Wisconsin Public Service Corporation
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
www.wisconsinpublicservice.com

March 26, 2019

RECEIVED
MPSC
APR 01 2019

Ms. Kavita Kale
Executive Secretary
Michigan Public Service Commission
P.O. Box 30221
Lansing, MI 48917

RE: Meter Test Summaries (R460.3617(2)) - U-10545

Enclosed are copies of the meter test summaries for Wisconsin Public Service meters in Michigan for the year ended December 31, 2018. The summary sheets have been prepared in accordance with the Michigan Rules (R460.3617 (2)).

In addition, 2018 in-service statistical sample test plan results as submitted to the Public Service Commission of Wisconsin have been included for submittal to the Michigan Public Service Commission. Both Wisconsin and Michigan meters have been tested under the Wisconsin statistical sample testing plan in accordance with MPSC Case No. U-10545.

If you have any questions, please contact Mr. Thomas Held at 414-221-3688.

Sincerely,

Theodore T. Eidukas
Vice President
State Regulatory Affairs

Attachments

REJECTED LOT FORM

SSTP REPORTING FORM PSC 113.0919(4)
ELECTRIC METER SSTP PSC 113.0921

PUBLIC SERVICE COMMISSION OF WISCONSIN

UTILITY: Wisconsin Public Service

YEAR GROUP FAILED: 2015

GROUP: WHD5S 87

NUMBER IN GROUP: 4,218

FULL LOAD M : 2.49

LIGHT LOAD M 7.61

YEAR TESTED	METERS TESTED	FULL LOAD				LIGHT LOAD			
		$\overline{X}$	S	P	ACTUAL P	$\overline{X}$	S	P	ACTUAL P
2016	9								
2017	0								
2018	0								
2019									
TOTAL	9								

NEW GROUP(S)	NUMBER
RETIRED	

Failed lots must have all meters tested within four (4) years from January 1 of the reporting year.

$\overline{X}$, S, P, calculated at full load and light load test points using procedure on pages 4, 43, 45, and 103 of MIL-STD-414, 11 June 1957.

M - same as that calculated for failed group.

Actual P - Do not include stopped meters at either test point.

Notes on Lot:

4,218 Meters was population on January 6, 2016
4,152 Meters was population on March 16, 2017
3,389 Meters was population on January 28, 2018
672 Meters was population on Febuary 28, 2019

Meters Tested in 2016 with test results

SerialNum	Test Date	FL	LL
493025	2/3/2016	100.01	99.27
499586	2/3/2016	100.05	100.59
498733	2/17/2016	100.38	100.69
494629	5/23/2016	99.46	93.61
499053	7/28/2016	100.14	101.33
492903	9/22/2016	100.135	99.573
494394	9/26/2016	99.49	96.47
498489	10/24/2016	99.08	99.24
494801	11/3/2016	99.89	100.03

WISCONSIN PUBLIC SERVICE CORPORATION

MENOMINEE, MICHIGAN

Test Class: Single-Phase Sample Tests

METER ACCURACY RECORD REPORT FOR MICHIGAN PUBLIC SERVICE COMMISSION

Twelve Months Ending December 2018

TYPE	NUMBER TESTED	CREEPING	NOT RECORDING	REGISTRATION IN PERCENT																							
				HEAVY LOAD 100% POWER FACTOR												LIGHT LOAD 100% POWER FACTOR											
				94.00 AND UNDER	94.01 TO 96.0	96.01 TO 97.0	97.01 TO 98.0	98.01 TO 99.0	99.01 TO 100.0	100.01 TO 101.0	101.01 TO 102.0	102.01 TO 103.0	103.01 TO 104.0	104.01 TO 106.0	OVER 106.0	94.00 AND UNDER	94.01 TO 96.0	96.01 TO 97.0	97.01 TO 98.0	98.01 TO 99.0	99.01 TO 100.0	100.01 TO 101.0	101.01 TO 102.0	102.01 TO 103.0	103.01 TO 104.0	104.01 TO 106.0	OVER 106.0
ALF	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
ALF-N	5	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0
ALF-UMT	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ALT-AL	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
AXS4E	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
C1SX	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
D4S	4	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0
I70ES	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
I70S	8	0	0	0	0	0	0	0	2	6	0	0	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0
MS	5	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0
MX	24	0	0	0	0	0	0	0	22	2	0	0	0	0	0	0	0	0	0	0	19	5	0	0	0	0	0
Totals	**52**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**36**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**38**	**14**	**0**	**0**	**0**	**0**	**0**

WISCONSIN PUBLIC SERVICE CORPORATION

MENOMINEE, MICHIGAN

Test Class: Three-Phase Periodic Tests

METER ACCURACY RECORD REPORT FOR MICHIGAN PUBLIC SERVICE COMMISSION

Twelve Months Ending December 2018

TYPE	NUMBER TESTED	CREEPING	NOT RECORDING	REGISTRATION IN PERCENT																							
				HEAVY LOAD 100% POWER FACTOR												LIGHT LOAD 100% POWER FACTOR											
				94.00 AND UNDER	94.01 TO 96.0	96.01 TO 97.0	97.01 TO 98.0	98.01 TO 99.0	99.01 TO 100.0	100.01 TO 101.0	101.01 TO 102.0	102.01 TO 103.0	103.01 TO 104.0	104.01 TO 106.0	OVER 106.0	94.00 AND UNDER	94.01 TO 96.0	96.01 TO 97.0	97.01 TO 98.0	98.01 TO 99.0	99.01 TO 100.0	100.01 TO 101.0	101.01 TO 102.0	102.01 TO 103.0	103.01 TO 104.0	104.01 TO 106.0	OVER 106.0
AXRS4E	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
AXS4	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
MAXSYS2510	3	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0
QUAD4+	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
RXRS4E	6			0	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0
TOTALS	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**4**	**0**	**0**	**0**	**0**	**0**

TYPE	METER TESTED	CREEPING	NOT CREEPING	HEAVY LOAD 50% POWER FACTOR											
				94.00 AND UNDER	94.01 TO 96.0	96.01 TO 97.0	97.01 TO 98.0	98.01 TO 99.0	99.01 TO 100.0	100.01 TO 101.0	101.01 TO 102.0	102.01 TO 103.0	103.01 TO 104.0	104.01 TO 106.0	OVER 106.0
AXRS4E	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0
AXS4	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0
MAXSYS2510	3	0	0	0	0	0	0	0	1	2	0	0	0	0	0
QUAD4+	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
RXRS4E	6	0	0	0	0	0	0	0	6	0	0	0	0	0	0
TOTALS	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**3**	**0**	**0**	**0**	**0**	**0**

