

e-FILING REPORT COVER SHEET

REPORT NAME: Annual Meter Test and Certification Report for 2018

COMPANY NAME: Idaho Power Company

DOES REPORT CONTAIN CONFIDENTIAL INFORMATION? No Yes

If yes, please submit only the cover letter electronically. Submit confidential information as directed OAR 860-001-0070 or the terms of an applicable protective order.

If known, please select designation: RE (Electric) RG (Gas) RW (Water)
 RO (Other)

Report is required by: OAR 860-023-0015
 Statute 757.250
 Order
 Other RE 158

Is this report associated with a specific docket/case? No Yes
If Yes, enter docket number:

Key words:

If known, please select the PUC Section to which the report should be directed:

- Corporate Analysis and Water Regulation
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May 13, 2019

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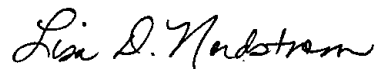
Re: OPUC Docket No. RE 158
2018 Annual Meter Test and Certification Report

Attention Filing Center:

Enclosed for filing is Idaho Power Company's 2018 Meter Test and Certification Report required by the Public Utility Commission of Oregon's Electric Utility Metering Policy that implements ORS 757.250 and OAR 860-023-0015.

If you have any questions about this report, please contact Regulatory Analyst Kristy Patteson at (208) 388-2982 or kpatteson@idahopower.com.

Very truly yours,



Lisa D. Nordstrom

LDN/kkt

Enclosure

IDAHO POWER COMPANY

2018 ANNUAL METER TEST AND CERTIFICATION REPORT

Idaho Power Company's ("Idaho Power" or "Company") advanced metering infrastructure ("AMI") meters record, display, read, and reset peak demand. In alignment with ANSI C12.1 2008, the meters are subject to a periodic in-service test plan. The remaining solid state non-AMI meters qualify for random sampling or period maintenance programs. In alignment with ANSI standards, the Company made the decision to divide all of the meters in its Oregon service territory into periodic meter groups ("PMG") by model and/or attribute.

The decision to place all of the Oregon meters into PMGs is in line with ANSI standards and industry practices. However, Idaho Power recognizes that long-term grouping of all meters into PMGs is not sustainable and will develop and implement other in-service planned maintenance programs to be approved by the Public Utility Commission of Oregon ("Commission"). There are a number of meter maintenance programs currently being performed to validate meters in Oregon that are not required or addressed by ANSI or the Commission's Electric Metering Policy. A summary of meter validation programs being performed is provided in this report.

Management Review

The review of Idaho Power's metering policies, practices, and procedures, and the results of in-service meter maintenance and validations performed shows that the Company is in compliance with ANSI C12.1 2008 and the Commission's Electric Metering Policy.

All test equipment used to validate meter accuracy is traceable to the National Institute of Standards and Technology laboratory. Calibration standards are used to verify meter test equipment accuracy on a regularly scheduled interval of six months.

Significant Deficiencies

There were no significant meter defects found by Idaho Power through testing or inspection programs in 2018.

Metering Corrective Action Plans

No failed PMG meter lots were found by testing or inspection programs in 2018; therefore, no corrective action plans are necessary.

Listing of HMGs and PMGs

Below is the listing of Idaho Power Oregon meters by PMG. The list includes PMG model, technology, i.e., AMI, Non-AMI, and offsite meter reading ("OMR"), along with a breakdown of the last test year. Idaho Power does not have any meters in homogeneous meter groups ("HMG") groupings.

Model	Tech	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total	
A1D	Non-AMI	1		1	2		3		4	4	62	52			23					152	
A1D+	Non-AMI	16	6	1	12	14	4		3	7	73	58							1	195	
A1RL+	AMI							1		9	2	30	7	2	3	1	1			56	
A1RL+	Non-AMI										1					1				2	
A1TL+	Non-AMI								2											2	
A3D	Non-AMI						5	10	1	2	15	4								37	
A3R	AMI																	1		1	
A3RAL	AMI													11						11	
AB1R	OMR								22	141	8	23			8					202	
ALF	Non-AMI					13			1	8	19	187	1	1	2	5	3	2	1	243	
ALF	AMI							3	119	13384	232	178	221	120	199	218	177	98	21	14970	
AXR-SD	AMI													777	2	142	24	5		950	
AXS4	Non-AMI		3	8	4						7									22	
AXS4	AMI			2	1	2	5	1	1											12	
C1S	Non-AMI		7	5	2	17	17	9	8	50	88	12								215	
C1SCT	Non-AMI		5		2			1		14										22	
C1SD	Non-AMI		1	1	3	1	1	5	3	1										16	
C1SR	OMR						5	4	5	50	51	55	2		1	3				176	
C1SX	AMI			13			1													14	
CN1SX	AMI							5												5	
ION-8600	AMI									3			2		1			1		7	
ION-8650	AMI															5	3	10		18	
J5SR	OMR								6	102	3	2								113	
KV2C	AMI								6	1094	76	104	137	142	296	211	259	179	27	2531	
M5S9	AMI																		5	5	
I210+	AMI																		106	19	125
I210+RD	AMI																		10		10
Q4N-9	AMI																		1		1
Total		17	22	31	26	47	41	39	181	14869	637	705	370	1053	535	586	467	418	69	20113	

Metering Audits for PMGs

1. Voltage readings on AMI three-phase meters are taken three times daily. Any missing voltage is investigated onsite.
2. Automated communication meters are verified in the field if reading errors are detected or communication fails for two consecutive days.
3. Transformer-rated irrigation meter monthly billing kilowatts (“kW”) are compared to the connected horse power (“Hp”) ($kW = (Hp \times .746) \times .866$) deviations and are validated at the site.
4. All primary distribution service level meter sites are validated in the field every six months and a random selection of meters are tested annually.
5. Transmission level metering is validated every six months and meters are tested annually.

Inspections and Tests for HMGs

Idaho Power does not have any meters in HMG groupings. All meters are in solid state AMI, solid state non-AMI, or OMR PMG groups.

Uniquely Defective Meters

Idaho Power did not identify any uniquely defective meters through testing, inspection programs, or audits in 2018.

Metering Hazards and Defects

Idaho Power did not identify any metering hazards or defects through testing, inspection programs, or audits in 2018.

2018 Inspections for HMGs and PMGs

Idaho Power did not identify any PMGs that were due for testing in 2018. Idaho Power does not have meters in HMGs.

Metering Standard Practice Changes

There were no changes in 2018. Standard metering practices are in alignment with the Commission's Electric Utility Metering Policy. The deployment of all solid-state metering post-AMI deployment in 2012 has resulted in all meters being in PMGs and being tested on a 16-year cycle.

Multi-State Metering Programs

Idaho Power meters in all states are audited as listed in "Metering Audits of PMGs". There are no multi-state HMG groupings of meters.

Qualified Meter Technicians

Idaho Power has assigned two meter technicians to the operational area covering its Oregon service territory.

Policy Changes Requiring Commission Approval

Idaho Power's Electric Metering Practices and Policy will be reviewed to determine if revisions are necessary to address the impact of periodic meter testing with its AMI meters. Currently, AMI meters are on a 16-year periodic test cycle and the volume of testing will increase significantly as their original installation date draws closer. The amount of testing may not be practical or sustainable. Therefore, a statistical sampling plan in accordance with ANSI C12.1 2014 and ANSI Z1.9 will be assessed to determine the best way to limit unnecessary and costly meter maintenance in the future. Revisions made to Idaho Power's Electric Metering Practices and Policy will be submitted to the Commission for approval.