# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

# FINAL APPLICATION FOR NEW LICENSE FOR MAJOR PROJECT EXISTING DAM

# EXHIBIT H – INFORMATION REQUIRED UNDER 18 CFR 5.18

Prepared by: Kleinschmidt

May 2022

©Copyright 2022. New York Power Authority. All Rights Reserved

CRESCENT AND VISCHER FERRY
HYDROELECTRIC PROJECTS
RELICENSING

FERC NO. 4678 AND 4679











#### **Table of Contents**

1	Inforr	nation to be Supplied by All Applicants (18 CFR Section 5.18(c))1
		Plans and Ability of the Power Authority to Operate the Projects (18 CFR Section (1)(i)(A))1
		Power Authority's Need for the Electricity Generated by the Projects (18 CFR Section (1)(i)(B))
		Need for Project Power, Reasonable Cost, and Availability of Alternative Sources of Power (18 ection 5.18(c)(1)(i)(C))2
		Use of Project Power for Power Authority-Owned Industrial Facility (18 CFR Section (1)(i)(D))
	1.5	Need for Power if Application is an Indian Tribe (18 CFR Section 5.18(c)(1)(i)(E))2
	1.6 CFR Se	Impact on Power Authority's Transmission System with/without Receipt of New License (18 ection 5.18(c)(1)(i)(F))
	1.7	Plan to Modify the Projects (18 CFR Section 5.18 (c)(1)(i)(G))
	1.8	Impacts of Plan Not to Modify the Projects (18 CFR Section 5.18(c)(1)(i)(H))3
	1.9 CFR Se	The Power Authority's Ability to Operate and Maintain the Projects in New License Term (18 ection 5.18(c)(1)(i)(I))
	1.9.1	Financial Resources3
	1.9.2	Personnel Resources
	1.10 Addition	The Power Authority's Notification of Adjacent Landowners Regarding Expansion of Projects on nal Lands (18 CFR Section 5.18(c)(1)(i)(J))4
		Power Authority's Electricity Efficiency Consumption Improvement Programs (18 CFR Section (1)(i)(K))4
		Names and Mailing Addresses of Indian Tribes Affected by Applicant's Proposed Projects (18 ection 5.18(c)(1)(i)(L))4
2	Inforr	nation to be Provided by Applicant Who is an Existing Licensee (18 CFR Section 5.18(c)(1)(ii))5
		Statement of Measures by the Power Authority to Ensure Safe Management, Operation, and nance of the Projects (18 CFR Section 5.18(c)(1)(ii)(B))
	2.2	Employee and Public Safety (18 CFR Section 5.18(c)(1)(ii)(B)(5))5
	2.2.1	Employee Safety5
	2.2.2	Public Safety6
	2.3 5.18(c)	Current Operation of Projects including Constraints Affecting Operations (18 CFR Section (1)(ii)(C))6
	2.3.1	Crescent Project6
	2.3.2	Vischer Ferry Project6
		History of Project Operations and Record of Programs to Upgrade Operation and Maintenance Project (18 CFR Section 5.18(c)(1)(ii)(D))6



		Summary of Lost Generation for Unplanned Outages at Projects over Last Five Years (18 CF 5.18(c)(1)(ii)(E)	
	Table 2	-1 Crescent Project, Summary of Unplanned Outages, 2016-2021	8
	Table 2	-2 Vischer Ferry Project, Summary of Unplanned Outages, 2016-2021	9
	2.6	License Compliance Activities (18 CFR Section 5.18(c)(1)(ii)(F))	10
	2.7	Actions Related to the Projects that Affect the Public (18 CFR Section 5.18(c)(1)(ii)(G))	10
		Ownership and Operating Expenses that would be Reduced if the License was Transferred to r Site (18 CFR Section 5.18(c)(1)(ii)(H))	
		Annual Fees Paid under Part I of the Federal Power Act for Use of Any Federal or Indian Land in the Project Boundary (18 CFR Section 5.18(c)(1)(ii)(I)	
3	PURF	PA Benefits (18 CFR Sections 5.17(e) and 4.38(b)(2)(vi))	11
L	ist of <sup>-</sup>	Tables	
Т	able 2-1	Crescent Project, Summary of Unplanned Outages, 2016-2021	8
т	able 2-2	Vischer Ferry Project, Summary of Unplanned Outages, 2016-2021	ç



