Appendix 7 – Amended Exhibit H

Gile Flowage Storage Reservoir Project
FERC Project No. 15055

Amended Exhibit H
Additional Information Required Under 18 CFR 5.18

Final License Application

Prepared for

Northern States Power Company
a Wisconsin Corporation

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LIST OF ABBREVIATIONS

Applicant	Northern States Power Company, a Wisconsin corporation
cfs	cubic feet per second
Commission	Federal Energy Regulatory Commission
DSM	demand side management
FERC	Federal Energy Regulatory Commission
MW	megawatt
MWh	megawatt hour
NGVD	National Geodetic Vertical Datum 1929
NSPW	Northern States Power Company, a Wisconsin corporation
Project	Gile Flowage Storage Reservoir Project
PURPA	Public Utility Regulatory Policies Act

1. Information Supplied by All Applicants - 18 CFR § 5.18 (c)

Northern States Power Company, a Wisconsin Corporation (NSPW), owner and operator of the Gile Flowage Storage Reservoir Project (FERC Project No. 15055) (Project) and Applicant for an original license, is required to provide certain information about their plans and ability to operate and maintain the Project. This information includes the need for power and the examination of alternative sources, plans to modify the existing Project, NSPW's ability to operate and maintain the Project, and NSPW's electrical efficiency programs. The information also includes NSPW's safe management, operation and maintenance of the Project, its operational history and programs to upgrade, and Project actions that affect the public.

1.1 Section 5.18(c)(1)(i)(A) - Plans and Ability to Operate the Project

The Project is operated with a minimum elevation of 1,476 feet NGVD and a maximum elevation of 1,490 feet NGVD. A minimum flow of 10 cfs is released year-round. Water is released from the Gile Dam during low flow periods to augment flows for the purpose of generating electricity at NSPW's downstream Saxon Falls and Superior Falls hydroelectric projects. NSPW conserves water at the Project by regulating releases from the Gile Dam such that the water released, when combined with the flow in the main branch of the Montreal River, allows for the downstream hydroelectric projects to operate efficiently without passing additional water (i.e., flows in excess of the hydraulic capacity of the powerhouses) over the spillway or through the radial gates. Storage of water at the Gile Flowage is conserved for project purposes.[1]

A typical daily drawdown of approximately 0.1 feet per day, but no more than 0.2 feet per day,[2] balances the needs of generation with the needs of recreation and environmental resources.

The Project's proposed operation is further described in Section 9 of Exhibit A.

1.1.1 Increase capacity or generation at the Project

The Project operates as a storage reservoir with no generating facilities. No development or upgrades are planned that would increase available storage in the reservoir such that generation at the downstream hydroelectric projects would increase. Routine maintenance and/or replacement of project facilities will be undertaken as-needed.

1.1.2 Coordinate Upstream and Downstream

There are no hydroelectric projects or storage reservoirs upstream of the Project. Downstream, NSPW operates and maintains two hydroelectric projects, the Saxon Falls Project (P-2610) and the Superior Falls Project (P-2587). Both project are located on the main branch of the Montreal River. The purpose of the Gile Flowage is to provide seasonally uniform streamflow for these two projects. Therefore, coordinating water releases from Gile Flowage with the downstream projects is critical for their efficient generation. According to the existing storage benefits report developed for NSPW in 2019, and eFiled with the Commission on February 21, 2020,[3] the current operation of the Project provides a 21% increase in generation for the two downstream projects. The percent increase in power generation for each facility on a monthly basis is displayed in **Tables H-1 and H-2**. This

[1] Project purposes include power generation and mitigation enhancement measures proposed in the Draft License Application.
[2] Except for scheduled whitewater releases and emergencies beyond Applicant's control, which include preemptive drawdowns for expected large inflow events due to precipitation or snow melt to reduce flooding and increased reservoir elevations at the downstream hydroelectric projects.
[3] Accession No. 20200221-5033.

calculates to 2,103.2 MWh for Saxon Falls and 2,401.6 MWh for Superior Falls for the five-year period ending in 2021[4] (NSPW, 2020) (NSPW, 2022).

Table H-1 Average Monthly Percent Increase in Potential Generation at the Saxon Falls Project Due to Operation of the Gile Flowage Storage Reservoir

Month	Percent Increase
January	**36.4**
February	**47.2**
March	**16.3**
April	**0.3**
May	**8.7**
June	**33.5**
July	**72.3**
August	**66.2**
September	**30.8**
October	**3.7**
November	**-0.6**
December	**6.7**

Table H-2 Average Monthly Percent Increase in Potential Generation at the Superior Falls Project Due to Operation of the Gile Flowage Storage Reservoir

Month	Percent Increase
January	**38.9**
February	**49.4**
March	**16.3**
April	**0.2**
May	**9.0**
June	**33.7**
July	**74.3**
August	**66.7**
September	**20.4**
October	**2.9**
November	**-1.7**
December	**6.3**

1.1.3 Coordinate with the Applicant's other electrical systems

The two downstream hydroelectric projects are an integral part of NSPW's distribution system in the Project vicinity. They provide power production, frequency control, dynamic voltage support, and distribution system reliability. Within NSPW's system, hydroelectric generation is one of the least costly alternatives and will be used to the extent possible.

