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December 31, 2025

Ms. Lisa Felice
Executive Secretary
Michigan Public Service Commission
7109 W. Saginaw Highway
Lansing, MI 48917

**Re: In the matter, on the Commission's own motion, to
Clarify Sections 101 and 103 of Public Act 235 of 2023,
and to conduct a study of long-duration energy storage
and multi-day energy storage systems.**

**Case No. U-21571
Case No. U-21814**

Dear Ms. Felice:

Northern States Power Company – Wisconsin (“NSP-W” or “the Company”) submits this annual report pursuant to the Michigan Public Service Commission’s (“Commission”) order issued February 8, 2024 in Case No. U-21571 to implement annual energy storage reporting requirements established by Section 103 of Public Act 235 of 2023. Section 103 of Public Act 235 requires; “By December 31, 2024, and each year thereafter, an electric provider whose rates are regulated by the Commission shall submit a report to the commission documenting the centralized and distributed electricity storage systems in its service territory.”

The Commission’s February 8, 2024 order in Case No. U-21571 established the annual reporting requirements listed below, which should be filed in NSP-W’s most recent Integrated Resource Plan (“IRP”) docket (Case No. U-21814):

1. Amount of storage by category (short-duration, long-duration, or multi-day) that was installed prior to the effective date of Act 235. The amount should be expressed in both installed capacity (MW) and energy (megawatt-hours);
2. Amount of storage by category (short-duration, long-duration, or multi-day) that has been installed since the effective date of Act 235;
3. Amount of storage by category (short-duration, long-duration, or multi-day) that is contracted for but not yet installed since the effective date of Act 235. Expected commercial operation dates shall be included;
4. Identification of the proportion of all storage amounts discussed above that are centralized as compared to distributed storage systems;
5. A map of the location of individual storage facilities including both centralized and distributed;
6. A schedule of current and expected future energy storage solicitations, by category;

7. Any challenges encountered in storage development and anticipated challenges in future developments;
8. An estimation of the utility's energy storage target at the time of the report; and
9. Any additional information that the utility would like to present to the Commission.

The summary tables attached to this letter provide energy storage data associated with annual reporting items 1, 2, 3, 4, 6, and 8. A map of energy storage facilities located within NSP-W's Michigan service territory is not included due to there being only one residential battery installed, contracted, or planned for development in Michigan as of December 2025. Additional context regarding challenges the Company has encountered with energy storage development and procurement (Item 7) is provided in the following section.

Energy Storage Procurement Activities & Challenges

NSP-W is part of an integrated multi-state electric generation and transmission network (the "NSP System") that provides service to customers in Michigan, as well as Minnesota, Wisconsin, North Dakota, and South Dakota. Generation capacity planning (including deployment of energy storage) is subject to robust integrated resource planning ("IRP") processes in multiple states, including Michigan. The data included in this report reflects the 2024-2040 NSP System IRP Settlement Agreement filed December 4, 2025 in Case No. U-21814 that is pending approval by the Commission.. The procurement of energy storage capacity across the NSP System is driven by the approved IRP and associated investments in Company-owned resources, or purchase of capacity resources through competitive solicitations.

The Company currently has 0 MW / 0 MWh of installed utility-scale energy storage capacity located in the NSP System and 2,222.1 MW / 9,848.4MWh of utility-scale energy storage capacity under construction/contract. The Company completed successful negotiations with the majority of energy storage project developers who submitted bids as part of the 2024 Request for Proposals (RFP). However, some projects failed to execute contracts due to pricing challenges caused by tariffs, legislative changes to tax credits, supply chain and other changing market conditions. In late 2025 the Company released RFP's in Minnesota and Wisconsin for wind and solar resources along with paired storage or standalone storage. Bids are due in March of 2026 with contracts expected to be negotiated and signed by the end of the year. The utility-scale energy storage capacity values contained in this annual report reflect projects located across the NSP System. The distributed energy storage capacity values contained in this annual report reflect customer-owned systems taking service under NSP-W's Distributed Generation ("DG-1") tariff in Michigan, as well as Minnesota and Wisconsin.

Energy Storage Capacity Target

With regard to reporting Item 8, the Commission adopted a storage target of 3.3 MW of energy storage for NSP-W as approved in the Commission's order in docket No. U-21775 (U-21775-0057). The utility-scale energy storage projects currently under construction/contract will meet and exceed this capacity target.