#### Information to be Supplied by All Applicants (18 CFR Section 5.18(c))

The Federal Power Act requires applicants for a new license to provide certain information about the applicant's plans and ability to operate and maintain the project. The information required by 18 CFR § 5.18(c) is provided in this Exhibit for the Crescent and Vischer Ferry Hydroelectric Projects (Projects). Section 1.0 discusses the need for power and the examination of alternative sources; plans to modify an existing Project; an applicant's ability to operate and maintain the Project; and the applicant's electrical efficiency programs. Section 2.0 discusses the Power Authority's safe management, operation, and maintenance of the Projects; operational history and programs to upgrade the Projects' operation and maintenance; compliance with the current license; and actions related to the Projects that affect the public.

#### Plans and Ability of the Power Authority to Operate the Projects (18 CFR Section 5.18(c)(1)(i)(A))

As discussed in Exhibit B, the Power Authority of the State of New York (d/b/a "New York Power Authority" and referred to as "Power Authority") has no current plans to increase capacity or generation at the Projects.

Both Project dams were originally constructed as part of the New York State Barge Canal System<sup>1</sup> (Barge Canal System<sup>2</sup>) to 'canalize' the Mohawk River from Scotia to Crescent, providing navigable conditions for barges and vessels and facilitating water level control and lock operations. The original purpose of the Crescent and Vischer Ferry Dams was to impound water to support navigation on the Barge Canal; this remains true today. In 1983, the State of New York and the Power Authority entered into a Development Agreement whereby the State agreed to grant a perpetual hydroelectric easement to the Power Authority to develop and operate hydropower facilities at both Projects. The Development Agreement contains certain protocols for standard operation and maintenance of both the Projects and the Barge Canal System. For the Power Authority, Barge Canal System levels take priority over the operations of the Projects for generation. A complete description of Project operations is provided in Exhibit B.

Unless emergency conditions exist, the Projects operate in run-of-river mode with minimal fluctuations allowed under the existing FERC licenses, and at the New York State Canal Corporation's (NYSCC) direction to aid navigation, to facilitate flashboard installation and removal, and for canal maintenance or safety. Both Projects therefore operate in coordination with the Barge Canal System. The hydroelectric facilities at both Projects receive the necessary flows for generation from the waters of the Mohawk River.

<sup>&</sup>lt;sup>2</sup> The Barge Canal System is owned by the People of the State of New York and operated by the New York State Canal Corporation (NYSCC), which was created by the New York State Legislature in 1992 as a subsidiary of the New York State Thruway Authority (NYSTA). Prior to 1992, the operations of the Barge Canal System fell under the New York State Department of Transportation. On January 1, 2017, the NYSCC became a subsidiary of the Power Authority (N.Y. Public Authorities Law § 1005-b).



<sup>&</sup>lt;sup>1</sup> The existing Barge Canal System was created following the passage of the Barge Canal Act in 1903. However, some portion of the original Erie Canal built between 1817 and 1825 still exists. For the purposes of this document, the Licensee will consistently refer to the portions of the Barge Canal or Erie Canal adjacent to the Projects as the Barge Canal System.

The Power Authority coordinates operation of the Projects' generating plants with other electrical systems through its participation in the markets operated by the New York Independent System Operator (NYISO). The Projects are operated to provide low cost, emissions-free baseload power. The Crescent and Vischer Ferry Projects each have the capacity to generate up to 11.8 megawatts (MW) of clean renewable power. The annual gross generation at the Projects for the ten-year period between 2012-2021 was 58,249,754 kWh at the Crescent Project and 56,322,814 kWh at the Vischer Ferry Project.

### 1.2 Power Authority's Need for the Electricity Generated by the Projects (18 CFR Section 5.18(c)(1)(i)(B))

The sale of power from the Projects is governed by provisions of New York State law relating to the marketing of hydroelectric power, specifically Article 5, Title 1 of the Public Authorities Law, which is known as the "Power Authority Act." The Power Authority markets and operates the Projects to meet the marketing plan established pursuant to the Power Authority Act and the specific license conditions and operating characteristics of the Projects.

The Projects also play a role in New York's renewable energy portfolio as they provide a low-cost source of electricity. The Projects provide renewable power without the emission of air pollutants or greenhouse gases that other energy sources produce.