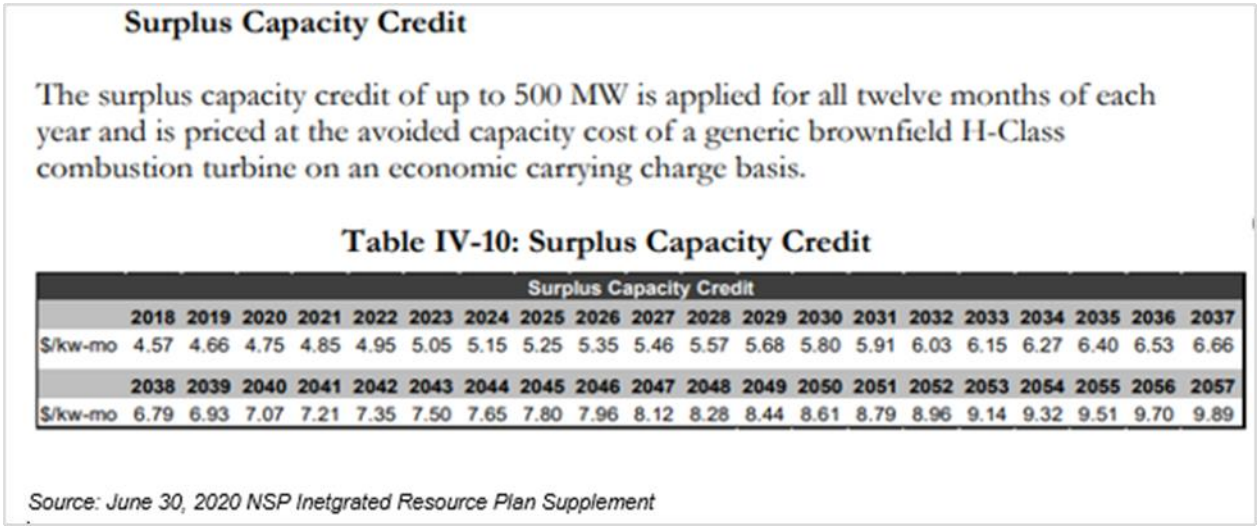
[4] Average annual generation (for the 5-year period ending 2021) for the Saxon Falls and Superior Falls Hydroelectric Projects is 10,015.3 and 11,436.4 MWh, respectively. These annual generation figures are taken from the respective Exhibit A and H documents filed with the Commission on December 30, 2022 (Accession No. 20221230-5395). The monthly basis percentages are taken from the "Estimation of Gile Reservoir Storage Benefits for Saxon Falls and Superior Falls Hydro Projects" eFiled as a privileged document as part of Accession #20200221-5032.

1.2 Section 5.18(c)(1)(i)(B) - Need for Electricity Generated by the Project

If a license is not granted for the Project, and it was no longer allowed to operate, the Applicant would need to obtain alternative power on the open market to support its electric load. The weighted average cost to obtain replacement power (including on-peak and off-peak usage) was $27.32 per MWh. Assuming the Project provides water to produce 21% of the energy at both downstream projects, this calculates to an additional annual energy production of 2,103.2 and 2,401.6 MWh at Saxon Falls and Superior Falls, respectively. The cost to replace power generated at the Saxon Falls and Superior Falls Projects resulting from the storage at Gile Flowage is estimated to be $123,073 per year as outlined in Exhibit A.

Figure H-1 Surplus Capacity Credit and **Figure H-2** Fuel and Market Price Forecasts, as derived from the NSPW's June 30, 2020 Integrated Resource Plan Supplement, represent the current forecast for capacity and energy costs.

Figure H-1 Surplus Capacity Credit



Surplus Capacity Credit

The surplus capacity credit of up to 500 MW is applied for all twelve months of each year and is priced at the avoided capacity cost of a generic brownfield H-Class combustion turbine on an economic carrying charge basis.

Table IV-10: Surplus Capacity Credit

Surplus Capacity Credit																				
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
$/kw-mo	4.57	4.66	4.75	4.85	4.95	5.05	5.15	5.25	5.35	5.46	5.57	5.68	5.80	5.91	6.03	6.15	6.27	6.40	6.53	6.66
	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057
$/kw-mo	6.79	6.93	7.07	7.21	7.35	7.50	7.65	7.80	7.96	8.12	8.28	8.44	8.61	8.79	8.96	9.14	9.32	9.51	9.70	9.89