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921

Year: 2018

Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM



Wisconsin Public Service

Group	Total	Meters	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS_SAJ5L1_____	14,195	75	99.837	0.332	0.000	2.29%	0.062	-0.040	0.000	99.843	0.441	0.000	7.15%	-0.076	-0.160	-0.049
WPS_SAJXL2_____	11,038	75	99.856	0.320	0.000	2.29%	0.021	-0.059	0.000	99.957	0.444	0.000	7.15%	0.038	-0.013	0.000
WPS_SAXXL2_____	10,812	75	100.044	0.149	0.000	2.29%	-0.021	0.005	0.000	99.982	0.151	0.000	7.15%	-0.049	-0.056	0.000
WPS_SNXXL1_____	319	25	99.949	0.089	0.000	2.86%	0.021	-0.037	0.000	99.966	0.091	0.000	8.63%	0.007	-0.040	0.000
Total	36,364	250														

Note: (1) XX = Mixed Type Lot.

(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.

(3) * Designates Lot Failed Once.

(4) ** Designates Lot Failed Twice.

(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

Report ID: XRPDV0026B

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SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921

Year: 2018

Company Name: WISCONSIN PUBLIC SERVICE

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Wisconsin Public Service

Group	Total	Meters	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS_ABXXL1*	15,479	75	100.043	0.293	0.000	2.29%	0.003	-0.061	0.000	99.757	0.911	3.183	7.15%	0.192	-0.445	-9.297
WPS_WED4L1	13,164	75	100.007	0.318	0.000	2.29%	-0.114	0.021	0.000	100.050	0.583	0.037	7.15%	-0.293	0.024	0.037
WPS_WED4L2	14,641	75	100.132	0.309	0.000	2.29%	-0.021	0.026	0.000	100.221	0.599	0.117	7.15%	-0.211	-0.062	0.111
WPS_WHD5S 88**	1,170	40	99.949	0.267	0.000	2.71%	-0.050	-0.047	0.000	99.807	0.531	0.011	8.09%	-0.154	-0.154	-0.118
Total	44,454	265														

Note: (1) XX = Mixed Type Lot.

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Example: Delta X = X of 2005 - X of 2004.

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(4) ** Designates Lot Failed Twice.

(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

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ELECTRIC METER SSTP PSC 113.0921

Year: 2018

Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM

Wisconsin Public Service

			Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Group Mfg-Type-Lot	Total Meter Lot	Meters Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS_GEI70L1_____	7,318	50	100.157	0.209	0.000	2.49%	-0.075	-0.047	0.000	100.067	0.483	0.000	7.61%	-0.243	0.019	0.000
WPS_GEI70L2_____	11,623	75	100.057	0.217	0.000	2.29%	-0.076	0.004	0.000	100.023	0.427	0.000	7.15%	-0.215	-0.065	0.000
WPS_GEI70L3_____	13,011	75	100.087	0.197	0.000	2.29%	-0.069	-0.051	0.000	99.968	0.437	0.000	7.15%	-0.274	-0.040	0.000
WPS_GEI70L4_____	14,080	75	100.129	0.206	0.000	2.29%	-0.078	-0.075	0.000	100.146	0.556	0.029	7.15%	-0.058	0.145	0.029
WPS_GEXXL1_____	207	25	99.923	0.331	0.000	2.86%	0.136	-0.064	0.000	100.003	0.521	0.000	8.63%	-0.144	-0.016	0.000
Total	46,239	300														

Note: (1) XX = Mixed Type Lot.

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Example: Delta X = X of 2005 - X of 2004.

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(4) ** Designates Lot Failed Twice.

