2302 Great Northern Drive
Fargo, ND 58102

March 28, 2025

—Via Electronic Mail and U.S. Mail—

Steven M. Kahl, Executive Director
North Dakota Public Service Commission
State Capitol Building, Dept. 408
600 East Boulevard
Bismarck, ND 58505-0480

RE: 2024 METER TESTING RESULTS
CASE NOS. PU-25-___ & PU-25-___

Dear Mr. Kahl:

Northern States Power Company, doing business as Xcel Energy (Company), submits the enclosed original and seven copies of the summary results of the 2024 testing of the Company's North Dakota electric and natural gas meters, in compliance with sections 69.09.01.16 and 69.09.02.28 of the North Dakota Administrative Code.

A summary of the Company's 2024 electric meter testing results is provided as Attachment A. As a result of a 2015 Commission Staff review of our meter testing tariff, it was recommended the Company also include a more detailed report of our electric meter random test results for meters within the NSP-Minnesota operating company (serving the states of Minnesota, North Dakota, and South Dakota). That information is provided as Attachment B.

A summary of the Company's 2024 natural gas meter testing results is provided as Attachment C.

An electronic copy of this filing is also being sent to you for your convenience. Please contact me at alex.j.nisbet@xcelenergy.com if you have any questions regarding this filing.

Sincerely,

/s/

ALEX NISBET
REGULATORY POLICY SPECIALIST

Enclosures

Xcel Energy - State of North Dakota
Electric Meter Testing
Summary of 2024 Results

	Meters	Acceptable[1]		Slow		Fast		No Register	
Random Sample Tests	#	#	%	#	%	#	%	#	%
Self-contained Single & Polyphase	191	191	100.0%	0	0.0%	0	0.0%	0	0.0%
Transformer-rated Single & Polyphase	18	18	100.0%	0	0.0%	0	0.0%	0	0.0%
Total Random Tests	209	209	100.0%	0	0.0%	0	0.0%	0	0.0%
Periodic Tests	#	#	%	#	%	#	%	#	%
Transformer-rated Polyphase (>600V)[2]	37	37	100.0%	0	0.0%	0	0.0%	0	0.0%
Transformer-rated Polyphase (>1 MW)[3]	43	43	100.0%	0	0.0%	0	0.0%	0	0.0%
Total Periodic Tests	80	80	100.0%	0	0.0%	0	0.0%	0	0.0%
2024 Electric Meter Tests:	289	289	100.0%	0	0.0%	0	0.0%	0	0.0%

[1] Meters that test within acceptable tolerance have an average error within plus or minus 2% of accurate

[2] Meters in substations on primary services above 600 volts

[3] Meters with demands greater than 1 MW during the previous calendar year

See Section 3.1 *Metering and Testing* in Xcel Energy's North Dakota Electric Rate Book (NDPSC No. 2) for meter testing criterium and process.