Source: June 30, 2020 NSP Inetgrated Resource Plan Supplement

Figure H-2 Fuel and Market Price Forecasts

Table IV-9: Fuel and Market Price Forecasts

	Base Price Forecast				Low Price Forecast				High Price Forecast			
	Fuel Price ($/mmBTu)		Market Price ($/MWh)		Fuel Price ($/mmBTu)		Market Price ($/MWh)		Fuel Price ($/mmBTu)		Market Price ($/MWh)	
Year	Generic Coal	Ventura Hub	Minn Hub On-Peak	Minn Hub Off-Peak	Generic Coal	Ventura Hub	Minn Hub On-Peak	Minn Hub Off-Peak	Generic Coal	Ventura Hub	Minn Hub On-Peak	Minn Hub Off-Peak
2018	$2.19	$2.74	$28.60	$21.61	$2.19	$2.74	$28.60	$21.61	$2.19	$2.74	$28.60	$21.61
2019	$2.08	$2.60	$26.93	$20.98	$2.08	$2.60	$26.93	$20.98	$2.08	$2.60	$26.93	$20.98
2020	$2.11	$2.26	$25.78	$20.13	$2.11	$2.26	$25.78	$20.13	$2.11	$2.26	$25.78	$20.13
2021	$2.14	$2.23	$25.32	$19.06	$2.14	$2.23	$25.32	$19.06	$2.14	$2.23	$25.32	$19.06
2022	$2.19	$2.33	$26.92	$20.45	$2.17	$2.28	$26.33	$20.00	$2.24	$2.38	$27.52	$20.90
2023	$2.25	$2.45	$29.31	$22.19	$2.19	$2.34	$27.96	$21.17	$2.36	$2.57	$30.68	$23.23
2024	$2.30	$2.58	$30.00	$23.20	$2.22	$2.40	$27.94	$21.60	$2.46	$2.76	$32.16	$24.87
2025	$2.35	$2.79	$31.47	$24.36	$2.24	$2.50	$28.17	$21.80	$2.57	$3.11	$35.04	$27.12
2026	$2.40	$2.98	$32.30	$24.99	$2.27	$2.58	$28.01	$21.67	$2.69	$3.42	$37.09	$28.70
2027	$2.45	$3.12	$33.35	$26.71	$2.29	$2.64	$28.28	$22.64	$2.81	$3.66	$39.16	$31.36
2028	$2.51	$3.26	$34.09	$26.97	$2.32	$2.71	$28.25	$22.35	$2.93	$3.92	$40.92	$32.38
2029	$2.57	$3.44	$35.21	$28.25	$2.34	$2.78	$28.42	$22.79	$3.07	$4.24	$43.38	$34.80
2030	$2.62	$3.70	$38.27	$30.69	$2.37	$2.88	$29.83	$23.92	$3.20	$4.71	$48.76	$39.09
2031	$2.68	$3.87	$39.33	$32.07	$2.40	$2.95	$29.97	$24.44	$3.35	$5.04	$51.22	$41.77
2032	$2.75	$4.02	$39.75	$33.14	$2.43	$3.01	$29.71	$24.77	$3.51	$5.34	$52.76	$43.99
2033	$2.81	$4.10	$39.93	$33.46	$2.45	$3.03	$29.58	$24.79	$3.67	$5.48	$53.47	$44.80
2034	$2.87	$4.20	$41.13	$34.56	$2.48	$3.07	$30.08	$25.28	$3.83	$5.70	$55.76	$46.86
2035	$2.94	$4.35	$42.15	$35.66	$2.51	$3.13	$30.32	$25.65	$4.00	$6.00	$58.12	$49.17
2036	$2.99	$4.47	$42.79	$36.60	$2.53	$3.17	$30.37	$25.97	$4.14	$6.24	$59.80	$51.13
2037	$3.07	$4.65	$44.00	$38.21	$2.56	$3.24	$30.61	$26.58	$4.36	$6.63	$62.69	$54.44
2038	$3.14	$4.86	$44.95	$39.45	$2.60	$3.31	$30.60	$26.85	$4.58	$7.08	$65.43	$57.42
2039	$3.23	$5.04	$45.82	$40.48	$2.63	$3.37	$30.63	$27.06	$4.83	$7.47	$67.88	$59.98
2040	$3.31	$5.22	$46.61	$41.48	$2.66	$3.43	$30.61	$27.25	$5.06	$7.87	$70.25	$62.53
2041	$3.37	$5.32	$46.52	$41.48	$2.69	$3.46	$30.27	$26.99	$5.26	$8.10	$70.79	$63.12
2042	$3.45	$5.47	$47.61	$42.64	$2.72	$3.51	$30.57	$27.38	$5.51	$8.43	$73.40	$65.74
2043	$3.53	$5.62	$48.37	$43.71	$2.75	$3.56	$30.64	$27.69	$5.77	$8.78	$75.56	$68.28
2044	$3.62	$5.78	$49.72	$44.99	$2.79	$3.61	$31.04	$28.09	$6.05	$9.17	$78.79	$71.29
2045	$3.70	$5.99	$51.23	$46.37	$2.82	$3.68	$31.45	$28.46	$6.31	$9.65	$82.57	$74.73
2046	$3.78	$6.17	$52.49	$47.53	$2.85	$3.73	$31.74	$28.74	$6.59	$10.09	$85.85	$77.73
2047	$3.86	$6.29	$53.27	$48.57	$2.88	$3.77	$31.89	$29.08	$6.88	$10.40	$87.98	$80.22
2048	$3.95	$6.46	$54.39	$49.88	$2.91	$3.82	$32.15	$29.49	$7.20	$10.80	$90.96	$83.42
2049	$4.04	$6.66	$55.69	$50.92	$2.95	$3.88	$32.43	$29.65	$7.53	$11.30	$94.52	$86.43
2050	$4.13	$6.77	$56.64	$51.71	$2.98	$3.91	$32.70	$29.85	$7.87	$11.60	$96.97	$88.53
2051	$4.22	$6.96	$58.23	$53.16	$3.01	$3.96	$33.16	$30.27	$8.21	$12.08	$101.05	$92.24
2052	$4.31	$7.13	$59.62	$54.42	$3.04	$4.01	$33.56	$30.63	$8.57	$12.51	$104.64	$95.53
2053	$4.41	$7.29	$61.00	$55.68	$3.08	$4.06	$33.94	$30.99	$8.94	$12.95	$108.29	$98.85
2054	$4.50	$7.46	$62.38	$56.95	$3.11	$4.10	$34.33	$31.34	$9.33	$13.39	$111.97	$102.21
2055	$4.60	$7.62	$63.76	$58.21	$3.14	$4.15	$34.71	$31.69	$9.73	$13.83	$115.69	$105.61
2056	$4.69	$7.79	$65.15	$59.47	$3.17	$4.19	$35.09	$32.03	$10.12	$14.28	$119.45	$109.05
2057	$4.79	$7.95	$66.53	$60.73	$3.21	$4.24	$35.48	$32.37	$10.52	$14.74	$123.26	$112.52