(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

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Group	Total	Meters	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS_LGALFN 17	7,175	50	99.964	0.087	0.000	2.49%	99.964	0.087	0.000	100.030	0.086	0.000	7.61%	100.030	0.086	0.000
WPS_LGALFL1	18,474	75	99.943	0.131	0.000	2.29%	-0.010	0.048	0.000	99.983	0.138	0.000	7.15%	0.000	0.053	0.000
WPS_LGALFL2	4,131	50	99.956	0.098	0.000	2.49%	-0.005	-0.013	0.000	99.999	0.083	0.000	7.61%	-0.016	-0.025	0.000
WPS_LGALFN 10	9,710	75	99.982	0.103	0.000	2.29%	0.012	0.002	0.000	100.030	0.097	0.000	7.15%	-0.002	0.007	0.000
WPS_LGALFN 11	9,244	75	99.975	0.078	0.000	2.29%	-0.017	-0.016	0.000	100.025	0.086	0.000	7.15%	-0.030	-0.029	0.000
WPS_LGALFN 12	7,976	75	100.008	0.102	0.000	2.29%	0.027	0.022	0.000	100.069	0.105	0.000	7.15%	0.029	0.032	0.000
WPS_LGALFN 13	9,073	75	99.997	0.092	0.000	2.29%	0.022	0.006	0.000	100.057	0.081	0.000	7.15%	0.025	0.000	0.000
WPS_LGALFN 15	6,954	50	100.014	0.128	0.000	2.49%	0.027	0.008	0.000	100.068	0.128	0.000	7.61%	0.018	0.012	0.000
WPS_LGALFN 16	10,207	75	100.004	0.093	0.000	2.29%	-0.019	-0.058	0.000	100.063	0.091	0.000	7.15%	-0.014	-0.051	0.000
WPS_LGAXS4EL1	878	35	99.964	0.048	0.000	2.68%	0.012	-0.019	0.000	99.986	0.056	0.000	8.10%	0.009	-0.012	0.000
WPS_LGMKL1	537	30	100.052	0.290	0.000	2.83%	-0.054	0.030	0.000	100.021	0.701	0.216	8.47%	-0.130	0.118	0.215
WPS_LGMSL1	9,078	75	100.055	0.390	0.000	2.29%	-0.048	0.061	0.000	100.028	0.859	1.800	7.15%	-0.190	0.289	1.798
WPS_LGMSL2	13,808	75	99.985	0.280	0.000	2.29%	-0.035	0.026	0.000	99.902	0.565	0.028	7.15%	-0.232	0.038	0.028
WPS_LGMSL3	15,066	75	99.956	0.263	0.000	2.29%	-0.074	0.001	0.000	100.008	0.422	0.000	7.15%	-0.229	0.007	0.000
WPS_LGMSL4	5,797	50	100.109	0.187	0.000	2.49%	-0.018	0.021	0.000	100.067	0.406	0.000	7.61%	-0.046	-0.013	0.000
WPS_LGMX1 04A	7,356	50	99.703	0.287	0.000	2.49%	-0.033	0.019	0.000	99.813	0.407	0.000	7.61%	-0.252	0.053	0.000
WPS_LGMX1 04B	6,488	50	99.775	0.246	0.000	2.49%	-0.007	0.027	0.000	99.947	0.407	0.000	7.61%	-0.188	-0.165	-0.003
WPS_LGMX1 04C	6,312	50	99.637	0.299	0.000	2.49%	-0.111	0.047	0.000	99.949	0.325	0.000	7.61%	-0.276	-0.011	0.000
WPS_LGMX1 04D	6,162	50	99.688	0.344	0.000	2.49%	-0.107	0.108	0.000	99.988	0.418	0.000	7.61%	-0.172	0.078	0.000
WPS_LGMX1 04E	5,953	50	99.691	0.327	0.000	2.49%	0.017	0.026	0.000	99.709	0.604	0.164	7.61%	-0.206	0.241	0.164
WPS_LGMX1 04F	7,216	50	99.527	0.339	0.000	2.49%	-0.104	0.047	0.000	99.690	0.404	0.000	7.61%	-0.304	-0.019	0.000
WPS_LGMX1 04G	7,135	50	99.669	0.306	0.000	2.49%	-0.038	0.042	0.000	99.733	0.470	0.003	7.61%	-0.219	0.027	0.003
WPS_LGMX1 04H	10,351	75	99.680	0.345	0.000	2.29%	-0.050	0.104	0.000	99.616	0.473	0.020	7.15%	-0.219	-0.152	-0.110
WPS_LGMXL1	17,418	75	99.743	0.291	0.000	2.29%	-0.057	0.021	0.000	100.088	0.495	0.002	7.15%	-0.038	0.053	0.002
WPS_LGXXL2	22,593	100	99.861	0.795	1.207	2.20%	0.035	0.559	1.207	100.206	0.955	3.894	6.91%	-0.078	0.567	3.894
WPS_LGXXL3	22,304	100	99.715	0.337	0.000	2.20%	0.009	-0.023	0.000	99.960	0.505	0.003	6.91%	-0.005	-0.165	-0.137
WPS_LGXXL4	6,885	50	99.821	0.209	0.000	2.49%	0.040	-0.074	0.000	100.071	0.362	0.000	7.61%	0.022	-0.131	0.000
WPS_LGXXL5	14,725	75	99.580	0.674	0.881	2.29%	-0.196	0.260	0.881	99.756	0.761	1.070	7.15%	-0.112	-0.060	0.008
WPS_SIXXALT1	8,775	75	99.969	0.095	0.000	2.29%	0.013	0.010	0.000	100.035	0.138	0.000	7.15%	0.027	0.031	0.000
Total	277,781	1,840														

Note: (1) XX = Mixed Type Lot.
(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.
(3) * Designates Lot Failed Once.
(4) ** Designates Lot Failed Twice.
(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2018
Company Name: WISCONSIN PUBLIC SERVICE
Print Date: 2/14/2019 7:07:36 AM



Group					
Mfg-Type-Lot	**Manufacturer**	**Type**	**Type**	**Type**	**Type**
WPS_ABXXL1	ABB	AB1	AB1R	D5S	
WPS_WED4L1	Westinghouse	D4S			
WPS_WED4L2	Westinghouse	D4S			
WPS_WHD5S 88	Westinghouse	D5S			
WPS_GEI70L1	General Electric	I70S			
WPS_GEI70L2	General Electric	I70S			
WPS_GEI70L3	General Electric	I70S			
WPS_GEI70L4	General Electric	I70S			
WPS_GEXXL1	General Electric	I70ES	I70ES	I70S	I70S
WPS_LGALFN 17	Landis Gyr	ALF-N			
WPS_LGALFL1	Landis Gyr	ALF	ALF-UMT		
WPS_LGALFL2	Landis Gyr	ALF	ALF-UMT		
WPS_LGALFN 10	Landis Gyr	ALF-N			
WPS_LGALFN 11	Landis Gyr	ALF-N			
WPS_LGALFN 12	Landis Gyr	ALF-N			
WPS_LGALFN 13	Landis Gyr	ALF-N			
WPS_LGALFN 15	Landis Gyr	ALF-N			
WPS_LGALFN 16	Landis Gyr	ALF-N			
WPS_LGAXS4EL1	Landis Gyr	AXS4	AXS4E		
WPS_LGMKL1	Landis Gyr	MSK			
WPS_LGMSL1	Landis Gyr	MS			
WPS_LGMSL2	Landis Gyr	MS			
WPS_LGMSL3	Landis Gyr	MS			
WPS_LGMSL4	Landis Gyr	MS			
WPS_LGMX1 04A	Landis Gyr	MX			
WPS_LGMX1 04B	Landis Gyr	MX			
WPS_LGMX1 04C	Landis Gyr	MX			
WPS_LGMX1 04D	Landis Gyr	MX			
WPS_LGMX1 04E	Landis Gyr	MX			
WPS_LGMX1 04F	Landis Gyr	MX			
WPS_LGMX1 04G	Landis Gyr	MX			
WPS_LGMX1 04H	Landis Gyr	MX			
WPS_LGMXL1	Landis Gyr	MX			
WPS_LGXXL2	Landis Gyr	MX			
WPS_LGXXL3	Landis Gyr	MX			
WPS_LGXXL4	Landis Gyr	MX	MX		
WPS_LGXXL5	Landis Gyr	MX			
WPS_SIXXALT1	Landis Gyr	ALT-AL	ALT-AX-SW		
WPS_SAJ5L1	Sangamo	J5S			
WPS_SAJXL2	Sangamo	J4S			
WPS_SAXXL2	Sangamo	C1SX	CN1SX		
WPS_SNXXL1	Sensus	ICON			

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921

Year: 2019

Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM

Wisconsin Public Service

Group	Total	Meters	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample						
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS-SA-JX-2019	25233	100														
WPS_SAJ5L1_____	0	0														
WPS_SAJXL2_____	0	0														
WPS_SAXXL2_____	10,812	75														
WPS_SNXXL1_____	319	25														
Total	36,364	200														

Note: (1) XX = Mixed Type Lot.

