



2302 Great N. Drive
Fargo, North Dakota 58402
701-241-8632
dave.sederquist@xcelenergy.com

April 1, 2016

VIA ELECTRONIC
AND U.S. MAIL

Darrell Nitschke, Executive Secretary
North Dakota Public Service Commission
Department 408
600 East Boulevard Avenue
Bismarck, ND 58505-0480

Re: Summary Report of 2015 Meter Testing Results

Dear Mr. Nitschke:

In accordance with sections 69.09.01.16 and 69.09.02.28 of the North Dakota Administrative Code, Northern States Power Company, an Xcel Energy company with operations in North Dakota, encloses summary results of the 2015 testing of the Company's North Dakota electric and natural gas meters.

Note that as a result of a 2015 Commission Staff review of our meter testing tariff, we are also including 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).

Please call or email me if you have any questions about the information provided.

Sincerely,

DAVID SEDERQUIST
SR. REGULATORY CONSULTANT

Enclosures

- 1 PU-16-152 Filed 04/01/2016 Pages: 7
Summary Report of 2015 Meter Testing Results
Northern States Power Company
David Sederquist
- 1 PU-16-151 Filed 04/01/2016 Pages: 7
Summary Report of 2015 Meter Testing Results
Northern States Power Company
David Sederquist

**Xcel Energy - State of North Dakota
Electric Meter Testing
Summary of 2015 Results**

<u>Test Category</u>	Meters	Acceptable ¹		Slow ²		Fast ³		No Register	
	#	#	%	#	%	#	%	#	%
Random tests	251	251	100.0%	0	0.0%	0	0.0%	0	0.0%
Selective/ Random/ Routine Test	176	176	100.0%	0	0.0%	0	0.0%	0	0.0%
Cellnet Problem Suspected	108	108	100.0%	0	0.0%	0	0.0%	0	0.0%
Customer requested	48	48	100.0%	0	0.0%	0	0.0%	0	0.0%
Company request / field check	37	37	100.0%	0	0.0%	0	0.0%	0	0.0%
Dead register	12	12	100.0%	0	0.0%	0	0.0%	0	0.0%
Periodic tests	5	5	100.0%	0	0.0%	0	0.0%	0	0.0%
Tamper suspected	5	5	100.0%	0	0.0%	0	0.0%	0	0.0%
Older vintaged meter test	2	2	100.0%	0	0.0%	0	0.0%	0	0.0%
Cellnet Errors	1	1	100.0%	0	0.0%	0	0.0%	0	0.0%
New receipted meters	0	0	N/A	0	N/A	0	N/A	0	N/A
Reconditioned / Re-serviced	0	0	N/A	0	N/A	0	N/A	0	N/A
Automated energy services tests	0	0	N/A	0	N/A	0	N/A	0	N/A
Low Consumption (internal request)	0	0	N/A	0	N/A	0	N/A	0	N/A
Manufacturer defect	0	0	N/A	0	N/A	0	N/A	0	N/A
Electric Meter Totals:	645	645	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 that test slow (under measuring) have an average error lower than -2% of accurate

³ Meters that test fast (over measuring) have an average error higher than +2% of accurate