**Coal prices are delivered prices, while gas and market prices are hub prices.*

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Source: June 30, 2020 NSPW IRP Supplement

1.2.1 Increase in Fuel, Capital, and Other Costs Incurred

If the Applicant is not granted a license for the Project, additional power would need to be procured to replace the lost generation at the two downstream projects. It is assumed this replacement power would be supplied via a purchase on the open market. If NSPW had to replace the downstream generation attributed to the storage benefits provided by the Gile Flowage, the annual cost for NSPW to purchase said power would be $123,073.

1.2.2 Effects of Each Alternative Power Source

The rates charged to customers for power generated by NSPW are based on the cost of production, operation, maintenance, debt service, and a Public Service Commission of Wisconsin-approved profit from sale of power. The use of alternative sources of power would increase the costs to NSPW's electricity end users.

NSPW uses all power generated by the Saxon Falls and Superior Falls Hydroelectric Projects. Alternative sources of power would have no significant effect on the NSPW operating and load characteristics.

Since NSPW is the regional utility, if the Project could no longer provide storage benefits for the downstream hydroelectric projects, it would still be responsible for distributing power to residential, commercial, and industrial customers within the area. Approximately 21% of the power currently generated by the two downstream hydroelectric projects would need to be replaced from another source. Therefore, the lost generation resulting from the Gile Flowage's inability to provide for downstream generation would result in NSPW purchasing replacement power from another source (if the need arises). While purchasing power may cost less than that supplied by the Project, NSPW realizes that the Project provides additional benefits beyond the current electrical power costs. Those additional benefits include, but are not limited to, fish and wildlife habitat, recreation, flood control, electrical grid support, and renewable portfolio benefits. Therefore, NSPW is willing to pursue an original license for the Project with the limited mitigation and enhancement measures proposed within the FLA.

The average annual cost of the power produced by the Project includes capital costs, operating costs, and costs associated with licensing. The method for that calculation is included in Exhibit A, Section 20. If the water storage benefits provided by the Project ceased to exist, alternative generation resources would be needed to meet such requirements and would be secured by way of power purchase agreements.

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

The Project provides water storage for the generation of power at the two downstream hydroelectric projects, for the distribution system, that is low-cost and emissions-free.

NSPW has existing and committed resources available to meet its customer capacity and energy requirements through NSPW-owned generating facilities (see **Table H-3**) and RFPs for new resources.

Table H-3 NSPW System Resources

System Resources Located in Wisconsin[5]															
Year	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**
MW	494	493	493	493	493	493	493	493	493	493	493	170	170	170	170

[5] NSPW system resources are a part of the overall NSPW system. Additional system resources are located outside of Wisconsin.

In 2021, NSPW's existing supply side resource mix was made up of 7,900 Megawatts (MW) thermal resources, 1,875 MW renewable intermittent resources, and 1,045 MW of demand response.[6] The resources consist of owned generation resources, purchase power agreements, and demand side management programs (see Section 1.11).

NSPW's plans are developed recognizing the uncertainty associated with forecasting demand, as well as supply, including the level of non-utility purchases and life-extendible capacity. The generation technologies, fuels used, sites, and costs for these resources will be determined through the Integrated Resource Planning process and subsequent resource acquisition efforts. System resource additions are acquired through competitive Request for Proposals.

NSPW's resource mix is a diversity of generation sources. **Figure H-3** shows the Load and Resources Table from NSPW's 2020-2034 Integrated Resource Plan. This represents the forecast of system obligation and resources needed. The planned resources reflect the proposed preferred plan. New technologies and fuel types are continually evaluated to create a more diverse energy mix to prevent reliance on any single fuel, make better use of available resources, and satisfy customers demands for environmentally sound, low-cost energy.

[6] This resource mix applies to the overall NSPW system.