(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.

(3) * Designates Lot Failed Once.

(4) ** Designates Lot Failed Twice.

(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

(6) Combined Lots WPS_SAJ5L1 & WPS_SAJXL2 into Lot WPS_SAJX 19

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921

Year: 2019

Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM

Wisconsin Public Service

Group	Total Meter Lot	Meters Sample Tested	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot			X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS-AB-WH-2019	44,454	100															
WPS_ABXXL1_____	0	0															
WPS_WED4L1_____	0	0															
WPS_WED4L2_____	0	0															
WPS_WHD5S 88___	0	0															
Total	44,454	100															

Note: (1) XX = Mixed Type Lot.
(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.
(3) * Designates Lot Failed Once.
(4) ** Designates Lot Failed Twice.
(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2
(6) Combined all Lots into WPS_AB_WH_19

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921

Year: 2019

Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM

Wisconsin Public Service

			Sample Testing Data														
Group	Total Meter Lot	Meters Sample Tested	Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot			X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS-GE-I70L-2019	46,239	100														
WPS_GEI70L1	0	0														
WPS_GEI70L2	0	0														
WPS_GEI70L3	0	0														
WPS_GEI70L4	0	0														
WPS_GEXXL1	0	0														
Total	46,239	100														

Note: (1) XX = Mixed Type Lot.

(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.

(3) * Designates Lot Failed Once.

(4) ** Designates Lot Failed Twice.

(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

(6) Combined all Lots into WPS_GEI70L_19

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2019
Company Name: WISCONSIN PUBLIC SERVICE
Print Date: 2/14/2019 7:07:36 AM

Wisconsin Public Service

Group	Total	Meters	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS-LG-FS1-2019	80,000	100														
WPS-LG-FS2-2019	65,000	100														
WPS-LG-ALFN-2019	82,944	100														
WPS_LGALFN 17	0	0														
WPS_LGALFL1	0	0														
WPS_LGALFL2	0	0														
WPS_LGALFN 10	0	0														
WPS_LGALFN 11	0	0														
WPS_LGALFN 12	0	0														
WPS_LGALFN 13	0	0														
WPS_LGALFN 15	0	0														
WPS_LGALFN 16	0	0														
WPS-LG-AXS4E-L2	20,317	100														
WPS-LG-MSL-2019	44,286	100														
WPS_LGMKL1	0	0														
WPS_LGMSL1	0	0														
WPS_LGMSL2	0	0														
WPS_LGMSL3	0	0														
WPS_LGMSL4	0	0														
WPS-LG-MX1-2019	56,973	100														
WPS_LGMX1 04A	0	0														
WPS_LGMX1 04B	0	0														
WPS_LGMX1 04C	0	0														
WPS_LGMX1 04D	0	0														
WPS_LGMX1 04E	0	0														
WPS_LGMX1 04F	0	0														
WPS_LGMX1 04G	0	0														
WPS_LGMX1 04H	0	0														
WPS-LG-MX2-2019	83,925	100														
WPS_LGMXL1	0	0														
WPS_LGXXL2	0	0														
WPS_LGXXL3	0	0														
WPS_LGXXL4	0	0														
WPS_LGXXL5	0	0														
WPS_SIXXALT1	8,775	75														
Total	442,220	775														

Note: (1) XX = Mixed Type Lot.
(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.
(3) * Designates Lot Failed Once.
(4) ** Designates Lot Failed Twice.
(5) First Failed, Separated Lot. *SA-J3-L2-1

*SA-J3-L2-2

Report ID: XRPDV0026B

CIS

SSTP REPORTING FORM PSC 113.0919(3)

ELECTRIC METER SSTP PSC 113.0921

Year: 2019

Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM



Wisconsin Public Service

Group						
Mfg-Type-Lot	Manufacturer	Type	Type	Type	Type	
WPS-AB-WH-2019	ABB/ Westinghouse	AB1	AB1R	D5S	D4S	New combined lot contains ABB/ Westinghouse meters
WPS_ABXXL1	ABB	AB1	AB1R	D5S		Lot closed- meters added to lot WPS-AB-WH-2019
WPS_WED4L1	Westinghouse	D4S				Lot closed- meters added to lot WPS-AB-WH-2019
WPS_WED4L2	Westinghouse	D4S				Lot closed- meters added to lot WPS-AB-WH-2019
WPS_WHD5S 88	Westinghouse	D5S				Lot closed- meters added to lot WPS-AB-WH-2019
WPS-GE-I70L-2019	General Electric	I70ES	I70ES	I70S	I70S	New combined lot contains GE meters
WPS_GEI70L1	General Electric	I70S				Lot closed, meters added to lot WPS-GE-I70L-2019
WPS_GEI70L2	General Electric	I70S				Lot closed, meters added to lot WPS-GE-I70L-2019
WPS_GEI70L3	General Electric	I70S				Lot closed, meters added to lot WPS-GE-I70L-2019
WPS_GEI70L4	General Electric	I70S				Lot closed, meters added to lot WPS-GE-I70L-2019
WPS_GEXXL1	General Electric	I70ES	I70ES	I70S	I70S	Lot closed, meters added to lot WPS-GE-I70L-2019
WPS-LG-FS1-2019	Landis Gyr	Focus AXe-SD	Focus Axe			New Lot
WPS-LG-FS2-2019	Landis Gyr	Focus AXe-SD	Focus Axe			New Lot
WPS_LGALFN 19	Landis Gyr	ALF-N	ALF-UMT	ALF		New combined lot contains LG Focus AL meters
WPS_LGALFN 17	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFL1	Landis Gyr	ALF	ALF-UMT			Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFL2	Landis Gyr	ALF	ALF-UMT			Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 10	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 11	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 12	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 13	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 15	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 16	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGAXS4EL2	Landis Gyr	AXS4	AXS4E			Existing Lot
WPS-LG-MSL-2019	Landis Gyr	MK	MSK	MS		New combined lot contains LG meters
WPS_LGMKL1	Landis Gyr	MSK				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS_LGMSL1	Landis Gyr	MS				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS_LGMSL2	Landis Gyr	MS				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS_LGMSL3	Landis Gyr	MS				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS_LGMSL4	Landis Gyr	MS				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS-LG-MX1-2019	Landis Gyr	MX				New combined lot contains LG meters
WPS_LGMX1 04A	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04B	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04C	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04D	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04E	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04F	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04G	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04H	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS-LG-MX2-2019	Landis Gyr	MX				New combined lot contains LG meters
WPS_LGMXL1	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_LGXXL2	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_LGXXL3	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_LGXXL4	Landis Gyr	MX	MX			Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_LGXXL5	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_SDXXALT1	Landis Gyr	ALT-AL	ALT-AX-SW			Existing Lot
WPS-SA-JX-2019	Sangamo	J5S	J4S			New combined lot contains Sangamo meters
WPS_SAJ5L1	Sangamo	J5S				Lot closed, meters added to lot WPS-SA-JX-2019
WPS_SAJXL2	Sangamo	J4S				Lot closed, meters added to lot WPS-SA-JX-2019
WPS_SAXXL2	Sangamo	C1SX	CN1SX			Existing Lot
WPS_SNXXL1	Sensus	ICON				Existing Lot