2015 North Dakota Random Test Detail Report

Lot	OPCO	Description (OPCO, Random Test, Manuf, Model, Test Code)	Manufacturer	Meter Type	Meter Form	Lot Size	Sample Size MIL-STD-414 (Inspection Level IV)	Meters Requested	# of Meters Tested	Full Load Sigma	Full Load Bar-x	Full Load Est. % Defect	MIL-STD-414 Max. Allowable % Defect	Full Load Pass/Fail
1006	NSP-MN	MN,RT,GE,I70S,AC,SN <= 70000000	General Electric	I70S	2	26,031	100	110	108	0.214	99.979	0.000	4.690	Pass
1007	NSP-MN	MN,RT,GE,I70S,AC,SN BET 70,000,000 & 80,000,001	General Electric	I70S	2	35,346	100	110	108	0.164	99.935	0.000	4.690	Pass
1008	NSP-MN	MN,RT,GE,I70S,AC,SN BET 80,000,000 & 90,000,001	General Electric	I70S	2	47,308	100	110	110	0.186	99.963	0.000	4.690	Pass
1009	NSP-MN	MN,RT,GE,I70S,AC,SN > 90,000,000	General Electric	I70S	2	41,575	100	110	108	0.164	99.989	0.000	4.690	Pass
1077	NSP-MN	MN,RT,SCHLUM,S112S,MP	Schlumberger	S112S	12	3,201	50	55	55	0.152	#####	0.000	5.200	Pass
1079	NSP-MN	MN,RT,ABB,AB1,AI	ABB Power	AB1	1	2,797	40	44	42	0.460	#####	0.000	5.580	Pass
211	NSP-MN	MN,RT,GE,I70S,AF	General Electric	I70S	2	15	3	4	4	0.214	99.970	0.000	7.590	Pass
573	NSP-MN	MN,RT,ABB,D5S,AC,SN>79200000	ABB Power	AB1	2	2,094	40	44	44	0.252	99.840	0.000	5.580	Pass
609	NSP-MN	MN,RT,L&G,MS,AC,SN<21155180	Landys & Gyr	MS	2	20,824	75	83	82	0.410	#####	0.000	4.870	Pass
610	NSP-MN	MN,RT,L&G,MS,AC,BET 21155180 - 224256936	Landys & Gyr	MS	2	23,004	100	110	110	0.228	99.901	0.000	4.690	Pass
611	NSP-MN	MN,RT,L&G,MS,AC,BET 24256935 - 33024770	Landys & Gyr	MS	2	27,276	100	110	108	0.235	99.920	0.000	4.690	Pass
612	NSP-MN	MN,RT,L&G,MS,AC,SN>33024770	Landys & Gyr	MS	2	29,403	100	110	109	0.207	99.966	0.000	4.690	Pass
8001	NSP-MN	MN,RT,SCHLUM,J4ES,AF	Schlumberger	J4ES	2	1,240	35	39	39	0.476	99.914	0.000	5.570	Pass
8004	NSP-MN	MN,RT,ABB,ABS-5U,MP	ABB Power	ABS-5U	12	44,205	100	110	108	0.195	#####	0.000	4.690	Pass
8005	NSP-MN	MN,RT,ABB,AB1,JW	ABB Power	AB1	3	20	4	5	4	0.302	#####	0.000	10.920	Pass
8008	NSP-MN	MN,RT,ABB,AB1,AG	ABB Power	AB1	4	187	20	22	21	0.299	99.900	0.000	6.170	Pass
8015	NSP-MN	MN,RT,L&G,MTN12S,MP	Landys & Gyr	MTN12S	12	5,190	50	55	52	0.214	#####	0.000	5.200	Pass
8018	NSP-MN	MN,RT,SCHLUM,S12S,MP	Schlumberger	S12S	12	6,657	50	55	55	0.357	#####	0.000	5.200	Pass
8018	NSP-MN	MN,RT,ABB,D4S5U,MP	ABB Power	D4S5U	12	4,912	50	55	55	0.248	99.966	0.000	5.200	Pass