Lots	Description (OPCO, Random Test, Manuf, Model, Test Code)	Manufacturer	Model	Form	Lot Size	Sample size ANSI_ASQ_Z1_9 (Inspection Level II)	New Buffer Sample Size Values Showing Requested Meters	Meters Requested	# of Meters Tested	Full Load Sigma	Bar-X	Full Load Bar-x	Full Load Estimated Percent Defect	Maximum Allowable Percent Defect	Full Load Pass/Fail
573	MN,RT,ABB,D5S,AC,SN	ABB Power	D5S	2S	385	20	23	21	21	0.287	-0.26	99.740	0.000	6.18	Pass
882	MN,RT,SCHLUM,J5S,IF	Schlumberger	J5S	2S	21404	100	105	97	105	0.347	-0.064	99.936	0.000	4.67	Pass
1079	MN,RT,ABB,AB1,AI	ABB Power	AB1	1S	512	35	40	30	34	0.228	0.198	100.198	0.000	5.58	Pass
8001	MN,RT,SCHLUM,J4ES,AF	Schlumberger	J4ES	2S	359	20	23	22	22	0.505	0.042	100.042	0.000	6.18	Pass
8004	MN,RT,ABB,ABS-5U,MP	ABB Power	ABS-5U	12S	14588	100	105	97	100	0.623	0.122	100.122	0.000	4.67	Pass
8006	MN,RT,ABB,AB1,AG	ABB Power	AB1	4S	53	7	9	8	8	0.393	-0.09	99.910	0.000	8.4	Pass
8015	MN,RT,L&G,MTN12S,MP	Landys & Gyr	VMW65E	12S	1026	35	40	37	38	0.243	-0.061	99.939	0.000	5.58	Pass
8018	MN,RT,ABB,D4S5U,MP	ABB Power	D4S5U	12S	995	35	40	37	37	0.247	0.188	100.188	0.000	5.58	Pass
8561	MN,RT,LANDIS&GYR,MQS	Landys & Gyr	VMW65E	3S	48	5	7	5	5	0.191	-0.074	99.926	0.000	9.8	Pass
8743	MN,RT,S,J5ES,AF,FM2S	Schlumberger	J5ES	2S	17	4	6	5	5	0.16	0.032	100.032	0.000	10.88	Pass
8745	MN,RT,W,A1D,TR,FM3S	ABB Power	A1D	3S	72	7	9	9	9	0.105	0.014	100.014	0.000	8.4	Pass
8747	MN,RT,W,A1D,TE,FM16S	ABB Power	A1D	16S	9563	75	80	67	76	0.136	-0.018	99.982	0.000	4.83	Pass
8748	MN,RT,W,A1D,TX,FM12S	ABB Power	A1D	12S	488	25	29	27	27	0.390	-0.094	99.906	0.000	5.98	Pass
8756	MN,RT,W,A1D,RJ,FM4S	ABB Power	A1D	4S	487	25	29	28	28	0.056	-0.024	99.976	0.000	5.98	Pass
8773	MN,RT,W,A1R+,Y8,FM35S	ABB Power	A1R+	35S	29	5	7	4	5	0.032	-0.004	99.996	0.000	9.8	Pass
8837	MN,RT,W,A1R+,BA,FM6S	General Electric	V65S	14S	122	10	12	11	11	0.07	-0.035	99.965	0.000	7.26	Pass
8849	MN,RT,D,AL,NX,FM2S	ABB Power	A1R+	6S	107060	150	156	131	157	7.409	-0.583	99.417	0.000	4.42	Pass
8850	MN,RT,D,AL,TX,FM12S	Landys & Gyr	AL	2S	53240	150	156	147	153	0.081	0.06	100.060	0.000	4.42	Pass
8857	MN,RT,D,AL,ALF,NY,FM2S	Landys & Gyr	AL	12S	2961	50	54	51	51	0.079	0.002	100.002	0.000	5.21	Pass
8868	MN,RT,D,AL,ALF,TR,FM3S	Landys & Gyr	AL (F)	2S	63	7	9	9	9	0.052	0.004	100.004	0.000	8.4	Pass
8871	MN,RT,D,AL,ZS,FM1S	Landys & Gyr	AL (F)	3S	525	35	40	30	35	0.051	0.014	100.014	0.000	5.58	Pass
8899	MN,RT,I,S,C1S,CISC,C1SRC,2B,FM1S	Landys & Gyr	AL	1S	1282	50	54	37	51	0.160	-0.038	99.962	0.000	5.21	Pass
8901	MN,RT,E,W,A1T+,A1TL+,NX,FM2S	Itron	C1S (C, RC)	1S	7810	75	80	70	76	0.120	-0.036	99.964	0.000	4.83	Pass
8902	MN,RT,E,A3R,A3RL,A3T,A3TL,NX,FM2S	Elster	A1T+, A1TL+	2S	8336	75	80	71	76	0.037	-0.028	99.972	0.000	4.83	Pass
8903	MN,RT,E,W,AB1,AC,FM2	Elster	A3R (L), A3T (L)	2S	75291	150	156	139	149	0.30	-0.113	99.887	0.000	4.42	Pass
8904	MN,RT,I,S,C1S,C1SC,C1SRC,1N,FM2S	Elster	AB1	2S	380614	200	209	148	204	6.30	-0.407	99.593	0.000	4.39	Pass
8905	MN,RT,S,J4S,AC,IF,FM2S	Itron	C1S (C, RC)	2S	5779	75	80	74	78	0.396	-0.104	99.896	0.000	4.83	Pass
8906	MN,RT,E,W,A1T+,NY,TU,FM2S	Schlumberger	J4S	2S	1526	50	54	45	51	0.106	-0.001	99.999	0.000	5.21	Pass
8907	MN,RT,E,A3RL,A3R,A3T,A3TL,NY,FM2S	Elster	A1T+	2S	774	35	40	34	38	0.047	-0.046	99.954	0.000	5.58	Pass
8908	MN,RT,I,C1S,C1SC,2J,FM2S	Elster	A3R (L), A3T (L)	2S	3057	50	54	45	52	0.123	0.029	100.029	0.000	5.21	Pass
8909	MN,RT,W,A1T+,A1TL+,TR,FM3S	Itron	C1SC	2S	113	10	12	12	12	0.131	0.025	100.025	0.000	7.26	Pass
8910	MN,RT,E,A3RL,A3R,A3T,A3TL,TR,FM3S	ABB Power	A1T+, A1TL+	3S	55	7	9	9	9	0.024	-0.024	99.976	0.000	8.4	Pass
8911	MN,RT,I,C1S,C1SC,2F,FM3S	Elster	A3R (L), A3T (L)	3S	1172	35	40	38	38	0.134	0.041	100.041	0.000	5.58	Pass
8912	MN,RT,E,W,A1T+,A1TL+,RJ,FM4S	Itron	C1SC	3S	2727	50	54	45	52	0.122	-0.012	99.988	0.000	5.21	Pass
8914	MN,RT,I,C1SRC,C1SC,2G,FM4S	Elster	A1T+, A1TL+	4S	1839	50	54	51	51	0.105	0.061	100.061	0.000	5.21	Pass