Section 101 of Public Act 235 defines an eligible energy storage system as; "... an energy storage system that is located *within the local resource zone or the locational deliverability area, as defined by the appropriate independent system operator or regional transmission*

organization, in which the electric provider is subject to capacity demonstration obligations pursuant to section 6w(8)(b) of 1939 PA 3, MCL 460.6w.” (emphasis added). Therefore, energy storage resources installed within the NSP System, not just in Michigan, are eligible for use toward NSP-W’s share of the statewide target because they are all located within MISO LRZ1.

NSP-W expects that its share of Michigan’s statewide target will be met with energy storage resources located within the NSP System, which resides entirely within Load Resource Zone 1 (“LRZ1” of the Mid-Continent Independent System Operator (“MISO”) footprint). Specifically, the 76.6 MW / 306.4 MWh energy storage component of the 300 MW Elk Creek solar photovoltaic facility in Dunn County, Wisconsin, is expected to have a commercial operation date of quarter four of 2028. The Company also has additional projects located in Minnesota described below.

The 2024-2040 NSP System IRP will result in the installation of 900 MW / 3,600 MWh (assuming four-hour duration) by 2030 as well as one long duration 10 MW / 1,000 MWh pilot project. Once implemented, the NSP System IRP will far exceed the Company’s estimated share of Michigan’s energy storage target. A summary of energy storage resources to be procured under the 2024-2040 IRP are listed below:

- 10 MW / 1000 MWh long duration storage pilot project by Form Energy in Minnesota;
- 300 MW / 1,200 MWh short-duration storage located at the Sherco West coal plant site;
- 600 MW / 2,400 MWh of short-duration storage by 2030 (generic subject to competitive procurement);

Please contact Jackson Schmidtke at Jackson.H.Schmidtke@xcelenergy.com if you have any questions about this filing.

Respectfully submitted,



Tyrel J. Zich
Regional Vice President, Regulatory Policy
Northern States Power, a Wisconsin Corporation

Annual Energy Storage Report for Year Ended 2025

Table 1) Cumulative Energy Storage Capacity Installed within the NSP Upper Midwest System (within MISO LRZ 1)

	Installed Prior to Public Act 235 (before 2/27/2024)			Installed Since Public Act 235 (2/27/2024 to 12/31/2025)		
	# Systems	MW Capacity	MWh Energy	# Systems	MW Capacity	MWh Energy
Distributed ESS (Short Duration)	362	2.42	9.69	421	4.32	17.29
Distributed ESS (Long Duration)	0	0.0	0.0	0	0.0	0.0
Distributed ESS (Multi Day)	0	0.0	0.0	0	0.0	0.0
Centralized ESS (Short Duration)	0	0.0	0.0	0	0.0	0.0
Centralized ESS (Long Duration)	0	0.0	0.0	0	0.0	0.0
Centralized ESS (Multi Day)	0	0.0	0.0	0	0.0	0.0
Total NSP System in MISO LRZ1	362	2.42	9.69	421	4.32	17.29

Table 2) Cumulative Energy Storage Capacity Located in the NSPW Michigan Service Territory

	Installed Prior to Public Act 235 (before 2/27/2024)		Installed Since Public Act 235 (2/27/2024 to 12/31/2025)	
	MW Capacity	MWh Energy	MW Capacity	MWh Energy
Distributed ESS (Short Duration)	0.0	0.0	1	0.04
Distributed ESS (Long Duration)	0.0	0.0	0.0	0.0
Distributed ESS (Multi Day)	0.0	0.0	0.0	0.0
Centralized ESS (Short Duration)	0.0	0.0	0.0	0.0
Centralized ESS (Long Duration)	0.0	0.0	0.0	0.0
Centralized ESS (Multi Day)	0.0	0.0	0.0	0.0
Total in NSPW Michigan Territory	0.0	0.0	0.0	0.0