8019	NSP-MN	MN,RT,ABB,D5S5U,MP	ABB Power	D4S5U	12	29	5	6	6	0.179	99.842	0.000	9.800	Pass
8561	NSP-MN	MN,RT,LANDIS&GYR,MQS	Landys & Gyr	MQS	2	388	25	28	28	0.255	99.893	0.000	5.970	Pass
8729	NSP-MN	MN,RT,G,VMW65E,BA,FM6S	General Electric	VMW65E	6	3	3	4	3	0.079	#####	0.000	7.590	Pass
8731	NSP-MN	MN,RT,S,SLS5,BW,FM14	Schlumberger	SLS5	14	92	10	11	11	0.319	#####	0.000	7.290	Pass
8733	NSP-MN	MN,RT,G,VMW65S,BP,FM6S	General Electric	VMW65	6	3	3	4	3	0.024	99.960	0.000	7.590	Pass
8734	NSP-MN	MN,RT,D,MSE,AF,FM2S	Landys & Gyr	MSE	2	158	15	17	17	0.140	#####	0.000	6.560	Pass
8735	NSP-MN	MN,RT,D,MS2SE,AF,FM2S	Landys & Gyr	MS2SE	2	44	7	8	8	0.176	99.874	0.000	8.400	Pass
8739	NSP-MN	MN,RT,S,S5S,BP,FM6S	Schlumberger	S5S	14	3	3	4	3	0.075	#####	0.000	7.590	Pass
8741	NSP-MN	MN,RT,S,S5S,QM,FM14S	Schlumberger	S5S	14	60	7	8	7	0.273	#####	0.000	8.400	Pass
8742	NSP-MN	MN,RT,S,J4ES,NX,FM2S	Schlumberger	J4ES	2	6	3	4	4	0.303	#####	0.000	7.590	Pass
8743	NSP-MN	MN,RT,S,J5ES,AF,FM2S	Schlumberger	J5ES	2	112	15	17	17	0.278	99.948	0.000	6.560	Pass
8745	NSP-MN	MN,RT,W,A1D,TR,FM3S	ABB Power	A1D	3	121	15	17	16	0.076	99.986	0.000	6.560	Pass
8746	NSP-MN	MN,RT,W,A1R,BA,FM6S	ABB Power	A1R	6	30	5	6	6	0.030	99.983	0.000	9.800	Pass
8747	NSP-MN	MN,RT,W,A1D,TE,FM16S	ABB Power	A1D	16	12,454	75	83	76	0.059	99.958	0.000	4.870	Pass
8748	NSP-MN	MN,RT,W,A1D,TX,FM12S	ABB Power	A1D	12	907	35	39	37	0.048	99.991	0.000	5.570	Pass
8750	NSP-MN	MN,RT,W,A1R-A,BA,FM6S	ABB Power	A1R-A	6	13	3	4	3	0.063	99.907	0.000	7.590	Pass
8751	NSP-MN	MN,RT,W,A1R-A,KZ,FM9S	ABB Power	A1R-A	9	9	3	4	4	0.028	#####	0.000	7.590	Pass
8756	NSP-MN	MN,RT,W,A1D,RJ,FM4S	ABB Power	A1R	9	107	10	11	11	0.047	#####	0.000	7.290	Pass
8759	NSP-MN	MN,RT,W,A1R-AL,KZ,FM9S	ABB Power	A1R-AL	4	656	30	33	32	0.079	#####	0.000	5.860	Pass
8760	NSP-MN	MN,RT,W,A1R-AL,BA,FM6S	ABB Power	A1R-AL	9	380	25	28	28	0.035	#####	0.000	5.970	Pass
8763	NSP-MN	MN,RT,S,S2S,MP,FM12S	Schlumberger	S2S	12	42	7	8	8	0.026	99.994	0.000	8.400	Pass
8764	NSP-MN	MN,RT,W,A1R+KZ,FM9S	Schlumberger	S2S	12	513	30	33	33	0.261	#####	0.000	5.860	Pass
8768	NSP-MN	MN,RT,W,A1T+TE,FM16S	ABB Power	A1T+	9	14,431	75	83	75	0.036	#####	0.000	4.870	Pass
8770	NSP-MN	MN,RT,W,A1T+TX,FM12S	ABB Power	A1T+	16	13,897	75	83	81	0.040	99.962	0.000	4.870	Pass
8772	NSP-MN	MN,RT,W,A1D+TE,FM16S	ABB Power	A1D+	12	2,915	40	44	43	0.036	99.968	0.000	5.580	Pass
8772	NSP-MN	MN,RT,W,A1D+TE,FM16S	ABB Power	A1D+	16	20	4	5	5	0.053	99.986	0.000	10.920	Pass