#### 1.3 Need for Project Power, Reasonable Cost, and Availability of Alternative Sources of Power (18 CFR Section 5.18(c)(1)(i)(C))

The Projects' generating facilities provide low-cost, emissions-free power for the benefit of New York State. This power is managed within the NYISO. The average annual cost of the power produced by the Project, including the basis for that calculation, is included in Exhibit D, Section 5. The average annual cost of the power produced by the Projects includes capital costs, operating costs (the costs of purchased power and related expenses, fuel consumed, operation and maintenance, and administrative expenses), and costs associated with the Projects' proposed protection, mitigation, and enhancement measures. If the generating facilities at the Projects ceased to exist, alternative source providers would either need to have sufficient existing resources to meet the needs of their customers, including the current Projects' customers, or would secure resources from the wholesale market.

# 1.4 Use of Project Power for Power Authority-Owned Industrial Facility (18 CFR Section 5.18(c)(1)(i)(D))

The Power Authority is the primary source of power for both Projects and their adjacent Locks (Lock E-7 for the Vischer Ferry Project and Lock E-6 for the Crescent Project). Lock E-7 can obtain power from an alternate feed if the Power Authority's power is not available.

# 1.5 Need for Power if Application is an Indian Tribe (18 CFR Section 5.18(c)(1)(i)(E))

The Power Authority is not an Indian Tribe applying for a license located on a tribal reservation.



### 1.6 Impact on Power Authority's Transmission System with/without Receipt of New License (18 CFR Section 5.18(c)(1)(i)(F))

The continued flow of Project-generated energy will not impact the Power Authority's transmission system. Because the Power Authority has no plans to increase the installed capacity of the Projects, the current interconnections are capable of handling the maximum output of the Projects. No upgrade of the Projects' interconnections will be required. The single-line diagrams for each Project are provided in Exhibit A. There are no Project transmission lines associated with either Project.

#### 1.7 Plan to Modify the Projects (18 CFR Section 5.18 (c)(1)(i)(G))

The Power Authority has no plans to construct new facilities or to alter operations of the Projects. The Power Authority is seeking authorization to continue operating the Projects in their current configuration and as they are currently licensed to operate.

#### 1.8 Impacts of Plan Not to Modify the Projects (18 CFR Section 5.18(c)(1)(i)(H))

The Projects will continue to provide low-cost, renewable energy. The Projects will be operated under the terms and conditions of a new license issued by the Commission.

## 1.9 The Power Authority's Ability to Operate and Maintain the Projects in New License Term (18 CFR Section 5.18(c)(1)(i)(l))

The Power Authority's successful operation of the Projects since their previous licensing in 1984 demonstrates its financial ability and personnel experience to operate the Projects during the new license term.

#### 1.9.1 Financial Resources

The Power Authority is the nation's largest state-owned public power organization. The Power Authority has the financial resources to operate the Projects during the term of the new license.

#### 1.9.2 Personnel Resources

The Power Authority has a full complement of operations personnel who perform all necessary day-to-day functions related to the Projects' operations and maintenance. Power Authority staff are fully qualified to handle all aspects of the operation and maintenance of the Projects. The Power Authority has a full complement of heavy equipment, which the staff is fully trained and certified to operate. All personnel receive training commensurate with their responsibilities in an ongoing effort to improve the operation of the Projects in the safest and most efficient manner possible.

In addition, the Power Authority's corporate staff provides additional expertise relative to all aspects of the Projects' operations. Corporate staff includes personnel from the Engineering, Safety, Environmental, Real Estate, Legal, and Public & Governmental Affairs groups.

The Power Authority's success in the operation of the Projects demonstrates its continued ability to operate the Projects during the term of the new license.



# 1.10 The Power Authority's Notification of Adjacent Landowners Regarding Expansion of Projects on Additional Lands (18 CFR Section 5.18(c)(1)(i)(J))

The Power Authority is not proposing any expansion of the Projects onto additional lands.