8918	MN,RT,I,S,CN1S,CN1SC,CN1SRC,2H,FM12S	Itron	C1SC, C1SRC	4S	37856	150	156	132	151	0.168	-0.076	99.924	0.000	4.42	Pass
8920	MN,RT,D,MT14S,BW,CL,FM14S	Itron	CN1S, CN1SRC	12S	279	15	18	13	15	0.205	0.044	100.044	0.000	6.55	Pass
8923	MN,RT,E,A3R,A3RL,A3T,A3TL,TE,FM16S	Landys & Gyr	VMW65E	14S	12407	100	105	94	102	0.033	-0.038	99.962	0.000	4.67	Pass
8926	MN,RT,W,A1R,A1R-AL,X8,FM36S	Elster	A3R (L), A3T (L)	16S	10	3	5	3	3	0.026	0.023	100.023	0.000	7.59	Pass
8927	MN,RT,E,W,A1R+,A1RL+,X8,FM36S	ABB Power	A1R, A1R-AL	36S	3954	75	80	71	75	0.053	-0.053	99.947	0.000	4.83	Pass
8936	MN,RT,E,A3R,A3RL,A3T,V0,FM12S	Elster	A1R+, A1RL+	36S	60	7	9	9	9	0.020	-0.039	99.961	0.000	8.4	Pass
8937	MN,RT,E,A3R,A3T,A3TL,A3RL,A3R-AL,A3R-A,RJ,FM4S	Elster	A3R (L), A3T	12S	1342	50	54	50	50	0.048	-0.007	99.993	0.000	5.21	Pass
8938	MN,RT,E,A3R-AL,A3R,A3R-A,ON,Y8,FM5/35S	Elster	A3R (AL), A3T (L)	4S	85	7	9	2	9	0.045	-0.03	99.970	0.000	8.4	Pass
8939	MN,RT,E,A3T,A3TL,A3RL,N5,FM1S	Elster	A3R (AL)	5S	119	10	12	8	12	0.02	-0.043	99.957	0.000	7.26	Pass
8940	MN,RT,W,A1T+,A1R-A,V0,FM12S	Elster	A3T (L), A3RL	1S	18	4	6	5	5	0.090	0.026	100.026	0.000	10.88	Pass
8945	MN,RT,E,W,A1R+,KZ,FM9S	ABB Power	A1T+, A1R-A	12S	17113	100	105	89	101	0.140	-0.034	99.966	0.000	4.67	Pass
8951	MN,RT,L&G,MS,AC	Elster	A1T+,A1R-A	1S	29794	100	105	95	102	0.263	-0.047	99.953	0.000	4.67	Pass
8952	MN,RT,GE,I70S,AC	Elster	A1R-A	2S	33078	100	105	100	100	0.15	-0.075	99.925	0.000	4.67	Pass
8959	MN,RT,D,AL,ALF,RJ,FM4S	Elster	A1R+	9S	534	35	40	35	35	0.05	0.004	100.004	0.000	5.58	Pass
8960	MN,RT,E,A3R,A3R-A,A3R-AL,A3RL,A3T,A3TL,Y1,FM16S	ABB Power	A1R,A1R-A,A1R-AL	6S	2255	50	54	43	50	0.029	-0.022	99.978	0.000	5.21	Pass
8961	MN,RT,E,A3T,A3TL,A3R,TX,FM12S	Landys & Gyr	MS	2S	1472	50	54	52	52	0.030	-0.039	99.961	0.000	5.21	Pass
8965	MN,RT,D,RXRE-SD,NX,FM2S	General Electric	I70S	2S	15440	100	105	98	100	0.055	0.044	100.044	0.000	4.67	Pass
8966	MN,RT,D,RXRE-SD,TX,FM12S	Landys & Gyr	AL (F)	4S	924	35	40	39	39	0.038	0.038	100.038	0.000	5.58	Pass
8967	MN,RT,S,S5S,SL5S,QM,CL,BW,FM14S	Elster	A3R (AL), A3T (L)	16S	29	5	7	3	5	0.35	0.456	100.456	0.000	9.8	Pass
8968	MN,RT,E,W,A3R,A3R-A,A3R-AL,A3R-ALNCQ,A3RALNCQ,A3CSPOLY,A3RL, KZ, FM9S	Elster	A3T (L), A3R	12S	13090	100	105	90	101	0.053	-0.011	99.989	0.000	4.67	Pass
8969	MN,RT,SCHLUMBERGER,SL12S,S12S,S2S,FM12S	Landys & Gyr	RXRE-SD	2S	2027	50	54	53	54	0.255	0.258	100.258	0.000	5.21	Pass
8970	MN,RT,E,W,A1T+,A1D+,TX,FM12S	Landys & Gyr	RXRE-SD	12S	10161	100	105	90	101	0.152	-0.044	99.956	0.000	4.67	Pass
8971	MN,RT,D,MSE,MS2SE,AF,FM2S	Schlumberger	S5S, SL5S	14S	22	4	6	6	6	0.335	-0.132	99.868	0.000	10.88	Pass
8972	MN,RT,E,W,A1T+,A1D+,TE,FM16S	Elster	A3R (ALNCQ), A3CSPOLY	9S	18511	100	105	81	100	0.281	-0.063	99.937	0.000	4.67	Pass
8973	MN,RT,W,A1R,A1R-A,A1R-AL,KZ,FM9S	Schlumberger	SL12S, S12S, S2S	12S	35	5	7	5	5	0.081	0.046	100.046	0.000	9.8	Pass
8974	MN,RT,E,W,A1T+,A1R-A,Y1,FM16S	Elster	A1D+, A1T+	12S	246	15	18	15	15	0.110	0.001	100.001	0.000	6.55	Pass
8975	MN,RT,E,A3R-AL,A3R,A3R-A,A3RALNCQ,BA,X8,FM6/36S	Landys & Gyr	MSE, MS2SE	2S	2304	50	54	52	52	0.053	-0.037	99.963	0.000	5.21	Pass
9003	MN,RT,I,RN2SID,RN2SID-NL,2H,FM12S	Elster	A1D+, A1T+	16S	89933	150	156	142	151	0.067	0.012	100.012	0.000	4.42	Pass
9004	MN,RT,I,RN2SID,RN2SID-NL,1N,FM2S	Elster	A1R (AL)	9S	587712	200	209	198	201	0.04	0.074	100.074	0.000	4.39	Pass
9005	MN,RT,I,R2SID,6J,FM1S	Elster	A1T+, A1R-A	16S	1122	35	40	31	36	0.056	0.083	100.083	0.000	5.58	Pass
9006	MN,RT,G,I-210+C,1N,FM2	Elster	A3R (ALNCQ)	6S, 36	1165	35	40	38	39	0.088	-0.065	99.935	0.000	5.58	Pass
9007	MN,RT ,G, I-210+CN, 2H, FM12S	Itron	RN2SID,RN2SID-NL	12S	7	3	5	5	5	0.06	-0.036	99.964	0.000	7.59	Pass
9008	MN, RT , I, RP3SIA, KZ, FM9S	Itron	RN2SID,RN2SID-NL	2S	282	20	23	22	22	0.058	-0.036	99.964	0.000	6.18	Pass
9009	MN,RT,I,RP3SIA,TE,FM16S	Itron	R2SID	1S	1398	50	54	48	50	0.038	0	100.000	0.000	5.21	Pass
9010	MN,RT,I,R2SI,2J,FM2S,CL320	Itron	R2SI	2S	3817	75	80	78	78	0.057	-0.018	99.982	0.000	4.83	Pass