Wisconsin Public Service Corporation
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
www.wisconsinpublicservice.com

March 12, 2019

Ms. Steffany Powell Coker
Commission Secretary
Public Service Commission of Wisconsin
P.O. Box 7854
Madison, Wisconsin 53707-7854

Dear Ms. Powell Coker:

Re: meter testing reports PSC 113.0919(3) and 113.0921 – 5-GF-113

Enclosed for filing are the following reports required in WI Admin. Code PSC 113.0919(3) metering equipment records and PSC 113.0921 sample testing.

2018 xrptSSTPPSCWSummaryRpts.rdl is the meter test results for the 2017 in-service sample testing plan for electronic (solid state) meters, electro-mechanical self-contained single phase meters and 3-wire network meters.

WPS 2016 Rejected Lot WHD5S 87 are the 2018 rejected lot forms, submitted for all failed meter groups that did not pass the in-service plan in any two test years. Rejected meters were scrapped without a test in 2017 as allowed by PSC 113.0921(e).

2019 xrptSSTPPSCWSummaryRpts.rdl is the list of lot designations for Wisconsin electronic (solid state) meters, and electro-mechanical self-contained single phase and 3-wire network meters to be tested in 2019 in accordance with the in-service statistical sample testing plan.

The lot descriptions are included in the SSTP Summary Report documents.

If you have any questions, please contact Tom Held at 414-221-3688

Sincerely,

Theodore T. Eidukas
Vice President
Regulatory Affairs

Attachments

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2018

Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM

Wisconsin Public Service

Group	Total	Meters	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS_SAJ5L1	14,195	75	99.837	0.332	0.000	2.29%	0.062	-0.040	0.000	99.843	0.441	0.000	7.15%	-0.076	-0.160	-0.049
WPS_SAJXL2	11,038	75	99.856	0.320	0.000	2.29%	0.021	-0.059	0.000	99.957	0.444	0.000	7.15%	0.038	-0.013	0.000
WPS_SAXXL2	10,812	75	100.044	0.149	0.000	2.29%	-0.021	0.005	0.000	99.982	0.151	0.000	7.15%	-0.049	-0.056	0.000
WPS_SNXXL1	319	25	99.949	0.089	0.000	2.86%	0.021	-0.037	0.000	99.966	0.091	0.000	8.63%	0.007	-0.040	0.000
Total	36,364	250														

Note: (1) XX = Mixed Type Lot.

(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.

(3) * Designates Lot Failed Once.

(4) ** Designates Lot Failed Twice.

(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2018
Company Name: WISCONSIN PUBLIC SERVICE
Print Date: 2/14/2019 7:07:36 AM

Wisconsin Public Service

Group	Total Meter Lot	Meters Sample Tested	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot			X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS_ABXXL1*	15,479	75	100.043	0.293	0.000	2.29%	0.003	-0.061	0.000	99.757	0.911	3.183	7.15%	0.192	-0.445	-9.297
WPS_WED4L1	13,164	75	100.007	0.318	0.000	2.29%	-0.114	0.021	0.000	100.050	0.583	0.037	7.15%	-0.293	0.024	0.037
WPS_WED4L2	14,641	75	100.132	0.309	0.000	2.29%	-0.021	0.026	0.000	100.221	0.599	0.117	7.15%	-0.211	-0.062	0.111
WPS_WHD5S 88**	1,170	40	99.949	0.267	0.000	2.71%	-0.050	-0.047	0.000	99.807	0.531	0.011	8.09%	-0.154	-0.154	-0.118
Total	44,454	265														

Note: (1) XX = Mixed Type Lot.
(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.
(3) * Designates Lot Failed Once.
(4) ** Designates Lot Failed Twice.
(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2018
Company Name: WISCONSIN PUBLIC SERVICE
Print Date: 2/14/2019 7:07:38 AM

Wisconsin Public Service

Sample Testing Data

Group	Total	Meters	Full Load Testing Sample							Light Load Testing Sample						
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS_GEI70L1	7,318	50	100.157	0.209	0.000	2.49%	-0.075	-0.047	0.000	100.067	0.483	0.000	7.61%	-0.243	0.019	0.000
WPS_GEI70L2	11,623	75	100.057	0.217	0.000	2.29%	-0.076	0.004	0.000	100.023	0.427	0.000	7.15%	-0.215	-0.065	0.000
WPS_GEI70L3	13,011	75	100.087	0.197	0.000	2.29%	-0.069	-0.051	0.000	99.968	0.437	0.000	7.15%	-0.274	-0.040	0.000
WPS_GEI70L4	14,080	75	100.129	0.206	0.000	2.29%	-0.078	-0.075	0.000	100.146	0.556	0.029	7.15%	-0.058	0.145	0.029
WPS_GEXXL1	207	25	99.923	0.331	0.000	2.86%	0.136	-0.064	0.000	100.003	0.521	0.000	8.63%	-0.144	-0.016	0.000
Total	46,239	300														

Note: (1) XX = Mixed Type Lot.
(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.
(3) * Designates Lot Failed Once.
(4) ** Designates Lot Failed Twice.
(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921