Figure H-3 Load and Resources Table[7]

Load and Resources Table

NSP 2020-2034 Integrated Resource Plan

1		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2	Forecast Net Load	9,115	9,067	9,101	9,111	9,092	9,068	9,057	9,072	9,080	9,029	9,041	9,049	9,090	9,143	9,205
3	MISO System Coincident	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
4	Coincident Load	8,659	8,614	8,646	8,655	8,638	8,615	8,604	8,618	8,626	8,578	8,589	8,597	8,636	8,686	8,745
5	MISO PRM	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%
6	NSP Obligation	9,430	9,380	9,416	9,426	9,406	9,382	9,370	9,385	9,393	9,341	9,354	9,362	9,404	9,459	9,523
7																
8		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
9	Thermal Resources, Existing and Appro	7,905	7,905	7,905	7,881	7,088	6,753	6,462	6,255	6,223	5,740	5,229	4,677	4,401	3,880	3,382
10	Large Hydro, Existing	709	831	831	831	831	-	-	-	-	-	-	-	-	-	-
11	Small Hydro, Existing	172	170	162	162	162	162	162	162	162	162	162	162	156	152	152
12	Wind, Existing	498	623	672	647	635	631	626	611	605	583	582	566	563	498	479
13	Solar, Existing	495	531	574	606	595	576	557	536	518	497	476	454	432	408	412
14	Demand Response	1,045	1,192	1,273	1,349	1,407	1,454	1,470	1,485	1,499	1,511	1,518	1,526	1,536	1,547	1,560
15	Total Existing & Approved Resources	10,824	11,252	11,418	11,478	10,717	9,576	9,278	9,052	9,007	8,493	7,967	7,386	7,087	6,486	5,986
16																
17	Net Resource (Need)/Surplus Position	1,394	1,871	2,002	2,052	1,311	195	-92	-334	-386	-848	-1,387	-1,976	-2,317	-2,973	-3,537
18	Planned Resources	0	0	0	0	0	230	440	420	600	950	1,581	2,153	2,529	3,226	3,672
19	Net Resource (Need)/Surplus Position	1,394	1,871	2,002	2,052	1,311	425	348	86	214	102	194	176	212	253	135

[7] Load and Resources Table applies to entire NSPW system.

1.4 Section 5.18(c)(1)(i)(D) - Use of Project Power-Industrial Facility

Applicant does not use Project power to meet its own industrial needs; not applicable.

1.5 Section 5.18(c)(1)(i)(E) - Need for Power If Native American Tribes

NSPW is not a Native American Tribe applying for a license located on a Native American reservation.

1.6 Section 5.18(c)(1)(i)(F) - Impact on Transmission System

The Project is a storage reservoir that provides water for use in downstream hydroelectric generation. The production of generated energy will not impact the existing transmission system. The existing facilities are sized to accommodate the maximum capacity of the downstream hydroelectric projects.

1.7 Section 5.18(c)(1)(i)(G) - Plan to Modify Project

NSPW has no plans to construct new facilities at the Project other than the proposed spillway improvements described in Section 2.1.2 of Exhibit E. [8]

1.8 Section 5.18(c)(1)(i)(H) - Impacts Not to Modify Project

The Project will continue to store water for the production of low cost renewable energy at the downstream Saxon Falls and Superior Falls hydroelectric projects. Exhibit E discusses the anticipated operation and the Project's compliance with comprehensive plans for developing or improving the waterway and other beneficial uses.

1.9 Section 5.18(c)(1)(i)(I) - Ability to Maintain and Operate in New License Term

NSPW's successful operation of the Project prior to this licensing proceeding demonstrates it has the financial resources and personnel to continue to operate the Project during the upcoming license term. NSPW implements a preventive maintenance program to increase the safety, reliability and efficiency of the Project's equipment and facilities. NSPW's hydro department personnel and financial resources are sufficient to reliably maintain and operate the Project along with its other hydroelectric projects. NSPW also has a demonstrated record of license compliance at its other FERC regulated facilities.

1.9.1 Financial Resources

NSPW is a Wisconsin corporation. It has the financial resources to operate the Project during the term of the upcoming license.

1.9.2 Personnel Resources

NSPW resources are adequate to meet the needs of the hydro department. NSPW has a consistent record of satisfactory performance with respect to reliability, price competitiveness, and safety. NSPW maintains a staff of more than 60 individuals with expertise in engineering, maintenance, electric system operations, mapping, environmental resources, and planning. Hydro department

[8] NSPW is currently working with FERC Division of Dam Safety and Inspections (DDSI) to evaluate spillway improvements necessary to meet FERC dam safety standards. A comprehensive review of the spillway improvements will be completed via the license amendment process once the project scope and design have been finalized.

personnel conduct routine training and have adopted standardized maintenance practices for all NSPW hydro facilities.

1.10 Section 5.18(c)(1)(i)(J) - Notification of Adjacent Landowners

NSPW has added those landowners whose property is within or adjacent to the proposed Project boundary to the stakeholder list.

1.11 Section 5.18(c)(1)(i)(K) - Electric Consumption Efficiency Programs

The Applicant is committed to demand side management (DSM) measures as a resource to meet customer energy needs. Cost-effective DSM resources, in the form of capacity and energy savings, are in essence "purchased" from the customer through incentives, subsidies, rate structures, or other means needed to meet system DSM goals and commitments. NSPW offers programs for the residential sector, business sector, and agricultural sector. Specific options in these programs include, but are not limited to:

Residential Programs

- Residential Rate Plans
    - Time of Day Service
    - Optional Off-Peak Service
    - Savers Switch Credit
- Residential Rewards (Focus on Energy[9])
    - Energy Saving Tips
    - Home rebates
        - Home Performance
        - Simple Energy Efficiency
        - New Homes
- Renewable Choices
    - Renewable Connect
    - Solar Connect Community
    - Net metering

Business Programs

- Equipment Rebates
- Energy Audits
- Renewable Programs
    - Renewable Connect
    - Solar
    - Working with Third Party Providers
- Energy Efficient Buildings
    - Multi-Family Building Efficiency (Focus on Energy)
    - Custom Efficiency

[9] Funded through the Focus on Energy ® program. Focus on Energy® is Wisconsin's energy efficiency and renewable resource program. It is funded by Wisconsin's investor-owned utilities and participating municipal and electric cooperative utilities, including NSPW.