# 1.11 Power Authority's Electricity Efficiency Consumption Improvement Programs (18 CFR Section 5.18(c)(1)(i)(K))

To date, the Power Authority has completed over \$3.5 billion in projects under energy conservation programs. Through these initiatives, the Power Authority has produced over \$289 million in annual savings for program participants. Since 1990, the Power Authority's award-winning energy efficiency programs have been the centerpiece of its conservation efforts. Nationally recognized by the U.S. Department of Energy, the American Public Power Association and the National Environmental Awards Council, the programs provide energy-efficiency improvements, with no up-front costs, to public schools and other government facilities. As part of its efforts to save energy and reduce taxpayers' costs, the Power Authority has undertaken energy-efficiency projects at more than 7,127 public facilities across the state and lowered the utility bills of state and municipal governments by approximately \$263 million annually. These measures have reduced peak electricity demand by approximately 276,000 kilowatts – equivalent to the output of a medium-sized power plant. The measures have also reduced heat-trapping greenhouse gas emissions by nearly 843,000 tons and oil use by over five million barrels.

# 1.12 Names and Mailing Addresses of Indian Tribes Affected by Applicant's Proposed Projects (18 CFR Section 5.18(c)(1)(i)(L))

There are no Tribal lands occupied by the Projects or which would likely be affected by the relicensing. Nevertheless, the Power Authority has included certain Indian Tribes and Nations in the distribution of this Final License Application. The names and mailing addresses are provided below.

St. Regis Mohawk Tribe 71 Margaret Terrance Memorial Way Akwesasne, NY 13655

Stockbridge-Munsee Community Band of Mohican Indians N8476 MohHeConNuck Road Bowler, WI 54416

Delaware Tribe of Indians
Delaware Tribe Historic Preservation Office
Roosevelt Hall, Rm 212
1200 Commercial Street
Emporia, KS 66801

Mohawk Nation Council of Chiefs 346 State Route 37 Akwesasne, NY 13655



Delaware Nation PO Box 825 Anadarko, OK 73005

2 Information to be Provided by Applicant Who is an Existing Licensee (18 CFR Section 5.18(c)(1)(ii))

### 2.1 Statement of Measures by the Power Authority to Ensure Safe Management, Operation, and Maintenance of the Projects (18 CFR Section 5.18(c)(1)(ii)(B))

The Crescent and Vischer Ferry Projects are in compliance with the existing FERC licenses and are in compliance with all federal, state, and local safety requirements including those listed in the Commission's regulations under 18 C.F.R. Part 12. The Projects' operations are described in the respective Exhibit B portions of this FLA. As described in Exhibit B, the Projects can be operated remotely and manually. The Projects are generally staffed Monday-Friday, during business hours, but the Projects are typically operated remotely from the control room of the Power Authority's Blenheim-Gilboa Pumped Storage Project (FERC Project No. P-2685). The Projects utilize a programmable logic controller (PLC) system to monitor impoundment water levels and plant output. Many safeguards are in place for monitoring the Projects' operations at all times. The Power Authority maintains an Emergency Action Plan for each of the Crescent and Vischer Ferry Projects. The Power Authority is in compliance with the requirements as described in the Emergency Action Plans for the Projects and is not proposing any changes that may affect the Emergency Action Plans for the Projects.

#### 2.2 Employee and Public Safety (18 CFR Section 5.18(c)(1)(ii)(B)(5))

#### 2.2.1 Employee Safety

The Power Authority operates the Projects consistent with its corporate commitment to employee safety. This commitment begins with compliance with applicable local, state, and federal regulations regarding the safe operation of industrial and electrical facilities. The commitment is implemented through a rigorous safety program at the Projects. Rigorous inspection and maintenance programs ensure employee safety relative to operating equipment and facilities. The Power Authority's Corporate Safety Oversight Group takes an active role in shaping the Power Authority's Industrial Safety Program and works closely with the Safety Administrators regarding the Projects' issues, goals, and strategies that impact the safety program.

The Power Authority's Safety Program involves employee training sessions as well as making safety information available to employees. The Power Authority uses a Safety Newsletter to inform employees about pertinent regulatory activities, safety alerts, and corporate safety initiatives. Information in the newsletter is often discussed in periodic "Toolbox Talks." In addition to these meetings, staff of the Corporate Safety Group and Project Safety Administrators lead more extensive onsite and offsite training sessions. Information on safety issues and policies is made available on the Power Authority's Intranet Webpage. The Power Authority has a union/management safety committee that meets monthly. The Licensee is proposing no changes to the Projects or Projects' operations that will affect the Projects' safety, and all of the Projects' safety measures will continue to be consistent with FERC regulations and dam safety requirements.