Year: 2018

Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM

Wisconsin Public Service

Group	Total Meter	Meters Sample	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot	Lot	Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS_LGALFN 17	7,175	50	99.964	0.087	0.000	2.49%	99.964	0.087	0.000	100.030	0.086	0.000	7.61%	100.030	0.086	0.000
WPS_LGALFL1	18,474	75	99.943	0.131	0.000	2.29%	-0.010	0.048	0.000	99.983	0.138	0.000	7.15%	0.000	0.053	0.000
WPS_LGALFL2	4,131	50	99.956	0.098	0.000	2.49%	-0.005	-0.013	0.000	99.999	0.083	0.000	7.61%	-0.016	-0.025	0.000
WPS_LGALFN 10	9,710	75	99.982	0.103	0.000	2.29%	0.012	0.002	0.000	100.030	0.097	0.000	7.15%	-0.002	0.007	0.000
WPS_LGALFN 11	9,244	75	99.975	0.076	0.000	2.29%	-0.017	-0.016	0.000	100.025	0.086	0.000	7.15%	-0.030	-0.029	0.000
WPS_LGALFN 12	7,976	75	100.008	0.102	0.000	2.29%	0.027	0.022	0.000	100.069	0.105	0.000	7.15%	0.029	0.032	0.000
WPS_LGALFN 13	9,073	75	99.997	0.092	0.000	2.29%	0.022	0.006	0.000	100.057	0.081	0.000	7.15%	0.025	0.000	0.000
WPS_LGALFN 15	6,954	50	100.014	0.128	0.000	2.49%	0.027	0.008	0.000	100.068	0.128	0.000	7.61%	0.018	0.012	0.000
WPS_LGALFN 16	10,207	75	100.004	0.093	0.000	2.29%	-0.019	-0.058	0.000	100.063	0.091	0.000	7.15%	-0.014	-0.051	0.000
WPS_LGAXS4EL1	878	35	99.964	0.048	0.000	2.68%	0.012	-0.019	0.000	99.986	0.056	0.000	8.10%	0.009	-0.012	0.000
WPS_LGMKL1	537	30	100.052	0.290	0.000	2.83%	-0.054	0.030	0.000	100.021	0.701	0.216	8.47%	-0.130	0.118	0.215
WPS_LGMSL1	9,078	75	100.055	0.390	0.000	2.29%	-0.048	0.061	0.000	100.028	0.859	1.800	7.15%	-0.190	0.289	1.798
WPS_LGMSL2	13,808	75	99.985	0.280	0.000	2.29%	-0.035	0.026	0.000	99.902	0.565	0.028	7.15%	-0.232	0.038	0.028
WPS_LGMSL3	15,066	75	99.956	0.263	0.000	2.29%	-0.074	0.001	0.000	100.008	0.422	0.000	7.15%	-0.229	0.007	0.000
WPS_LGMSL4	5,797	50	100.109	0.187	0.000	2.49%	-0.018	0.021	0.000	100.067	0.406	0.000	7.61%	-0.046	-0.013	0.000
WPS_LGMX1 04A	7,356	50	99.703	0.287	0.000	2.49%	-0.033	0.019	0.000	99.813	0.407	0.000	7.61%	-0.252	0.053	0.000
WPS_LGMX1 04B	6,488	50	99.775	0.246	0.000	2.49%	-0.007	0.027	0.000	99.947	0.407	0.000	7.61%	-0.188	-0.165	-0.003
WPS_LGMX1 04C	6,312	50	99.637	0.299	0.000	2.49%	-0.111	0.047	0.000	99.949	0.325	0.000	7.61%	-0.276	-0.011	0.000
WPS_LGMX1 04D	6,162	50	99.688	0.344	0.000	2.49%	-0.107	0.108	0.000	99.988	0.418	0.000	7.61%	-0.172	0.078	0.000
WPS_LGMX1 04E	5,953	50	99.691	0.327	0.000	2.49%	0.017	0.026	0.000	99.709	0.604	0.164	7.61%	-0.206	0.241	0.164
WPS_LGMX1 04F	7,216	50	99.527	0.339	0.000	2.49%	-0.104	0.047	0.000	99.690	0.404	0.000	7.61%	-0.304	-0.019	0.000
WPS_LGMX1 04G	7,135	50	99.669	0.306	0.000	2.49%	-0.038	0.042	0.000	99.733	0.470	0.003	7.61%	-0.219	0.027	0.003
WPS_LGMX1 04H	10,351	75	99.680	0.345	0.000	2.29%	-0.050	0.104	0.000	99.616	0.473	0.020	7.15%	-0.219	-0.152	-0.110
WPS_LGMXL1	17,418	75	99.743	0.291	0.000	2.29%	-0.057	0.021	0.000	100.088	0.495	0.002	7.15%	-0.038	0.053	0.002
WPS_LGXXL2	22,593	100	99.861	0.795	1.207	2.20%	0.035	0.559	1.207	100.206	0.955	3.894	6.91%	-0.078	0.567	3.894
WPS_LGXXL3	22,304	100	99.715	0.337	0.000	2.20%	0.009	-0.023	0.000	99.960	0.505	0.003	6.91%	-0.005	-0.165	-0.137
WPS_LGXXL4	6,885	50	99.821	0.209	0.000	2.49%	0.040	-0.074	0.000	100.071	0.362	0.000	7.61%	0.022	-0.131	0.000
WPS_LGXXL5	14,725	75	99.580	0.674	0.881	2.29%	-0.196	0.260	0.881	99.756	0.761	1.070	7.15%	-0.112	-0.060	0.008
WPS_SIXXALT1	8,775	75	99.969	0.095	0.000	2.29%	0.013	0.010	0.000	100.035	0.138	0.000	7.15%	0.027	0.031	0.000
Total	277,781	1,840														

Note: (1) XX = Mixed Type Lot.

(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.

(3) * Designates Lot Failed Once.

(4) ** Designates Lot Failed Twice.