    - Efficient Facilities (Focus on Energy)
    - Energy Benchmarking
- Rate Programs
    - Electric Rate Savings
    - Savers Switch for Business

Farm Programs

- Farm Rewiring
- Agriculture and Farm Rebates

1.12 Section 5.18(c)(1)(i)(L) – Native American Tribes Affected by Proposed Project

There are no Native American Tribal lands held in trust within the Project boundary. Early in the licensing process, NSPW contacted the following Native American tribes and organizations for the purposes of consultation required under Section 106 of the National Historic Preservation Act. NSPW has continued to consult with these tribes and organizations throughout the licensing process.

Mr. Lawrence Plucinski, THPO
Bad River Band of Lake Superior Tribe of Chippewa Indians
P.O. Box 39
Odanah, WI 54861

Ms. Whitney Gravelle, Chairman
Bay Mills Indian Community of Michigan
12140 W. Lakeshore Drive
Brimley, MI 49715-9319
bnewland@baymills.org

Mr. Kevin DuPuis, Chairperson
Fond du Lac Band of Minnesota Chippewa Tribe
1720 Big Lake Road
Cloquet, MN 55720

Mr. Benjamin Rhodd, THPO
Forest County Potawatomi Community of Wisconsin
5320 Wensaut Lane, P.O. Box 340
Crandon, WI 54520
Benjamin.rhodd@FCPotawatomi-nsn.gov

Mr. Michael Blackwolf, THPO
Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
656 Agency Main Street
Harlem, MT 59526-9455

Ms. Mary Ann Gagnon, THPO
Grand Portage Band of MN Chippewa Tribe
PO Box 428
Grand Portage, MN 55605

Mr. Earl Meshigaud, Cultural Director
Hannahville Potawatomi Indian Community
M-14911 Hannahville B1 Road
Wilson, MI 49896

Mr. William Quackenbush, THPO
Ho-Chunk Nation of WI
PO Box 667
Black River Falls, WI 54615-0667

Cultural Preservation Office
Iowa Tribe of Oklahoma
RR1, Box 721
Perkins, OK 74059

Mr. Warren Swartz, President
Keweenaw Bay Indian Community
17429 Beartown Road
Baraga, MI 49908-9210

Mr. Brian Bisonette, THPO
Lac Courte Oreilles Band of Chippewa Indians
13394 West Trepania Road, Bldg. No.1
Hayward, WI 54543

Ms. Melinda Young, THPO
Lac du Flambeau Band of Lake Superior Chippewa Indians
PO Box 67
Lac du Flambeau, WI 54538

Ms. Alina Shively, THPO
Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan
E23968 Pow Wow Trail
Watersmeet, MI 49969

Ms. Amy Burnette, THPO
Leech Lake Band of Chippewa Indians
190 Sailstar Drive NW
Cass Lake, MN 56633

Ms. Joan Delabreau, Chairwoman
Menominee Indian Tribe of Wisconsin
W3426 Cty VV, PO Box 910
Keshena, WI 54135-0910

Ms. Natalie Weyaus, THPO
Mille Lacs Band of Ojibwe
43408 Oodena Drive
Onamia, MN 56359

Mr. Nicolas Metoxen, THPO
Oneida Nation of Wisconsin
PO Box 365
Oneida, WI 54155-0365
NMetoxe4@oneidanation.org

Mr. Ryan Howell, THPO
Prairie Island Indian Community
5636 Sturgeon Lake Road
Welch, MN 55089

Mr. Warren Wahweotten Jr., THPO
Prairie Band Potawatomi Nation
162Q Road
Maetta, KS 66509

Mr. Marvin Defoe, THPO
Red Cliff Band of Lake Superior Chippewa Indians
88385 Pike Rd, Hwy. 13
Bayfield, WI 54814

Mr. Jonathan Buffalo, NAGPRA Rep.
Sac and Fox of the Mississippi in Iowa
349 Meskwaki Road
Tama, IA 52339-9629

Mr. Gary Bahr
Sac and Fox Nation of Missouri in Kansas and Nebraska
305 N. Main
Reserve, KS 66434

Ms. Sandra Massey, NAGPRA Rep.
Sac and Fox Nation of Oklahoma
920883 S. Hwy 99, Bldg. A
Stroud, OK 74079

Mr. Cecil E. Pavlat Sr., Cultural Repatriation Specialist
Sault Ste. Marie Tribe of Chippewa Indians
523 Ashmun Street
Sault Ste. Marie, MI 49783

Mr. Michael LaRonge, THPO
Sokaogon Chippewa Community Mole Lake Band
3051 Sand Lake Road
Crandon, WI 54520-9801

