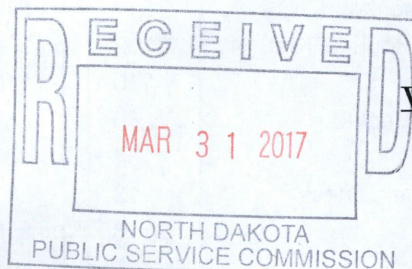


2302 Great N. Drive  
Fargo, North Dakota 58402  
701-241-8632  
dave.sederquist@xcelenergy.com

March 31, 2017



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 2016 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 2016 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-17-127** Filed: 3/31/2017 Pages: 7  
**Summary Report of 2016 Meter Testing Results**

Northern States Power Company  
David Sederquist

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**Summary Report of 2016 Meter Testing Results**

Northern States Power Company  
David Sederquist

**Xcel Energy - State of North Dakota  
Electric Meter Testing  
Summary of 2016 Results**

<b>Test Category</b>	Meters	Acceptable <sup>1</sup>		Slow <sup>2</sup>		Fast <sup>3</sup>		No Register	
	#	#	%	#	%	#	%	#	%
Reconditioned / Re-serviced	517	516	99.8%	0	0.0%	0	0.0%	1	0.2%
Selective/ Random/ Routine Test	302	301	99.7%	0	0.0%	1	0.3%	0	0.0%
Did Not Register	110	110	100.0%	0	0.0%	0	0.0%	0	0.0%
Cellnet Problem Suspected	80	80	100.0%	0	0.0%	0	0.0%	0	0.0%
Customer requested	34	33	97.1%	0	0.0%	0	0.0%	1	2.9%
Company request / field check	13	13	100.0%	0	0.0%	0	0.0%	0	0.0%
Periodic tests	6	6	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%
Other-Return Miscellaneous	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%
<b>2016 Electric Meter Totals:</b>	1,070	1,067	99.7%	0	0.0%	1	0.1%	2	0.2%