Table 3) Cumulative Energy Storage Capacity Contracted but not yet Installed

	Commercial Operation Date (COD) & Location			Capacity MW / MWh	
	COD	State	MISO LRZ	MW Capacity	MWh Energy
Distributed ESS (Short Duration)	None	<Select>	LRZ1	0.0	0.0
Distributed ESS (Long Duration)	None	<Select>	LRZ1	0.0	0.0
Distributed ESS (Multi Day)	None	<Select>	LRZ1	0.0	0.0
Centralized ESS (Short Duration) - Northstar	5/30/2027	MN	LRZ1	100.0	400.0
Centralized ESS (Short Duration) - Sherco West Battery	12/31/2027	MN	LRZ1	300.0	1200.0
Centralized ESS (Short Duration) - Elk Creek Storage	1/1/2029	WI	LRZ1	76.6	306.4
Centralized ESS (Short Duration) - Sherco South Storage	11/26/2027	MN	LRZ1	300.0	1200.0
Centralized ESS (Short Duration) - Blue Lake Storage	5/31/2027	MN	LRZ1	135.5	542.0
Centralized ESS (Short Duration) - Crowned Ridge Storage	12/15/2027	MN	LRZ1	120.0	480.0
Centralized ESS (Short Duration) - Tenaska Crane Storage	12/31/2028	MN	LRZ1	200.0	800.0
Centralized ESS (Short Duration) - NextEra Mayhew Storage	5/1/2028	MN	LRZ1	100.0	400.0
Centralized ESS (Short Duration) - Cottage Grove Storage	6/1/2028	MN	LRZ1	80.0	320.0
Centralized ESS (Short Duration) - Nobles Energy Storage	4/8/2028	MN	LRZ1	300.0	1200.0
Centralized ESS (Short Duration) - Sandhill Energy Storage	9/30/2028	MN	LRZ1	200.0	800.0
Centralized ESS (Short Duration) - Benton Energy Storage	6/1/2029	MN	LRZ1	300.0	1200.0
Centralized ESS (Long Duration)	None	<Select>	LRZ1	0.0	0.0
Centralized ESS (Multi Day) - Form Energy	3/1/2027	MN	LRZ1	10.0	1000.0
Total NSP System in MISO LRZ1				2222.1	9848.4

Annual Energy Storage Report for Year Ended 2025

Table 4) Centralized Energy Storage Capacity Procurement Plan (IRP Forecast & Solicitations)

IRP Forecast Description	IRP Forecast & Total Capacity Need			Solicitations for Centralized Energy Storage		
	IRP Year	MW	MWh	Short Duration	Long Duration	Multi Day
NSP Upper Midwest IRP 2024-2040	2024	0	0	2	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2025	0	0	1	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2026	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2027	860	3,440	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2028	245	980	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2029	120	480	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2030	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2031	240	960	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2032	360	1,440	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2033	60	240	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2034	60	240	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2035	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2036	60	240	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2037	360	1,440	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2038	240	960	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2039	120	480	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2040	0	0	None Planned	None Planned	None Planned
Total NSP System in MISO LRZ1		2,725	10,900			

Table 5) Distributed Energy Storage Capacity Procurement Plan (IRP Forecast & Solicitations)

IRP Forecast Description	IRP Forecast & Total Capacity Need			Solicitations for Distributed Energy Storage		
	IRP Year	MW	MWh	Short Duration	Long Duration	Multi Day
NSP Upper Midwest IRP 2024-2040	2024	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2025	0	0	1	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2026	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2027	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2028	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2029	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2030	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2031	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2032	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2033	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2034	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2035	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2036	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2037	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2038	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2039	0	0	None Planned	None Planned	None Planned
NSP Upper Midwest IRP 2024-2040	2040	0	0	None Planned	None Planned	None Planned
Total NSP System in MISO LRZ1		0	0			

Notes

- 1) Data in Table 1 prior to Act 235 differs from data reported in 2024's report. This is due to an effort to better document solar plus storage installations prior to 2025. This resulted in a slight decrease in installation figures.
- 2) All ESS capacity in the IRP forecasts is assumed to be 4-hour duration therefore MW forecasts are multiplied by four to compute MWh values
- 3) IRP forecasted ESS capacity in 2024-2040 are from the IRP Settlement approved by the MPUC in April 2025
- 4) Unless future mandates require NSP-W to obtain certain amounts of distributed ESS capacity, the Company does not expect to issue solicitations for distributed storage specific resources