

March 19, 2020

Executive Secretary
North Dakota Public Service Commission
State Capitol Building
Bismarck, ND 58505-0480

Re: Gas Meter Test Results

Great Plains Natural Gas Co. (Great Plains), a Division of Montana-Dakota Utilities Co. (Montana-Dakota), herewith submits the results of its gas meter testing program in compliance with the Company's Gas Meter Testing Program Rate 101 tariff, as authorized by the North Dakota Public Service Commission, effective February 1, 2019 in Case Nos. PU-17-075 and PU-17-490.

Effective February 1, 2019, Gas Meter Testing Program Rate 101 provides for the testing of Great Plains' gas meter testing program to be combined with the gas meter testing program of Montana-Dakota for purposes of random sample testing only. The random sample results included herein as Attachment A are the same random sample results included in Attachment A of Montana-Dakota's March 11, 2020 submission of its gas meter test results and are reflective of the time period July 1, 2018 through June 30, 2019. This is the first report reflecting the combination of Great Plains' random sample meter testing with Montana-Dakota's.

Great Plains' Rate 101 tariff provides for the testing of meters across three categories:

1. New Test - New meters purchased were tested and found to be satisfactory prior to release. 100% of new meters were tested at the factory. Montana-Dakota tested 479 meters during the period July 1, 2018 through June 30, 2019 resulting in an average accuracy of 98.9% at an open test (100% of meter rating) and 99.88% accuracy at a check test (20% of meter rating).
2. Periodic Test – Meters with ratings of 650 cubic feet per hour or greater are tested at a periodic interval of at least once in ten years. Results are included in a table below.
3. Random Test - All other active meters, with ratings of 650 cubic feet per hour or less, are assigned to lots and are selected for testing via a computer generated random selection process and meters pulled from customers' premises in correlation with service technicians being on site for other

service-related work.

The Random Test results are provided in Attachment A. With the exception of the two groups identified herein, all lots were below the maximum allowable defective percentage for this test period. The two groups that did experience a first-year failure are:

- Meter Lot S400A with install dates of 2000 through 2004 - 29 meters, and
- Meter Lot 415 with install dates of 2005 through 2008 – 2,054 meters.

Further analysis of the meter lot failures indicated a defective sub-group of meters with vintages from 1982 to 1986 for Meter Lot 415. The Company has identified 390 meters from Meter Lot 415 with vintages from 1982 to 1986 to be removed. In addition, the Company will replace all 29 meters from Meter Lot S400A.

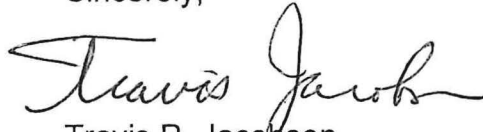
The Periodic Test results for the 2018 calendar year are provided in the table below. With the exception of nine meters, all meters were within the allowable defective percentage for the test period. Further analysis of the nine meters identified that eight of those meters were from the same shipment of meters received in 2005. The Company will remove all meters from that shipment for re-calibration. All meters from this shipment will be removed from service for re-calibration by October 2020.

Great Plains Natural Gas Co. North Dakota 2018 Periodic Meter Test Results	
% Error	# of Meters
<-5%	0
<-3%	0
<-2%	0
-2% to 2%	45
>2%	9
>3%	0
>4%	0
>5%	0
Total	54

All damaged or non-registering meters incapable of measuring gas accurately due to damaged indexes, mechanical malfunctions, or break(s) in the meter body are either retired or given a complete overhaul and re-tested before being placed back in service.

Please acknowledge receipt by stamping or initialing the duplicate copy of this letter attached hereto and returning the same in the enclosed self-addressed, stamped envelope.

Sincerely,

A handwritten signature in black ink that reads "Travis R. Jacobson". The signature is written in a cursive, flowing style.

Travis R. Jacobson
Directory of Regulatory Affairs

Attachment

**MONTANA - DAKOTA UTILITIES CO.
ND, SD, WY - 2019 TEST YEAR
(including Wahpeton ND)
RANDOM SAMPLE TEST RESULTS**

Lot Type	Size	Install Year	Count	Minimum Sample*	Defective [%]	Allowable [%]
AC-250	AC250	90-94	312	25	4.45	23.97
		95-99	7,893	50	6.17	21.11
		00-04	25,179	100	11.68	20.66
		05-08	26,926	100	14.22	21.11
AL-425	AL425	95-99	21	4	28.67	33.99
		00-04	483	25	13.80	23.58
		05-08	473	25	3.08	23.97
AC-630	AC630	00-04	32	5	23.47	33.99
		05-08	297	20	23.49	24.53
AS02	AL175, AL225 & AI250	75-79	208	20	0.44	24.53
		85-89	287	20	14.64	23.97
		90-94	1,074	35	14.81	22.91
		95-99	1,825	40	12.99	22.86
		00-04	642	30	0.39	23.58
		80 - 84	96	10	1.38	25.61
		05-08	339	25	1.28	23.97
ER01	175	80-84	3	3	0.00	40.47
		85-89	82	10	13.26	27.57
		90-94	353	25	15.81	23.97
		95-99	606	30	12.33	23.58
		00-04	108	10	0.00	23.58
ER02	250	75-79	6	3	0.00	40.47
		80-84	35	5	0.00	30.50
		85-89	894	35	13.58	22.91
		90-94	4,468	50	7.00	22.00
		95-99	7,259	50	17.89	22.00
		00-04	2,118	40	0.10	22.86
		05-08	147	15	0.05	25.61

**MONTANA - DAKOTA UTILITIES CO.
ND, SD, WY - 2019 TEST YEAR
(including Wahpeton ND)
RANDOM SAMPLE TEST RESULTS**

Lot Type	Size	Install Year	Count	Minimum Sample*	Defective [%]	Allowable [%]
ER03	R200 & R275	80-84	14	3	0.00	36.90
		85-89	1,093	35	20.21	22.91
		90-94	4,507	50	17.67	22.00
		95-99	8,576	75	16.17	21.11
		00-04	8,924	75	5.61	21.11
		05-08	2,550	50	0.05	22.00
NL-250	NL-250	90-94	52	7	0.52	30.50
		95-99	43	7	29.39	30.50
		00-04	99	10	9.18	27.57
		05-08	235	20	0.01	24.53
S250	S250	90-94	1,224	35	0.48	22.91
		95-99	1,040	35	1.09	22.91
		00-04	676	30	0.56	23.58
		05-08	440	25	0.04	23.97
SL250	SL250	95-99	973	35	1.56	22.91
		00-04	253	20	0.00	24.53
		05-08	215	20	0.00	24.53
S400	S400	05-08	10	3	0.00	40.47
S400A	S400A	95-99	32	5	1.28	33.99
		00-04	29	5	50.00	33.99
		05-08	34	5	11.29	33.99
415	415	05-08	2,054	40	26.30	22.86

* - Military Standard No. 414, Inspection Level IV with specification limit of $\pm 2\%$