Mr. Lewis Taylor, President
St. Croix Band of Lake Superior Chippewa
24663 Angeline Ave.
Webster, WI 54893-9246

Mr. Jeffery Bendremer, THPO
Stockbridge-Munsee Community
thpo@mohican-nsn.gov
(*sent via email per request*)

Ms. Sherry White, THPO
Stockbridge Munsee Tribe of Mohican Indians
PO Box 70
Bowler, WI 54416-0070

Ms. Jamie Arsenault, THPO
White Earth Band of the Minnesota Chippewa
PO Box 418
White Earth, MN 56591

2. Information Supplied by Existing Licensee - 18 CFR § 5.18 (c)[10]

2.1 Section 5.18(c)(1)(ii)(B) - Statement to Ensure Safe Management, Operation and Maintenance

The Project's anticipated operation is described in Exhibit A.

The Project is compliant with all federal, state, and local safety requirements, including those listed in the Commission's regulations under 18 C.F.R. Part 12, and features the necessary monitoring and warning devices.

Two operators share responsibility overseeing the operation of the Project and are available 24 hours per day, seven days per week to respond to emergencies. The Project is manually operated and visits to the facility increase as needed during flood conditions. Local monitoring of the reservoir elevation is completed on-site as there is no continuous remote monitoring capability at this time. The reservoir elevation is continuously recorded via a headwater probe which sends the data to a circle chart in the gatehouse. The system notifies NSPW's Control Center when the reservoir's high pond alarm (1,490.1') setting is reached. Upon receiving the high pond alarm, the Control Center would dispatch the operator to investigate. Additionally, the operator and Control Center can independently verify the reservoir elevation.

Project operations during flood conditions, when the reservoir is well below the maximum elevation of 1,490.0 feet NGVD, may not immediately result in increased discharge from the dam. NSPW is not proposing any changes to its current operation during flood conditions as part of this application.

When inflows increase, or the weather forecast indicates potential flood conditions, NSPW, based upon the current reservoir elevation, the weather forecast, and incoming inflows (determined by rate of rise of the reservoir, gate opening curves, and the stage storage curve), determines the appropriate course of action. This could include maintaining the current outflow and allowing the reservoir to rise, increasing the outflow to match inflow by opening the radial gate and allowing the reservoir elevation to remain relatively stable, or in the case of expected inflow increases, such as prior to spring runoff, increasing the outflow to reduce the reservoir elevation in anticipation of the runoff event.

During normal operations, releases from the Gile Dam are such that the reduction in reservoir elevation is typically no more than 0.1-foot per day. However, in anticipation of runoff events, NSPW may reduce the elevation at a rate not to exceed 0.2 feet per day to allow the reservoir to store or "peak shave" the incoming flows before passing them downstream.

Safety signage located at the dam includes a sign facing upstream indicating the presence of the dam, a sign indicating the area is hazardous and to keep away, and signs facing both earthen embankments prohibiting swimming and indicating the area has a dangerous undercurrent. Fencing and railings are maintained on both sides of the upstream intake and both sides of the tailwater. In 2024, NSPW installed a boat restraining barrier upstream of the dam to keep boats away from the spillway. More information

[10] Please note: Even though this is an application for an original license, NSPW is providing the information required in Section 5.18(c)(1)(ii) instead of the information required in Section 5.18(c)(1)(iii) because NSPW is the Licensee for two downstream hydroelectric projects that benefit from the water stored at the Gile Flowage Storage Reservoir Project and the information required in (ii) encompasses the information required in (iii).

about the public safety devices and the current public safety plan can be found in the Commission's e-library system as Accession #20230413-5129.

There are no proposed changes to the operation of the Project at this time that could affect the current Emergency Action Plan (EAP). In the event NSPW personnel detect an actual or potential failure condition through surveillance or direct observation, they will implement the FERC approved EAP.

2.2 Section 5.18(c)(1)(ii)(B)(5) - Employee and Public Safety

2.2.1 Employee Safety

NSPW views its employees as their greatest asset and operates the Project consistent with its corporate commitment to employee safety. This includes, but is not limited to, best industry practices and compliance with applicable local, state, and federal regulations regarding the safe operation of its facilities.

NSPW implements a rigorous safety program for its workers. This involves annual employee training sessions as well as making safety information available to employees. NSPW anticipates no changes to the Project or Project operations that could affect the Project's safety, and all safety measures will continue to be implemented consistent with FERC regulations and dam safety requirements.

There have been no lost-time accidents recorded at the Project by NSPW in the last five years (2018-2022).

2.2.2 Public Safety

Public safety is a high priority for NSPW and its Public Safety Plan (revised June 2022) demonstrates that commitment. Fencing is in place to restrict access to unsafe areas and signs warn of extreme danger in spillway areas. A boat restraining barrier will be designed and installed upstream of the Project's intake in 2024. Safety warning signage is used in various locations at the Project.

NSPW was not required to track injuries or deaths that occurred within the Project boundary as the Project was not under FERC jurisdiction. However, NSPW is not aware of any injuries or deaths related to Project operations.

The monitoring instruments and devices at the Project include an electronic water level monitor, a water level recorder, a staff gage, and a seepage monitoring weir. These monitoring devices are briefly described below.