Xcel Energy - North Dakota
Gas Meter Testing
Summary of 2024 Results

Meters with a capacity less than 400 Cubic feet per hour (CFH) (Residential size meters)	#	%
Total Number of Meters Tested	152	
Meters Tested Within Tolerance[1]	144	94.7%
Meters Tested Slow[2]	2	1.3%
Meters Tested Fast[3]	6	3.9%

Meters with a capacity of 400 CFH through 999 CFH (Small commercial size meters)	#	%
Total Number of Meters Tested	83	
Meters Tested Within Tolerance[1]	73	88.0%
Meters Tested Slow[2]	3	3.6%
Meters Tested Fast[3]	7	8.4%

Meters with a capacity greater than 999 CFH (Large commercial/industrial size meters)	#	%
Total Number of Meters Tested	137	
Meters Tested Within Tolerance[1]	137	100.0%
Meters Tested Slow[2]	0	0.0%
Meters Tested Fast[3]	0	0.0%

Meters are tested at two flow rates. The accuracy is the average of the two tests.

[1] Meters that test within tolerance have an average error within plus or minus 2% of accurate

[2] Meters that test slow (undermeasuring), have an average error greater than minus 2% of accurate

[3] Meters that test fast (overmeasuring), have an average error greater than plus 2% of accurate