Lot	OPCO	Description (OPCO, Random Test, Manuf, Model, Test Code)	Manufacturer	Meter Type	Meter Form	Lot Size	Sample Size MIL-STD-414 (Inspection Level IV)	Meters Requested	# of Meters Tested	Full Load Sigma	Full Load Bar-x	Full Load Est. % Defect	MIL-STD-414 Max. Allowable % Defect	Full Load Pass/Fail
8773	NSP-MN	MN,RT,W,A1R+,Y8,FM35S	ABB Power	A1R+	35	88	10	11	11	0.033	99.976	0.000	7.290	Pass
8776	NSP-MN	MN,RT,W,A1D+,TX,FM12S	ABB Power	A1D+	12	5,928	50	55	54	0.037	99.973	0.000	5.200	Pass
8777	NSP-MN	MN,RT,W,A1T+,VO,FM12S	ABB Power	A1T+	12	33	5	6	6	0.052	99.992	0.000	9.800	Pass
8779	NSP-MN	MN,RT,G,V65S,BW,FM14S	General Electric	V65S	14	55	7	8	8	0.441	#####	0.000	8.400	Pass
8780	NSP-MN	MN,RT,E,A1D+,TX,FM12S	Elster	A1D+	12	6,767	50	55	55	0.037	99.969	0.000	5.200	Pass
8782	NSP-MN	MN,RT,E,A1R+,KZ,FM9S	Elster	A1R+	9	47	7	8	8	0.032	#####	0.000	8.400	Pass
8783	NSP-MN	MN,RT,J,323-P,ALL FORMS	Scientific Columbus	323-P	9	3	3	4	2	0.000	99.985	0.000	7.590	*
8784	NSP-MN	MN,RT,W,A1R-A,TE,N5,RJ,Y8,ALL FORMS	ABB Power	A1R-A	ALL	5	3	4	4	0.069	#####	0.000	7.590	Pass
8785	NSP-MN	MN,RT,W,A1R-AL,ON,FM5S	ABB Power	A1R-AL	5	4	3	4	4	0.017	99.995	0.000	7.590	Pass
8787	NSP-MN	MN,RT,W,A1T+,Y1,FM16S	ABB Power	A1T+	16	229	20	22	22	0.039	99.941	0.000	6.170	Pass
8791	NSP-MN	MN,RT,E,A1T+,TE,FM16S	Elster	A1T+	16	8,248	75	83	82	0.055	99.875	0.000	4.870	Pass
8792	NSP-MN	MN,RT,E,A1T+,Y1,FM16S	Elster	A1T+	16	565	30	33	32	0.060	99.913	0.000	5.860	Pass
8801	NSP-MN	MN,RT,W,A1R-A,NY,FM2S	ABB Power	A1R-A	2	10	3	4	4	0.109	#####	0.000	7.590	Pass
8805	NSP-MN	MN,RT,E,A1D+,TE,FM16S	Elster	A1D+	16	352	25	28	26	0.042	99.864	0.000	5.970	Pass
8806	NSP-MN	MN,RT,E,A1R+,KZ,FM9S	Elster	A1R+	9	6,662	50	55	52	0.068	99.874	0.000	5.200	Pass
882	NSP-MN	MN,RT,SCHLUM,J5S,IF	Schlumberger	J5S	2	78,742	100	110	109	0.192	99.923	0.000	4.690	Pass
8830	NSP-MN	MN,RT,W,A1T+,N5,FM1S	ABB Power	A1T+	1	14	3	4	4	0.044	99.942	0.000	7.590	Pass
8834	NSP-MN	MN,RT,E,A3R-AL,BA,X8,FM6/36S	Elster	A3R-AL	36	557	30	33	33	0.050	99.983	0.000	5.860	Pass
8835	NSP-MN	MN,RT,E,A3R-AL,ON,Y8,FM5/35S	Elster	A3R-AL	35	30	5	6	6	0.044	99.992	0.000	9.800	Pass
8837	NSP-MN	MN,RT,W,A1R+,BA,FM6S	ABB Power	A1R+	6	187	20	22	21	0.048	99.925	0.000	6.170	Pass
884	NSP-MN	MN,RT,SCHLUM,J5S,LY	Schlumberger	J5S	4	21	4	5	5	0.204	#####	0.000	10.920	Pass
8841	NSP-MN	MN,RT,E,A1R-A,NY,FM2S	Elster	A1R-A	2	13	3	4	4	0.057	#####	0.000	7.590	Pass