A headwater probe is located on the dam to the left of the radial gate and continuously monitors reservoir levels. The readings are recorded on a circle chart inside the gatehouse. The reservoir staff gage is located on the dam to the right of the radial gate and is used as backup and calibration. If a high-water elevation occurs, NSPW will receive a high-water alarm at their continually-staffed control center and an operator will be dispatched to the site as needed.

Seepage through the left and right embankments is collected in the drain system and discharged downstream of the embankment through a series of 4-inch diameter pipes that extend downstream to

a seepage drainage ditch. The ditch conveys the water to the tailrace. The seepage clarity and discharge rate are monitored by the operator. No flow measurements are recorded.

Vertical and horizontal control points monitor are established and are periodically surveyed for potential differential movement of the concrete structures and embankments.

2.3 Section 5.18(c)(1)(ii)(C) - Current Operation Including Constraints

The Project is operated with a minimum elevation of 1,475 feet NGVD and a maximum elevation of 1,490 feet NGVD. A minimum flow of 10 cfs is released year-round.

Water released from the Gile Dam is prioritized throughout the year to allow the downstream hydroelectric projects to operate efficiently. NSPW conserves water at the Project by regulating releases from the Gile Dam such that the water released, when combined with the flow in the main branch of the Montreal River, allows the downstream hydroelectric projects to operate efficiently without passing additional water (i.e., flows in excess of the hydraulic capacity of the powerhouses) over the spillway or through the radial gates. Storage of water at the Gile Flowage Storage Reservoir is conserved for project purposes.

A typical daily drawdown of approximately 0.1 feet per day, but no more than 0.2 feet per day,[11] balances the needs of generation with the needs of recreation and environmental resources.

The Project's proposed operation is further described in Exhibit A.

2.4 Section 5.18(c)(1)(ii)(D) - History of Project Operation and Upgrade Programs

Since the Project's original construction in 1940, the upstream side of both embankments have been restored by extending the riprap limits to an elevation of 1483.0 feet and replacing displaced grouted sections of riprap with a layer of filter fabric, 12 inches of granular fill, and 36 inches of riprap. An additional layer of aggregate road base six inches deep and 10 feet wide was placed on the embankment crest during the same restoration. The restoration took place in 1988 (Ayres Associates, 2016).

The sluice gate was refurbished in 1997.

Periodic inspections are conducted of the various civil structures and continual maintenance is performed as needed. Any long-term maintenance work is scheduled to minimize effects on public safety and energy production at the downstream hydroelectric projects.

2.5 Section 5.18(c)(1)(ii)(E) - Summary of Last Five Years - Unplanned Outages and Lost Generation

NSPW is unaware of any unplanned outages at the Gile Project that have resulted in lost generation at the two downstream projects during the period of January 2018 through December 2022.

[11] Except for scheduled whitewater releases and emergencies beyond Applicant's control, which include preemptive drawdowns for expected large inflow events due to precipitation or snow melt to reduce flooding and increased reservoir elevations at the downstream hydroelectric projects.

2.6 Section 5.18(c)(1)(ii)(F) - License Compliance Activities

There are no known outstanding compliance issues associated with the Project.

2.7 Section 5.18(c)(1)(ii)(G) - Actions that Affect the Public

NSPW is an integral part of the communities in which it operates and that includes a significant community outreach and volunteer program. In addition to providing low-cost, affordable, renewable-based energy, NSPW contributes to the local economies through the salaries of its employees, hiring of local contractors, and purchasing materials locally. A typical daily drawdown of approximately 0.1 feet per day, but no more than 0.2 feet per day,[12] balances the needs of generation with the needs of recreation and environmental resources.

2.8 Section 5.18(c)(1)(ii)(H) - Reduced Ownership and Operating Expense if License Transferred

If NSPW does not receive a license for the Project, or the Project can no longer provide water storage benefits for its two downstream hydroelectric Projects, annual costs would be reduced by the amount of the Project's capital, operation and maintenance costs described in Exhibit A.

2.9 Section 5.18(c)(1)(ii)(I) - Annual Fees Paid for Use of Federal or Native American Tribal Lands

None.

3. PURPA Benefits – 18 CFR § 5.17(e) and 4.38(b)(2)(vi)

NSPW is not seeking benefits under the Public Utility Regulatory Policies Act (PURPA) as it pertains to the Project.

4. Works Cited

Ayres Associates. (2016). *2016 Consultant Safety Inspection Report for the Gile Reservoir Dam-WDNR Field File No. 26.09.*

NSPW. (2020). *Response to Additional Information Request Regarding Reservoir Storage Benefits, Gile Flowage (UL20-1). FERC Accession No. 20200221-5032.* February 21, 2020.

NSPW. (2022). *Final License Application for Subsequent License for the Saxon Falls Hydroelectric Project (FERC No. 2610-011) and New License for the Superior Falls Hydroelectric Project (FERC No. 2587-065). FERC Accession No. 20221230-5395.* December 30, 2022.

[12] Except for scheduled whitewater releases and emergencies beyond Applicant's control, which include preemptive drawdowns for expected large inflow events due to precipitation or snow melt to reduce flooding and increased reservoir elevations at the downstream hydroelectric projects.