- 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

2016 North Dakota Random Test Detail Report

Lot	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 Maximum Allowable % Defect	Full Load Pass/Fail
211	MN,RT,GE,I70S,AF	General Electric	MTN12S	25	11	3	4	4	0.187	99.695	0.000	7.590	Pass
573	MN,RT,ABB,D5S,AC,SN>79200000	ABB Power	D5S	25	1,964	50	55	54	0.354	99.900	0.000	5.210	Pass
609	MN,RT,L&G,MS,AC,SN<21155180	Landys & Gyr	MS	25	20,429	100	110	107	0.333	99.977	0.000	4.670	Pass
610	MN,RT,L&G,MS,AC,BET 21155180 - 224266936	Landys & Gyr	MS	25	22,540	100	110	106	0.207	99.923	0.000	4.670	Pass
611	MN,RT,L&G,MS,AC,BET 242566935 - 33024770	Landys & Gyr	MS	25	26,711	100	110	108	0.246	99.924	0.000	4.670	Pass
612	MN,RT,L&G,MS,AC,SN>33024770	Landys & Gyr	MS	25	28,861	100	110	106	0.212	99.982	0.000	4.670	Pass
882	MN,RT,SCHLUM,J5S,IF	Schlumberger	S5S	25	77,686	150	165	161	0.240	99.907	0.000	4.420	Pass
884	MN,RT,SCHLUM,J5S,LY	Schlumberger	SL12S	45	15	3	4	3	0.116	99.690	0.000	7.590	Pass
1006	MN,RT,GE,I70S,AC,SN <= 70000000	General Electric	I70S	25	26,408	100	110	109	0.178	99.915	0.000	4.670	Pass
1007	MN,RT,GE,I70S,AC,SN BET 70,000,000 & 80,000,001	General Electric	I70S	25	34,486	100	110	106	0.160	99.923	0.000	4.670	Pass
1008	MN,RT,GE,I70S,AC,SN BET 80,000,000 & 90,000,001	General Electric	I70S	25	46,281	150	165	163	0.150	99.955	0.000	4.420	Pass
1009	MN,RT,GE,I70S,AC,SN > 90,000,000	General Electric	I70S	25	40,676	150	165	161	0.173	99.962	0.000	4.420	Pass
1077	MN,RT,SCHLUM,SL12S,MP	Schlumberger	SL12S	12S	3,122	50	55	54	0.306	99.728	0.000	5.210	Pass
1079	MN,RT,ABB,AB1,AI	ABB Power	AB1	5S	2,504	50	55	50	0.222	99.836	0.000	5.210	Pass
8001	MN,RT,SCHLUM,J4ES,AF	Schlumberger	SL2S	25	1,172	35	39	39	0.160	100.000	0.000	5.580	Pass
8004	MN,RT,ABB,ABS-5U,MP	ABB Power	ABS-5U	12S	43,516	150	165	160	0.307	99.916	0.000	4.420	Pass
8005	MN,RT,ABB,AB1,JW	ABB Power	AB1	3S	16	4	5	5	0.371	99.796	0.000	10.880	Pass
8006	MN,RT,ABB,AB1,AG	ABB Power	AB1	4S	168	15	17	16	0.243	99.959	0.000	6.550	Pass
8015	MN,RT,L&G,MTN12S,MP	Landys & Gyr	VMW65E	12S	5,068	75	83	80	0.215	99.962	0.000	4.830	Pass
8016	MN,RT,SCHLUM,S12S,MP	Schlumberger	S12S	12S	6,504	75	83	83	0.239	99.848	0.000	4.830	Pass
8018	MN,RT,ABB,D4SSU,MP	ABB Power	J4S	12S	4,763	75	83	83	0.248	99.911	0.000	4.830	Pass
8019	MN,RT,ABB,D5SSU,MP	ABB Power	J5S	12S	22	4	5	5	0.220	99.908	0.000	10.880	Pass
8561	MN,RT,LANDIS&GYR,MQS	General Electric	VMW65E	6S	352	20	22	21	0.214	99.983	0.000	6.180	Pass
8729	MN,RT,G,VMW65E,BA,FM6S	General Electric	VMW65E	6S	3	3	4	0	0.172	99.883	0.000	7.590	Pass
8731	MN,RT,S,SL5S,BW,FM14	Schlumberger	SL5S	14S	77	7	8	8	0.346	99.360	0.000	8.400	Pass
8734	MN,RT,D,MSE,AF,FM2S	Landys & Gyr	V65S	2S	140	10	11	11	0.162	99.895	0.000	7.260	Pass
8735	MN,RT,D,MS2SE,AF,FM2S	Landys & Gyr	SL5S	2S	96	5	6	6	0.151	99.938	0.000	9.800	Pass
8741	MN,RT,S,S5S,QM,FM14S	Schlumberger	S5S	14S	50	5	6	6	0.393	99.732	0.000	9.800	Pass
8743	MN,RT,S,J5ES,AF,FM2S	Schlumberger	S5S	2S	93	10	11	11	0.249	99.685	0.000	7.260	Pass
8745	MN,RT,W,A1D,TR,FM3S	ABB Power	A1D	3S	102	10	11	10	0.047	99.996	0.000	7.260	Pass
8746	MN,RT,W,A1R,BA,FM6S	ABB Power	A1R	6S	9	3	4	2	0.052	99.975	0.000	7.590	Sample size*
8747	MN,RT,W,A1D,TE,FM16S	ABB Power	A1D	16S	12,119	100	110	101	0.049	99.997	0.000	4.670	Pass
8748	MN,RT,W,A1D,TX,FM12S	ABB Power	A1D	12S	860	35	39	36	0.039	99.989	0.000	5.580	Pass
8750	MN,RT,W,A1R-A,BA,FM6S	ABB Power	A1R-A	6S	4	3	4	3	0.580	99.547	0.000	7.590	Pass
8751	MN,RT,W,A1R-A,KZ,FM9S	ABB Power	A1R-A	9S	4	3	4	4	0.037	99.985	0.000	7.590	Pass
8753	MN,RT,W,A1R,KZ,FM9S	ABB Power	A1R	9S	49	5	6	5	0.045	99.940	0.000	9.800	Pass
8756	MN,RT,W,A1D,RJ,FM4S	ABB Power	A1D	4S	615	35	39	38	0.041	99.993	0.000	5.580	Pass
8759	MN,RT,W,A1R-AL,KZ,FM9S	ABB Power	A1R-AL	9S	39	5	6	5	0.082	99.984	0.000	9.800	Pass
8760	MN,RT,W,A1R-AL,BA,FM6S	ABB Power	A1R-AL	6S	7	3	4	4	0.054	99.992	0.000	7.590	Pass
8763	MN,RT,S,S2S,MP,FM12S	Schlumberger	S2S	12S	475	25	28	28	0.357	99.980	0.000	5.980	Pass
8764	MN,RT,W,A1R+,KZ,FM9S	ABB Power	A1R+	9S	13,836	100	110	105	0.033	99.975	0.000	4.670	Pass
8768	MN,RT,W,A1T+,TE,FM16S	ABB Power	A1T+	16S	13,315	100	110	105	0.064	99.989	0.000	4.670	Pass
8770	MN,RT,W,A1T+,TX,FM12S	ABB Power	A1T+	12S	2,837	50	55	51	0.069	99.968	0.000	5.210	Pass
8772	MN,RT,W,A1D+,TE,FM16S	ABB Power	A1D+	16S	15	3	4	4	0.040	99.992	0.000	7.590	Pass
8773	MN,RT,W,A1R+,Y8,FM35S	ABB Power	A1R+	35S	73	7	8	7	0.035	99.971	0.000	8.400	Pass
8776	MN,RT,W,A1D+,TX,FM12S	ABB Power	A1D+	12S	5,846	75	83	81	0.053	99.944	0.000	4.830	Pass