8842	NSP-MN	MN,RT,E,A1T+,TX,FM12S	Elster	A1T+	12	115	15	17	17	0.063	99.926	0.000	6.560	Pass
8849	NSP-MN	MN,RT,D,AL,NX,FM2S	Landys & Gyr	AL	2	19,081	75	83	80	0.100	#####	0.000	4.870	Pass
8850	NSP-MN	MN,RT,D,AL,FX,FM12S	Landys & Gyr	AL	12	5,483	50	55	52	0.028	#####	0.000	5.200	Pass
8857	NSP-MN	MN,RT,D,AL,FX,FM2S	Landys & Gyr	AL	2	699	30	33	33	0.063	99.973	0.000	5.860	Pass
8862	NSP-MN	MN,RT,D,AL,RJ,FM4S	Landys & Gyr	AL	4	80	10	11	11	0.146	99.951	0.000	7.290	Pass
8867	NSP-MN	MN,RT,E,A3R,Y8,FM35S	Elster	A3R	5	24	4	5	5	0.028	99.998	0.000	10.920	Pass
8868	NSP-MN	MN,RT,D,AL,ALF,TR,FM3S	Landys & Gyr	AL	3	14	3	4	4	0.017	99.977	0.000	7.590	Pass
8871	NSP-MN	MN,RT,D,AL,ZS,FM1S	Landys & Gyr	AL	1	17	4	5	5	0.107	#####	0.000	10.920	Pass
8899	NSP-MN	MN,RT,I,S,C1S,C1S,C1S,2B,FM1S	Itron	C1S	1	2,681	40	44	43	0.168	99.961	0.000	5.580	Pass
8900	NSP-MN	MN,RT,E,W,A1D,A1R-A,A1T,NX,FM2S	Elster	A1D	2	6	3	4	4	0.088	99.970	0.000	7.590	Pass
8901	NSP-MN	MN,RT,E,W,A1T+,A1T+,NX,FM2S	Elster	A1T+	2	11,508	75	83	82	0.132	99.956	0.000	4.870	Pass
8902	NSP-MN	MN,RT,E,A3R,A3R,A3T,A3TL,NX,FM2S	Elster	A3	2	2,026	40	44	43	0.040	99.836	0.000	5.580	Pass
8903	NSP-MN	MN,RT,E,W,AB1,AC,FM2	Elster	AB1	2	328,286	150	165	163	0.365	99.996	0.000	4.430	Pass
8904	NSP-MN	MN,RT,I,S,C1S,C1S,C1S,1N,FM2S	Itron	C1S	2	497,361	150	165	163	0.132	#####	0.000	4.430	Pass
8905	NSP-MN	MN,RT,S,J4S,AC,IF,FM2S	Schlumberger	J4S	2	22,184	100	110	110	0.299	99.873	0.000	4.690	Pass
8906	NSP-MN	MN,RT,E,W,A1T+,NY,TU,FM2S	Elster	A1T+	2	2,376	40	44	44	0.140	99.934	0.000	5.580	Pass
8907	NSP-MN	MN,RT,E,A3R,A3R,A3T,A3TL,NY,FM2S	Elster	A3	2	209	20	22	22	0.042	#####	0.000	6.170	Pass
8908	NSP-MN	MN,RT,I,C1S,C1S,2J,FM2S	Itron	C1S	2	4,359	50	55	54	0.145	#####	0.000	5.200	Pass
8909	NSP-MN	MN,RT,W,A1T+,A1T+,TR,FM3S	ABB Power	A1T+	3	178	15	17	17	0.110	99.964	0.000	6.560	Pass
8910	NSP-MN	MN,RT,E,A3R,A3R,A3T,A3TL,TR,FM3S	Elster	A3	3	33	5	6	6	0.026	99.840	0.000	9.800	Pass
8911	NSP-MN	MN,RT,I,C1S,C1S,2F,FM3S	Itron	C1S	3	1,523	40	44	43	0.128	#####	0.000	5.580	Pass
8912	NSP-MN	MN,RT,E,W,A1T+,A1T+,RJ,FM4S	Elster	A1T+	4	3,410	50	55	50	0.137	99.986	0.000	5.200	Pass
8913	NSP-MN	MN,RT,E,A3R,A3T,A3TL,RJ,FM4S	Elster	A3	4	426	25	28	25	0.033	99.847	0.000	5.970	Pass
8914	NSP-MN	MN,RT,I,C1S,C1S,2G,FM4S	Itron	C1S	4	2,015	40	44	42	0.078	#####	0.000	5.580	Pass
8915	NSP-MN	MN,RT,E,A3R,A3R-A,A3R-AL,A3R-AL,NCO,Q,KZ,F	Elster	A3	9	5,087	50	55	52	0.039	#####	0.000	5.200	Pass

