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REPORT NAME:	2015 Annual	Meter Test and Certification Report
COMPANY NAME:	Idaho Power (Company
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If known, please selec	et designation:	 □ RE (Electric) □ RG (Gas) □ RW (Water) □ RO (Other)
Report is required by:	○ OAR ○ Statute ○ Order ○ Other	860-023-0015 757.250
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LISA D. NORDSTROM Lead Counsel Inordstrom@idahopower.com

May 26, 2016

Public Utility Commission of Oregon Filing Center 201 High Street SE, Suite 100 P.O. Box 1088 Salem, Oregon 97301

Re: 2015 Annual Meter Test and Certification Report

Attention Filing Center:

Enclosed for filing is Idaho Power Company's 2015 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

Lin D. Madotrom

LDN/kkt

Enclosure



IDAHO POWER COMPANY

2015 ANNUAL METER TEST AND CERTIFICATION REPORT

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Overview Statement

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 would be subject to a periodic in-service test plan. The remaining solid state non-AMI meters qualify for random sampling or periodic 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, although ANSI C12.1 does not specifically address solid state meters or smart meters. Idaho Power recognizes that long-term grouping of all meters into PMGs is not practical or sustainable and that Idaho Power should develop and implement other inservice 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 2015.

Metering Corrective Action Plans

No failed PMG meter lots were found by testing or inspection programs in 2015; therefore, no corrective action plans are necessary.

Listing of Homogenous Meter Groups and Periodic Meter Groups

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	Technology	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
A 1D	Non-AMI	1		1	3		3		5	4	60	54			16	147
A 1D+	Non-AMI	17	6	1	14	16	4	1	4	5	67	59			1	195
A1R-AL	AMI														1	1
A1RL+	AMI							1		9	2	30	7	2	4	55
A1RL+	Non-AMI														1	1
A 1TL+	Non-AMI								2							2
A3D	Non-AMI						5	10	1	1	12	4				33
A3R	AMI														1	1
A3RAL	AMI													12		12
A3T	AMI										2					2
AB1R	OMR								22	71	2	5			8	108
ALF	AMI					21	1	3	128	14006	269	492	237	123	189	15471
AXR-SD	AMI													799	3	802
AXS4	Non-AMI		3	12	5	2	5	1	1		7					36
C1S	Non-AMI		13	6	4	20	22	12	9	65	76	20				247
C1SCT	Non-AMI		6		2			1		15						24
C1SD	Non-AMI		1	1	5	2	1	5	2	1						18
C1SR	OMR						6	4	6	51	51	58	2			178
C1SX	Non-AMI			14			1			1						16
CN1SX	Non-AMI							5								5
ION-8600	AMI									4	1		2		1	8
ION-8650	AMI											1			2	3
J5SR	OMR								7	19						26
KV2C	AMI								9	1487	104	133	168	191	211	2308
M 5S9	AMI														5	5
Q4N-9	AMI														1	1
Total		18	29	35	33	61	48	43	196	15739	653	856	416	1127	444	19705

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 x .746) x .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 2015.

Metering Hazards and Defects

Idaho Power did not identify any metering hazards or defects through testing, inspection programs, or audits in 2015.

2015 Inspections for HMGs and PMGs

Below are the test results for PMG grouping meters tested in 2015. Idaho Power does not have meters in HMGs:

Serial Nbr	<u>Model</u>	<u>Std</u>	<u>FI_Ld</u>	Lt Ld	Pwr Factor	Avg Accy
1428066	A1D	MTF5	99.99	99.95	100.02	99.98
1432332	A1D	MTF5	99.98	100.01	100.00	99.99
1432337	A1D	MTF5	99.97	99.88	99.96	99.95
1438409	A1D	MTF5	99.63	99.66	100.73	99.64
1438419	A1D	MTF5	99.98	99.92	100.01	99.97
1454029	A1D	MTF5	99.99	100.02	99.98	100.00
1454329	A1D	MTF5	99.97	99.96	100.00	99.97
1457166	A1D	MTF5	99.84	99.95	99.72	99.86
1458163	A1D	MTF5	99.98	99.96	100.05	99.98
1459539	A1D	MTF5	99.99	99.92	100.02	99.98
1459576	A1D	MTF5	99.98	99.88	100.01	99.96
1459736	A1D	MTF5	100.02	99.87	100.03	99.99
1460238	A1D	MTF5	100.01	99.94	100.05	100.00
1461390	A1D	MTF5	100.02	99.98	100.02	100.01
1461443	A1D	MTF5	100.01	99.97	99.99	100.00
1461445	A1D	MTF5	99.97	99.97	99.99	99.97
1466882	A1D	MTF5	100.01	100.01	100.01	100.01
1466883	A1D	MTF5	99.99	99.97	100.01	99.99
1472529	A1D	MTF5	99.99	100.02	99.99	100.00
1472555	A1D	MTF5	99.99	100.04	100.10	100.00

Metering Standard Practice Changes

There were no changes in 2015. 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

Under the current ANSI standards and the Commission's Electric Metering Policy, Idaho Power believes all of its Oregon meters are correctly identified in PMGs. However, ANSI C12.1 and the Commission's Electric Metering Policy do not adequately address the inservice maintenance requirements for solid-state meters with automated communication capabilities. That could result in significant, unnecessary, and costly meter maintenance programs in 2026 because the AMI meters are currently on a 16-year periodic test cycle. Longer periodic test cycles or alternative inspection programs should be explored prior to 2026 to avoid unnecessary maintenance expenses.