2016 North Dakota Random Test Detail Report

Lot	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 Maximum Allowable % Defect	Full Load Pass/Fail
8779	MN,RT,G,V66S,BW,FM14S	General Electric	V65S	14S	45	5	6	6	0.189	99.908	0.000	9.800	Pass
8780	MN,RT,E,A1D+,TX,FM12S	Elster	A1D+	12S	6,694	75	83	81	0.054	99.935	0.000	4.830	Pass
8785	MN,RT,W,A1R-AL-ON,FM6S	ABB Power	A1R-AL	5S	3	3	4	3	0.022	100.000	0.000	7.590	Pass
8787	MN,RT,W,A1T+,Y1,FM16S	ABB Power	A1T+	16S	212	15	17	17	0.040	99.932	0.000	6.550	Pass
8791	MN,RT,E,A1T+,TE,FM16S	Elster	A1T+	16S	8,064	75	83	83	0.069	99.893	0.000	4.830	Pass
8801	MN,RT,W,A1R-A,NY,FM2S	ABB Power	A1R-A	2S	5	3	4	4	0.033	99.970	0.000	7.590	Pass
8805	MN,RT,E,A1D+,TE,FM16S	Elster	A1D+	16S	315	20	22	21	0.053	99.877	0.000	6.180	Pass
8806	MN,RT,E,A1R+,KZ,FM9S	Elster	A1R+	9S	6,523	75	83	83	0.106	99.887	0.000	4.830	Pass
8830	MN,RT,W,A1T+,N5,FM1S	ABB Power	A1T+	1S	9	3	4	4	0.145	99.907	0.000	7.590	Pass
8831	MN,RT,E,A1T+,N5,FM1S	Elster	A1T+	1S	4	3	4	4	0.026	99.897	0.000	7.590	Pass
8834	MN,RT,E,A3R-AL,BA,X6,FM6/36S	Elster	A3R-AL	6S	671	35	39	38	0.032	99.979	0.000	5.580	Pass
8837	MN,RT,W,A1R+,BA,FM6S	ABB Power	A1R+	6S	168	15	17	16	0.313	99.992	0.000	6.550	Pass
8841	MN,RT,E,A1R-A,NY,FM2S	Elster	A1R-A	2S	6	3	4	4	0.051	99.867	0.000	7.590	Pass
8842	MN,RT,E,A1T+,TX,FM12S	Elster	A1T+	12S	128	10	11	11	0.094	99.929	0.000	7.260	Pass
8849	MN,RT,D,AL,NX,FM2S	Landys & Gyr	AL	2S	41,269	150	165	162	0.110	99.955	0.000	4.420	Pass
8850	MN,RT,D,AL,TX,FM12S	Landys & Gyr	C1S	12S	12,756	100	110	108	0.140	99.946	0.000	4.670	Pass
8857	MN,RT,D,AL,ALF,NY,FM2S	Landys & Gyr	AL (F)	2S	1,074	35	39	39	0.106	99.958	0.000	5.580	Pass
8862	MN,RT,D,AL,RJ,FM4S	Landys & Gyr	AL	4S	128	10	11	10	0.098	99.982	0.000	7.260	Pass
8868	MN,RT,D,AL,RF,TR,FM3S	Landys & Gyr	AL (F)	3S	27	5	6	6	0.071	99.938	0.000	9.800	Pass
8871	MN,RT,D,AL,ZS,FM1S	Landys & Gyr	C1S	1S	118	10	11	10	0.073	99.989	0.000	7.260	Pass
8899	MN,RT,I,S,C1S,C1SC,C1SRC,2B,FM1S	Itron	C1S (C,RC)	1S	2,585	50	55	54	0.242	99.957	0.000	5.210	Pass
8901	MN,RT,E,W,A1T+,A1TL+,NX,FM2S	Elster	A1T+,A1TL+	2S	11,211	100	110	106	0.077	99.960	0.000	4.670	Pass
8902	MN,RT,E,A3R,A3RL,A3T,A3TL,NX,FM2S	Elster	3R (L),A3T (L)	2S	2,728	50	55	54	0.049	99.976	0.000	5.210	Pass
8903	MN,RT,E,W,AB1,AC,FM2	Elster	AB1	2S	318,930	200	220	217	0.329	99.993	0.000	4.390	Pass