#### 2.2.2 Public Safety

The Power Authority places a high priority on public safety at the Projects. Public safety at the Projects begins with limiting public access to areas where access is safe. Types of access are regulated to ensure safe and compatible use of the Projects' properties. As required by the Commission, the Power Authority's most recent Public Safety Plan includes numerous measures to ensure public safety (e.g., lighting, signage, fencing, etc.).

## 2.3 Current Operation of Projects including Constraints Affecting Operations (18 CFR Section 5.18(c)(1)(ii)(C))

#### 2.3.1 Crescent Project

The Crescent Project is operated as run-of-river. Flow through the Project is through the powerhouse or over the dam. During the non-navigation season, a minimum flow of 100 cubic feet per second (cfs) (or inflow, whichever is less) is required to be passed at the Crescent Dam. In accordance with a July 31, 2007 FERC order, the minimum flow during canal navigation season is increased to 250 cfs and is passed through a notch in the Dam A flashboards. Once minimum flows and any diversions required for canal operations are met, the remaining flow is available for power generation.

The Dam A and B sections of the Crescent Dam utilize 1-foot-high flashboards that are installed seasonally to help maintain the normal pool level in the Barge Canal System upstream of Lock E-6. The existing flashboards are wooden with vertical steel pin supports. The steel pins used to support the flashboards are set to fail when the headpond level overtops the flashboards by 4 feet. When the flashboards are up, the normal full pool elevation of the impoundment is El. 185 ft. BCD. When the flashboards are out, the normal full pool elevation of the impoundment is El. 184 ft. BCD.

#### 2.3.2 Vischer Ferry Project

The Vischer Ferry Project is operated as run-of-river. Flow through the Project is through the powerhouse or over the dam. A minimum flow of 200 cfs (or inflow, whichever is less) is required to be passed at the Vischer Ferry Dam year-round. Once Project minimum flows and any diversion required for canal operations are met, the remaining flow is available for power generation.

Flashboards are installed along the spillway crests of the Vischer Ferry Dam seasonally for the navigation season. The flashboards are 27 inches high and are installed in sockets spaced 4 ft. apart. When the flashboards are installed the elevation of the spillway is El. 213.25 ft. BCD. The flashboards are set to fail when the headpond level overtops the flashboards by between 1-3 feet, depending on the dam section.

### 2.4 History of Project Operations and Record of Programs to Upgrade Operation and Maintenance of the Project (18 CFR Section 5.18(c)(1)(ii)(D))

As noted above, both Project dams were originally constructed as part of the Barge Canal System to 'canalize' the Mohawk River from Scotia to Crescent, providing navigable conditions for barges and vessels and facilitating water level control and lock operations. In 1983, the State of New York and the Power Authority entered into a Development Agreement whereby the State agreed to grant a perpetual hydroelectric easement to the Power Authority to develop and operate hydropower facilities at both Projects.



Maintenance operations at the Projects are carried out by Power Authority staff in coordination with NYSCC. Power Authority operations staff are supported by engineering, project management, safety, environmental, real estate, and other staff from the Power Authority's corporate offices.

Operation of the Projects includes routine maintenance of electrical and mechanical equipment and associated facilities. Equipment maintenance includes scheduled maintenance activities such as examination of and repair to turbine/generator units to ensure their continued availability and optimum performance. Scheduled and ongoing maintenance activities are planned to minimize effects on energy production, and with consideration for Barge Canal System needs and environmental resources. Longer-duration planned outages that require disassembly of the units for overhaul are typically scheduled for periods that minimize impacts to energy generation.

The Power Authority annually inspects all civil structures. Power Authority staff routinely perform maintenance activities such as removal of woody vegetation on earthen dikes or repairs to structural concrete.

# 2.5 Summary of Lost Generation for Unplanned Outages at Projects over Last Five Years (18 CFR Section 5.18(c)(1)(ii)(E)

Table 2-1 and Table 2-2 provide a summary of unplanned unit outages at the Projects from 2016 through 2021. Where outage times were fewer than 24 hours, repairs were generally made by the Projects' staff with equipment or materials located at the Projects. For outages that exceeded 24 hours, off-site procurement of equipment or materials for the repair work was generally required, causing a longer outage time.