(5) First Failed, Separated Lot, *SA-J3-L2-1

*SA-J3-L2-2

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2018
Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM



Wisconsin Public Service

Group Mfg-Type-Lot	Manufacturer	Type	Type	Type	Type
WPS_ABXXL1	ABB	AB1	AB1R	D5S	
WPS_WED4L1	Westinghouse	D4S			
WPS_WED4L2	Westinghouse	D4S			
WPS_WHD5S 88	Westinghouse	D5S			
WPS_GEI70L1	General Electric	I70S			
WPS_GEI70L2	General Electric	I70S			
WPS_GEI70L3	General Electric	I70S			
WPS_GEI70L4	General Electric	I70S			
WPS_GEXXL1	General Electric	I70ES	I70ES	I70S	I70S
WPS_LGALFN 17	Landis Gyr	ALF-N			
WPS_LGALFL1	Landis Gyr	ALF	ALF-UMT		
WPS_LGALFL2	Landis Gyr	ALF	ALF-UMT		
WPS_LGALFN 10	Landis Gyr	ALF-N			
WPS_LGALFN 11	Landis Gyr	ALF-N			
WPS_LGALFN 12	Landis Gyr	ALF-N			
WPS_LGALFN 13	Landis Gyr	ALF-N			
WPS_LGALFN 15	Landis Gyr	ALF-N			
WPS_LGALFN 16	Landis Gyr	ALF-N			
WPS_LGAXS4EL1	Landis Gyr	AXS4	AXS4E		
WPS_LGMKL1	Landis Gyr	MSK			
WPS_LGMSL1	Landis Gyr	MS			
WPS_LGMSL2	Landis Gyr	MS			
WPS_LGMSL3	Landis Gyr	MS			
WPS_LGMSL4	Landis Gyr	MS			
WPS_LGMX1 04A	Landis Gyr	MX			
WPS_LGMX1 04B	Landis Gyr	MX			
WPS_LGMX1 04C	Landis Gyr	MX			
WPS_LGMX1 04D	Landis Gyr	MX			
WPS_LGMX1 04E	Landis Gyr	MX			
WPS_LGMX1 04F	Landis Gyr	MX			
WPS_LGMX1 04G	Landis Gyr	MX			
WPS_LGMX1 04H	Landis Gyr	MX			
WPS_LGMXL1	Landis Gyr	MX			
WPS_LGXXL2	Landis Gyr	MX			
WPS_LGXXL3	Landis Gyr	MX			
WPS_LGXXL4	Landis Gyr	MX	MX		
WPS_LGXXL5	Landis Gyr	MX			
WPS_SIXXALT1	Landis Gyr	ALT-AL	ALT-AX-SW		
WPS_SAJ5L1	Sangamo	J5S			
WPS_SAJXL2	Sangamo	J4S			
WPS_SAXXL2	Sangamo	C1SX	CN1SX		
WPS_SNXXL1	Sensus	ICON			

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2019
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Wisconsin Public Service

			Sample Testing Data														
Group	Total	Meters	Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS-SA-JX-2019	25233	100														
WPS_SAJ5L1_____	0	0														
WPS_SAJXL2_____	0	0														
WPS_SAXXL2_____	10,812	75														
WPS_SNXXL1_____	319	25														
Total	36,364	200														

Note: (1) XX = Mixed Type Lot.
(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.
(3) * Designates Lot Failed Once.
(4) ** Designates Lot Failed Twice.
(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2
(6) Combined Lots WPS_SAJ5L1 & WPS_SAJXL2 into Lot WPS_SAJX 19

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2019
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Wisconsin Public Service

Group	Total	Meters	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS-AB-WH-2019	44,454	100														
WPS_ABXXL1	0	0														
WPS_WED4L1	0	0														
WPS_WED4L2	0	0														
WPS_WHD5S 88	0	0														
Total	44,454	100														

Note: (1) XX = Mixed Type Lot.
(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.

(3) * Designates Lot Failed Once.
(4) ** Designates Lot Failed Twice.
(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2
(6) Combined all Lots into WPS_AB_WH_19

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921

Year: 2019

Company Name: WISCONSIN PUBLIC SERVICE

Print Date: 2/14/2019 7:07:36 AM

Wisconsin Public Service

			Sample Testing Data														
Group	Total Meter Lot	Meters Sample Tested	Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot			X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS-GE-I70L-2019	46,239	100														
WPS_GEI70L1____	0	0														
WPS_GEI70L2____	0	0														
WPS_GEI70L3____	0	0														
WPS_GEI70L4____	0	0														
WPS_GEXXL1_____	0	0														
Total	46,239	100														

Note: (1) XX = Mixed Type Lot.

(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.

(3) * Designates Lot Failed Once.

(4) ** Designates Lot Failed Twice.

(5) First Failed, Separated Lot. *SA-J3-L2-1
*SA-J3-L2-2

(6) Combined all Lots into WPS_GEI70L_19

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2019
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Wisconsin Public Service

Group	Total	Meters	Sample Testing Data														
			Full Load Testing Sample							Light Load Testing Sample							
Mfg-Type-Lot	Meter Lot	Sample Tested	X	S	P	M	Delta X	Delta S	Delta P	X	S	P	M	Delta X	Delta S	Delta P
WPS-LG-FS1-2019	80,000	100														
WPS-LG-FS2-2019	65,000	100														
WPS-LG-ALFN-2019	82,944	100														
WPS_LGALFN 17	0	0														
WPS_LGALFL1	0	0														
WPS_LGALFL2	0	0														
WPS_LGALFN 10	0	0														
WPS_LGALFN 11	0	0														
WPS_LGALFN 12	0	0														
WPS_LGALFN 13	0	0														
WPS_LGALFN 15	0	0														
WPS_LGALFN 16	0	0														
WPS-LG-AXS4E-L2	20,317	100														
WPS-LG-MSL-2019	44,286	100														
WPS_LGMKL1	0	0														
WPS_LGMSL1	0	0														
WPS_LGMSL2	0	0														
WPS_LGMSL3	0	0														
WPS_LGMSL4	0	0														
WPS-LG-MX1-2019	56,973	100														
WPS_LGMX1 04A	0	0														
WPS_LGMX1 04B	0	0														
WPS_LGMX1 04C	0	0														
WPS_LGMX1 04D	0	0														
WPS_LGMX1 04E	0	0														
WPS_LGMX1 04F	0	0														
WPS_LGMX1 04G	0	0														
WPS_LGMX1 04H	0	0														
WPS-LG-MX2-2019	83,925	100														
WPS_LGMXL1	0	0														
WPS_LGXXL2	0	0														
WPS_LGXXL3	0	0														
WPS_LGXXL4	0	0														
WPS_LGXXL5	0	0														
WPS_SIXXALT1	8,775	75														
Total	442,220	775														

Note: (1) XX = Mixed Type Lot.
(2) Delta X, Delta S, & Delta P = Current Year Minus Previous Year.
Example: Delta X = X of 2005 - X of 2004.