8904	MN,RT,I,S,C1S,C1SC,C1SRC,1N,FM2S	Itron	C1S (C,RC)	2S	495,920	200	220	220	156.000	36.000	0.000	4.390	Pass
8905	MN,RT,S,J4S,AC,IF,FM2S	Schlumberger	S2S	2S	21,791	100	110	105	0.327	99.941	0.000	4.670	Pass
8906	MN,RT,E,W,A1T+,NY,TU,FM2S	Elster	A1T+	2S	2,311	50	55	55	0.355	99.996	0.000	5.210	Pass
8907	MN,RT,E,A3R,A3R,A3T,A3TL,NY,FM2S	Elster	3R (L),A3T (L)	2S	300	20	22	21	0.062	99.951	0.000	6.180	Pass
8908	MN,RT,I,C1S,C1SC,2J,FM2S	Itron	C1SC	2S	4,480	75	83	83	0.128	99.953	0.000	4.830	Pass
8909	MN,RT,W,A1T+,A1TL+,TR,FM3S	ABB Power	A1T+,A1TL+	3S	158	15	17	17	0.073	99.964	0.000	6.550	Pass
8910	MN,RT,E,A3R,A3R,A3T,A3TL,TR,FM3S	Elster	3R (L),A3T (L)	3S	50	5	6	6	0.057	99.940	0.000	9.800	Pass
8911	MN,RT,I,C1S,C1SC,2F,FM3S	Itron	C1SC	3S	1,507	50	55	54	0.120	99.974	0.000	5.210	Pass
8912	MN,RT,E,W,A1T+,A1TL+,RJ,FM4S	Elster	A1T+,A1TL+	4S	3,280	75	83	77	0.099	99.997	0.000	4.830	Pass
8914	MN,RT,I,C1SRC,C1SC,2G,FM4S	Itron	IS, C1SC, C1S	4S	2,004	50	55	53	0.105	99.967	0.000	5.210	Pass
8915	MN,RT,E,A3R,A3R-A,A3R-AL,A3R-ALNCQ,A3RALNCQ,KZ,F	Elster	A3R (ALNCQ)	9S	6,699	75	83	76	0.030	99.978	0.000	4.830	Pass
8916	MN,RT,I,SS4S2L,SS4S3L,SS4S4L,KZ,FM9S	Itron	S4S2L (3L,4L)	9S	8	3	4	4	0.040	99.983	0.000	7.590	Pass
8917	MN,RT,E,A3T,A3TL,TX,FM12S	Elster	A3T (L)	12S	430	25	28	25	0.024	99.980	0.000	5.980	Pass
8918	MN,RT,I,S,CN1S,CN1SC,CN1SRC,2H,FM12S	Itron	IS,CN1S,CN1S	12S	54,501	150	165	157	0.130	99.973	0.000	4.420	Pass
8920	MN,RT,D,MT14S,BW,CL,FM14S	Landys & Gyr	VMM65E	14S	605	35	39	36	0.257	99.763	0.000	5.580	Pass
8921	MN,RT,S,SS5,CL,BW,FM14S	Schlumberger	S5S	14S	78	7	8	8	0.488	99.806	0.000	8.400	Pass
8922	MN,RT,E,A3R,A3R,A3T,A3TL,TE,FM16S	Elster	3R (L),A3T (L)	16S	5,381	75	83	77	0.022	99.981	0.000	4.830	Pass
8924	MN,RT,E,A3R,A3R,A3T,A3TL,Y1,FM16S	Elster	3R (L),A3T (L)	16S	586	35	39	39	0.020	99.977	0.000	5.580	Pass
8926	MN,RT,W,A1R-AL,X8,FM36S	ABB Power	A1R-AL	36S	15	3	4	3	0.032	99.997	0.000	7.590	Pass
8927	MN,RT,E,W,A1R+,A1RL+,X8,FM36S	Elster	A1R+,A1RL+	36S	5,124	75	83	78	0.060	99.928	0.000	4.830	Pass
8928	MN,RT,E,A3R,A3R-A,A3RALNCQ,X8,FM36S	Elster	A3R (ALNCQ)	36S	900	35	39	35	0.051	99.964	0.000	5.580	Pass
8934	MN,RT,E,W,A1R-A,TE,N5,RJ,Y8,ALL FORMS	Elster	A1R-A ALL FORMS	3	3	3	4	3	0.059	99.907	0.000	7.590	Pass