Between 2016 and 2021, the average annual amount of unscheduled outage downtime was 1,239 unit hours at the Crescent Project and 3,727 unit hours at the Vischer Ferry Project. Typically, when a unit is forced out of service, enough generating capacity remains to meet scheduled load.



Table 2-1 Crescent Project, Summary of Unplanned Outages, 2016-2021

State Date	End Date	Unit No.	Duration of Outage (Hrs.)	Cause
01/15/2016	02/05/2016	4	505.9	Turbine blade to discharge ring clearance issue
06/08/2016	10/13/2016	1	3056.6	Wicket gates binding
12/11/2016	12/12/2016	3	27.6	High packing box temperature
12/26/2016	12/27/2016	3	26.3	PLC Issues
04/08/2017	04/11/2017	1	73.4	Excessive guide bearing runout
06/12/2017	08/04/2017	1	1268.8	Turbine bearing excessive runout
06/19/2017	06/20/2017	2	29.1	Bearing adjustment
06/27/2017	06/28/2017	3	26.1	Static head oil leak repair
06/28/2017	06/29/2017	4	25.5	Wicket gate inspection
08/22/2017	08/24/2017	3	52.7	Cooling water pipe replacement
07/03/2018	07/27/2018	1	589.8	Wicket gates binding
07/12/2018	07/13/2018	4	28.6	Relocation of governor oil pumps
12/06/2018	12/07/2018	1	27.3	Turbine bearing excessive runout
07/20/2019	07/22/2019	1	51.2	Wicket gates binding
10/03/2019	10/07/2019	4	93.3	Gate servo mismatch
06/03/2020	06/04/2020	1	24.8	Bearing runout
07/07/2021	07/15/2021	1	189.9	Wicket gates binding
08/13/2021	08/16/2021	2	70.2	Maintenance outage extension
11/23/2021	11/24/2021	1	27.3	Turbine bearing adjustment



Table 2-2 Vischer Ferry Project, Summary of Unplanned Outages, 2016-2021

State Date	End Date	Unit No.	Duration of Outage (Hrs.)	Cause
06/02/2016	06/06/2016	2	97.1	Incomplete stop sequence-Wicket gates failed to close fully
08/11/2016	12/09/2016	1	2882.5	Wicket gate binding
12/07/2016	01/18/2017	3	1011.3	LEM punch list / clean-up work
12/10/2016	12/22/2016	1	291.7	Turbine bearing excessive runout
01/10/2017	02/16/2017	4	895.9	Babbitt in oil sample
01/20/2017	02/23/2017	1	813.3	Packing box and turbine guide bearing issue
01/20/2017	01/26/2017	2	137.8	Turbine guide bearing issue
02/24/2017	02/28/2017	2	95.0	Turbine bearing excessive runout
02/25/2017	03/13/2017	1	378.1	Turbine bearing excessive runout
03/13/2017	05/05/2017	1	1268.9	Packing box leakage issue
03/13/2017	05/05/2017	2	1269.9	Turbine bearing excessive runout
05/12/2017	05/16/2017	1	90.8	Turbine bearing excessive runout
07/24/2017	07/26/2017	1	50.2	Bearing adjustment
08/09/2017	08/11/2017	3	49.9	Packing box maintenance
12/19/2017	12/21/2017	3	51.0	Incomplete speed sensor wiring
12/31/2017	01/02/2018	3	41.1	Trash rack differential
12/31/2017	01/02/2018	4	41.7	Trash rack differential
02/23/2018	02/27/2018	1	95.5	Cooling water issues
04/02/2018	04/04/2018	1	53.0	Shaft runout/ packing adjustment
04/12/2018	04/13/2018	1	29.1	Bearing adjustment
07/23/2018	07/25/2018	1	41.5	Wicket gate binding
01/11/2019	01/17/2019	1	149.7	Forebay icing
01/11/2019	01/16/2019	2	124.0	Forebay icing
10/15/2019	10/16/2019	2	25.3	Bearing adjustment
12/19/2019	12/30/2019	1	268.9	Forebay icing
12/19/2019	12/26/2019	2	179.2	Forebay icing
12/19/2019	12/23/2019	3	93.9	Forebay icing
12/19/2019	12/23/2019	4	92.9	Forebay icing
01/06/2020	11/20/2020	4	7658.3	Excessive bearing runout
03/02/2021	03/03/2021	4	29.4	Forebay icing
08/31/2021	09/09/2021	1	220.5	PMG coupling pins broken
11/05/2021	11/07/2021	1	53.2	Trash removal
11/05/2021	11/07/2021	2	54.4	Trash removal