Lot	OPCO	Description (OPCO, Random Test, Manuf, Model, Test Code)	Manufacturer	Meter Type	Meter Form	Lot Size	Sample Size MIL-STD-414 (Inspection Level IV)	Meters Requested	# of Meters Tested	Full Load Sigma	Full Load Bar-x	Full Load Est. % Defect	MIL-STD-414 Max. Allowable % Defect	Full Load Pass/Fail
8916	NSP-MN	MN,RT,I,SS4S2L,SS4S3L,SS4S4L,KZ,FM9S	Itron	SS4S	9	43	7	8	8	0.024	99.989	0.000	8.400	Pass
8917	NSP-MN	MN,RT,E,A3T,A3TL,TX,FM12S	Elster	A3T	12	295	20	22	22	0.026	#####	0.000	6.170	Pass
8918	NSP-MN	MN,RT,I,S,CN1S,CN1SC,CN1SRC,2H,FM12S	Itron	CN1S	12	54,401	100	110	108	0.107	#####	0.000	4.690	Pass
8919	NSP-MN	MN,RT,E,A3RL,A3T,V0,FM12S	Elster	A3	12	10	3	4	4	0.000	99.997	0.000	7.590	Pass
8920	NSP-MN	MN,RT,D,MT14S,BW,CL,FM14S	Landys & Gyr	MT14S	14	644	30	33	31	0.251	#####	0.000	5.860	Pass
8921	NSP-MN	MN,RT,S,SSS,CL,BW,FM14S	Schlumberger	SSS	14	93	10	11	10	0.381	#####	0.000	7.290	Pass
8923	NSP-MN	MN,RT,E,A3R,A3RL,A3T,A3TL,TE,FM16S	Elster	A3	16	3,984	50	55	50	0.024	99.991	0.000	5.200	Pass
8924	NSP-MN	MN,RT,E,A3R,A3RL,A3T,A3TL,Y1,FM16S	Elster	A3	16	382	25	28	28	0.026	99.994	0.000	5.970	Pass
8925	NSP-MN	MN,RT,W,ATR,A1R-AL,Y8,FM36S	ABB Power	A1R	35	3	3	4	3	0.067	99.997	0.000	7.590	Pass
8926	NSP-MN	MN,RT,W,A1R,A1R-AL,X8,FM36S	ABB Power	A1R	36	63	7	8	8	0.056	#####	0.000	8.400	Pass
8927	NSP-MN	MN,RT,E,W,ATR+,A1R+,X8,FM36S	Elster	A1R+	36	5,391	50	55	52	0.053	99.929	0.000	5.200	Pass
8928	NSP-MN	MN,RT,E,A3R,A3R-A,A3RALNCO,X8,FM36S	Elster	A3R	36	746	30	33	33	0.069	99.982	0.000	5.860	Pass
Total						1,452,214	3,670	4,066	3,965					