(3) * Designates Lot Failed Once.
(4) ** Designates Lot Failed Twice.
(5) First Failed, Separated Lot. *SA-J3-L2-1

*SA-J3-L2-2

Report ID: XRPDV0026B

CIS
SSTP REPORTING FORM PSC 113.0919(3)
ELECTRIC METER SSTP PSC 113.0921
Year: 2019
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Wisconsin Public Service

Group Mfg-Type-Lot	Manufacturer	Type	Type	Type	Type	
WPS-AB-WH-2019	ABB/ Westinghouse	AB1	AB1R	D5S	D4S	New combined lot contains ABB/ Westinghouse meters
WPS_ABXXL1	ABB	AB1	AB1R	D5S		Lot closed- meters added to lot WPS-AB-WH-2019
WPS_WED4L1	Westinghouse	D4S				Lot closed- meters added to lot WPS-AB-WH-2019
WPS_WED4L2	Westinghouse	D4S				Lot closed- meters added to lot WPS-AB-WH-2019
WPS_WHD5S 86	Westinghouse	D5S				Lot closed- meters added to lot WPS-AB-WH-2019
WPS-GE-I70L-2019	General Electric	I70ES	I70ES	I70S	I70S	New combined lot contains GE meters
WPS_GEI70L1	General Electric	I70S				Lot closed, meters added to lot WPS-GE-I70L-2019
WPS_GEI70L2	General Electric	I70S				Lot closed, meters added to lot WPS-GE-I70L-2019
WPS_GEI70L3	General Electric	I70S				Lot closed, meters added to lot WPS-GE-I70L-2019
WPS_GEI70L4	General Electric	I70S				Lot closed, meters added to lot WPS-GE-I70L-2019
WPS_GEXXL1	General Electric	I70ES	I70ES	I70S	I70S	Lot closed, meters added to lot WPS-GE-I70L-2019
WPS-LG-FS1-2019	Landis Gyr	Focus AXe-SD	Focus Axe			New Lot
WPS-LG-FS2-2019	Landis Gyr	Focus AXe-SD	Focus Axe			New Lot
WPS_LGALFN 19	Landis Gyr	ALF-N	ALF-UMT	ALF		New combined lot contains LG Focus AL meters
WPS_LGALFN 17	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFL1	Landis Gyr	ALF	ALF-UMT			Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFL2	Landis Gyr	ALF	ALF-UMT			Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 10	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 11	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 12	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 13	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 15	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGALFN 16	Landis Gyr	ALF-N				Lot closed, meters added to lot WPS-LG-ALFN-2019
WPS_LGAXS4EL2	Landis Gyr	AXS4	AXS4E			Existing Lot
WPS-LG-MSL-2019	Landis Gyr	MK	MSK	MS		New combined lot contains LG meters
WPS_LGMKL1	Landis Gyr	MSK				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS_LGMSL1	Landis Gyr	MS				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS_LGMSL2	Landis Gyr	MS				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS_LGMSL3	Landis Gyr	MS				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS_LGMSL4	Landis Gyr	MS				Lot closed, meters added to lot WPS-LG-MSL-2019
WPS-LG-MX1-2019	Landis Gyr	MX				New combined lot contains LG meters
WPS_LGMX1 04A	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04B	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04C	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04D	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04E	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04F	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04G	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS_LGMX1 04H	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX1-2019
WPS-LG-MX2-2019	Landis Gyr	MX				New combined lot contains LG meters
WPS_LGMXL1	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_LGXXL2	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_LGXXL3	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_LGXXL4	Landis Gyr	MX	MX			Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_LGXXL5	Landis Gyr	MX				Lot closed, meters added to lot WPS-LG-MX2-2019
WPS_SDXALT1	Landis Gyr	ALT-AL	ALT-AX-SW			Existing Lot
WPS-SA-JX-2019	Sangamo	J5S	J4S			New combined lot contains Sangamo meters
WPS_SAJ5L1	Sangamo	J5S				Lot closed, meters added to lot WPS-SA-JX-2019
WPS_SAJXL2	Sangamo	J4S				Lot closed, meters added to lot WPS-SA-JX-2019
WPS_SAXXL2	Sangamo	C1SX	CN1SX			Existing Lot
WPS_SNXXL1	Sensus	ICON				Existing Lot

REJECTED LOT FORM

SSTP REPORTING FORM PSC 113.0919(4)
ELECTRIC METER SSTP PSC 113.0921

PUBLIC SERVICE COMMISSION OF WISCONSIN

UTILITY: Wisconsin Public Service

YEAR GROUP FAILED: 2015

GROUP: WHD5S 87

NUMBER IN GROUP: 4,218

FULL LOAD M : 2.49

LIGHT LOAD M 7.61

YEAR TESTED	METERS TESTED	FULL LOAD				LIGHT LOAD			
		$\overline{X}$	S	P	ACTUAL P	$\overline{X}$	S	P	ACTUAL P
2016	9								
2017	0								
2018	0								
2019									
TOTAL	9								

NEW GROUP(S)	NUMBER
RETIRED	

Failed lots must have all meters tested within four (4) years from January 1 of the reporting year.

$\overline{X}$, S, P, calculated at full load and light load test points using procedure on pages 4, 43, 45, and 103 of MIL-STD-414, 11 June 1957.

M - same as that calculated for failed group.

Actual P - Do not include stopped meters at either test point.

Notes on Lot:

4,218 Meters was population on January 6, 2016
4,152 Meters was population on March 16, 2017
3,389 Meters was population on January 28, 2018
672 Meters was population on Febuary 28, 2019

Meters Tested in 2016 with test results

SerialNum	Test Date	FL	LL
493025	2/3/2016	100.01	99.27
499586	2/3/2016	100.05	100.59
498733	2/17/2016	100.38	100.69
494629	5/23/2016	99.46	93.61
499053	7/28/2016	100.14	101.33
492903	9/22/2016	100.135	99.573
494394	9/26/2016	99.49	96.47
498489	10/24/2016	99.08	99.24
494801	11/3/2016	99.89	100.03