#### 2.6 License Compliance Activities (18 CFR Section 5.18(c)(1)(ii)(F))

The Power Authority has had no instances of non-compliance with the terms and conditions of the current licenses. All environmental inspection and dam safety-related recommendations have been addressed in a timely manner to ensure continued safe operation of both Projects. Successful compliance is accomplished by use of a computerized compliance tracking system. When communications are received from the Commission, the documentation is distributed to appropriate Power Authority departments. Concurrently, the request is logged into a Compliance Tracking Database for follow-up. The person responsible for the action is identified in the tracking system. The tracking system is continually updated to reflect appropriate refinements.

In the course of its compliance obligations, the Power Authority has established a strong working relationship with Commission staff. The Power Authority has responded in a timely manner to any requests by Commission staff for data or assistance. The Power Authority's Project and corporate staff jointly attend operations inspections to review salient issues with Commission staff.

# 2.7 Actions Related to the Projects that Affect the Public (18 CFR Section 5.18(c)(1)(ii)(G))

The Projects make numerous contributions to local communities, principally through the generation of low cost, emissions-free, renewable hydroelectric generation. The Projects also affect the state, the region, and the local and neighboring communities through their expenditures, which include salaries to employees, and operation and maintenance costs (e.g., hiring, contractors, and purchasing materials).

During the new license term, the Power Authority's Environmental Justice (EJ) program will continue its role as an active participant in the life of communities surrounding the Crescent and Vischer Ferry Projects. The Power Authority's EJ program is based on a history of benefitting the communities surrounding the Power Authority's facilities. A cornerstone of the EJ program is a fully integrated, enterprise-wide plan that aligns with the Power Authority's strategic initiatives, State energy policy, and the environmental concerns of communities. The EJ program focuses on four areas: (1) science, technology, engineering and mathematics (STEM) education, (2) energy literacy and education around clean energy, (3) engagement and advocacy, and (4) community energy projects. The Power Authority's EJ program collaborates with stakeholders and community-based organizations within the underserved communities surrounding facilities.

Potential Environmental Justice Areas, as designated by the Department of Environmental Conservation, surrounding Vischer Ferry and Crescent include census block groups in Schenectady, Niskayuna, Cohoes, Troy, Colonie, and Albany. The Power Authority's EJ stakeholders in the Vischer Ferry and Crescent project areas (Albany County, Saratoga County, Schenectady County) include Union College Science and Technology Entry Program, Arbor Hill Neighborhood Association, Albany Medical College Science and Technology Entry Program, SUNY Albany Science and Technology Entry Program, and Capital Region BOCES. The Power Authority plans to continue to maintain and grow stakeholder relationships in the project area.

In addition, the Power Authority has developed several public access and recreational sites near the Projects that will remain open for public use, including a downstream fishing access and picnic area at the Crescent Project, and a boat launch, overlook parking, and shoreline tailrace fishing at the Vischer Ferry



Project. Additionally, since the Crescent and Vischer Ferry Projects are integrated with and operated in close coordination with the Barge Canal System, and because the Barge Canal System itself is used primarily for recreation purposes, essentially the entire Project area for both the Crescent and Vischer Ferry Projects affords excellent public recreation opportunities.

### 2.8 Ownership and Operating Expenses that would be Reduced if the License was Transferred to Another Site (18 CFR Section 5.18(c)(1)(ii)(H))

If the Power Authority does not receive new licenses for the Projects, annual costs would be reduced by the amount of the Projects' capital and operation and maintenance costs described in Exhibit D.

# 2.9 Annual Fees Paid under Part I of the Federal Power Act for Use of Any Federal or Indian Lands included in the Project Boundary (18 CFR Section 5.18(c)(1)(ii)(I)

The Projects do not occupy Federal or Indian Lands.

#### 3 PURPA Benefits (18 CFR Sections 5.17(e) and 4.38(b)(2)(vi))

The Power Authority is not seeking benefits under section 210 of the Public Utilities Regulatory Policies Act (PURPA) of 1978 for the Projects.