2016 North Dakota Random Test Detail Report

Lot	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 Maximum Allowable % Defect	Full Load Pass/Fail
8935	MIN,RT,E,A1R-A,A1T+,Y1,FM16S	Elster	A1R-A, A1T+	16S	545	35	39	38	0.059	99.931	0.000	5.580	Pass
8936	MIN,RT,E,A3R,A3RL,A3T,V0,FM12S	Elster	A3R (L), A3T	12S	16	4	5	5	0.010	99.988	0.000	10.880	Pass
8937	MIN,RT,E,A3R,A3T,A3TL,A3RL,A3R-AL,A3R-A,R,J,FM4S	Elster	3R (AL), A3T	4S	621	35	39	39	0.056	99.972	0.000	5.580	Pass
8938	MIN,RT,E,A3R-AL,A3R,A3R-A,ON,Y8,FM5/35S	Elster	A3R (AL)	5S	67	7	8	7	0.020	99.963	0.000	8.400	Pass
8939	MIN,RT,E,A3T,A3TL,A3RL,N5,FM1S	Elster	A3T (L), A3RL	1S	90	7	8	8	0.033	99.980	0.000	8.400	Pass
8940	MIN,RT,W,A1T+,A1R-A,V0,FM12S	ABB Power	A1T+, A1R-A	12S	29	5	6	6	0.037	99.968	0.000	9.800	Pass
	Totals				1,464,010	4,565	5,054	4,890					

\* Not enough meters tested. Will sample in 2017 using normal inspection.

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	RESERVICED / 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 2016 Results**

**Meter Test Group**

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

Meters #	Acceptable <sup>1</sup>		Slow <sup>2</sup>		Fast <sup>3</sup>	
	#	%	#	%	#	%
459	<b>443</b>	96.5%	<b>3</b>	0.7%	<b>13</b>	2.8%
55	<b>55</b>	100.0%	<b>0</b>	0.0%	<b>0</b>	0.0%
<u>116</u>	<u>94</u>	<u>81.0%</u>	<u>15</u>	<u>12.9%</u>	<u>7</u>	<u>6.0%</u>
630	592	94.0%	18	2.9%	20	3.2%

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

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

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

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