* Sample too small, no analysis. Should not be in Random Lot (periodic meters)

Test Codes (as referenced in the "Description" column)

CODE	DESCRIPTION	TABLE	CODE	DESCRIPTION	TABLE
A	AGE	D008	NW	NO TEST WHY METER TEST	D008
AM	AUTOMATE METER READ	D008	O	OBSOLETE / RETIRE / SCRAP	D008
BD	BROKEN DIAL	D008	OK	OKLAHOMA/KANSAS SALE	D008
C	CUSTOMER REQUEST/BILLING	D008	OR	OBSOLETE RECORDER	D008
CA	CAPACITY CHANGE	D008	OT	OTHER - RETURN MISCELLANEOUS	D008
CC	CC-REQUEST METER TEST	D008	P	PERIODIC TEST	D008
CD	CHANGED BECAUSE OF DAMAGED RECORDER	D008	PC	PRESSURE CHANGE	D008
CE	CELLNET ERRORS	D008	PF	PARTS FAILURE	D008
CH	CHEYENNE SALE	D008	PT	AES TOM NOT WORKING PROPERLY	D008
CM	COMEBACK	D008	PU	PUBLIC UTILITY COMMISSION	D008
CN	CELLNET METER	D008	QA	QUALITY ASSURANCE - NEW METER TEST	D008
CO	COMPANY REQUEST/FIELD CHECK	D008	R	RESERVED / REPAIR	D008
CP	CELLNET PROBLEM SUSPECTED	D008	RC	RATE CHANGE	D008
DE	DELINQUENT EXCHANGE	D008	RM	REMOVE METER TEST	D008
DF	DAMAGE IN FIELD/BAD DEVICE	D008	RS	RETURN SURVEY	D008
DM	DAMAGE MISCELLANEOUS	D008	RT	RETIRE METER TEST	D008
DP	DOESN'T PASS GAS - STUCK	D008	RU	RECORDER UPGRADE	D008
DR	PASSES GAS- DOESN'T REGISTER	D008	RW	REWIRE	D008
DS	DISCONTINUE SERVICE	D008	S	SELECTIVE/RANDOM/ROUTINE TEST	D008
DT	DAMAGE IN FIELD	D008	SC	SERVICE CHANGE	D008
E	NOISY METER	D008	SD	SOLD TO DELANO MUNI UTILITY	D008
EE	EMPLOYEE ERROR	D008	SG	SMART GRID METER	D008
EF	EQUIPMENT FAILURE	D008	SM	SCRAPPED METER TESTS	D008
EU	EQUIPMENT UPGRADE	D008	SR	STRAIGHT RETURN	D008
F	CHANGE IN SIZE	D008	SS	SPECIAL SAMPLE	D008
FD	FIRE DAMAGE	D008	ST	SPECIAL TEST - INTERCHANGE/LARGE CUST	D008
FL	CELLNET FLAG	D008	SU	SURVEY CHANGE	D008
FP	FIELD PERIODIC	D008	SW	SWITCHED METER	D008
FT	FINAL TEST (OUT TEST)	D008	SY	SMARTSYNC EXCHANGES	D008
FX	FIX - SYSTEM CORRECTION	D008	T	TAMPERING SUSPECTED	D008
G	ACCOUNT CLOSED	D008	TM	AES TIN METER EFFORT	D008
GI	GAS INSPECTIONS - DIS CONVERSION	D008	TU	TIME OF USE - COLORADO	D008
H	NEW ACCOUNT	D008	W	WISCONSIN CREDIT	D008
I	INSTRUMENT CHANGE	D008	WB	WRECKING BUILDING	D008
IO	IN TO OUT	D008	WI	ORCOM TEST CONVERSIONS	D008
J	LOT FAILURE	D008	XR	COMPANY REQUEST	D008
K	LEAKING	D008	FR	FLOOD REMOVAL	D008
L	LOST, DAMAGED, STOLEN	D008	AO	AMRP METER MOVE-OUTS	D008
LC	LOW CONSUMPTION/CBO REQUEST	D008	MO	METER MOVE-OUT	D008
LF	LOTFAIL	D008			
M	MODULE DR METER	D008			
MD	MANUFACTURER DEFECT / REPAIRED - ELEC	D008			
MT	MANUFACTURER TEST / MFG TESTS ENTERED	D008			
MU	METER UPGRADE	D008			
N	NEW METER TEST/IN TESTING	D008			
NC	NO TEST	D008			

**Xcel Energy - State of North Dakota
 Natural Gas Meter Testing
 Summary of 2015 Results**

Meter Test Group

Residential (capacity < 400 cubic ft/hr) 435
 Small C&I (capacity 400 - 999 cubic ft/hr) 54
 Large C&I (capacity > 999 cubic ft/hr) 140
Natural Gas Meter Totals 629

Meters #	Acceptable ¹		Slow ²		Fast ³		No Register	
	#	%	#	%	#	%	#	%
435	419	96.3%	7	1.6%	9	2.1%	0	0.0%
54	53	98.1%	0	0.0%	1	1.9%	0	0.0%
140	136	97.1%	0	0.0%	4	2.9%	0	0.0%
629	608	96.7%	7	1.1%	14	2.2%	0	0.0%

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

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

² Meters that test slow (under measuring) have an average error lower than -2% of accurate

³ Meters that test fast (over measuring) have an average error higher than +2% of accurate