

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON
UM 1675**

In the Matter of

IDAHO POWER COMPANY,

2014 Annual Smart Grid Report

STAFF COMMENTS

Staff is pleased to submit these comments regarding Idaho Power Company's (IPC, Idaho Power, or Company) 2014 Smart Grid Report. The report has evolved and expanded compared to last year's report, which demonstrates to Staff that Idaho Power is devoted to both the Commission's goals and those of IPC described in its 2013 Smart Grid Report. The general continuity in organization of the report from 2013 is appreciated. However, Staff appreciates revisions, such as the change in section III, "Future Smart Grid Investments," that better align the report with recommendations made in Commission Order 12-158. Overall, Staff is pleased with the progress IPC is achieving in advancing the implementation of a smarter grid for its customers. The goal of these comments is to address matters that were presented and subsequently reviewed in the 2014 Smart Grid Report, ensuring that they are progressing accordingly, and to acknowledge and evaluate new developments.

Staff would like to acknowledge IPC's response to the three recommendations provided in Order No. 13-481. In that order, the Commission ordered the following:

- 1) The Company should circulate a draft version of future smart grid reports at the same time they solicit comments and prior to filing at the Commission.
- 2) In the next Smart Grid report, IPC provide an update and timeline for current analysis of CVR. The Company should also detail the criteria it will use to gauge success and expandability of CVR efforts.
- 3) In the next Smart Grid Report, Idaho Power provide:
 - (a) An update on the current Time of Day (TOD) pilot;
 - (b) A time line and specific criteria for how the company will analyze critical peak pricing and seasonal pricing structure as potential options for IPC customers; and

(c) Criteria for how the TOD pilot will be evaluated and what participant behavior modifications and revenue impact outcomes would lead to decisions to expand pilot or not.

IPC largely responded to these recommendations thoroughly and Staff appreciates the Company's substantive answers. However, Staff is disappointed to see what it views as insufficient information related to two components of the third recommendation regarding three pilot programs. Staff would like to see 1) an explicit timeline for analyzing the critical peak pricing and seasonal pricing structure pilots similar to what IPC provided in Appendix G for Conservation Voltage Reduction Enhancements Projects, and 2) expanded details of the possible implementation barriers to the TOD pilot project delineated at the bottom of page 53 of the report.

Mirroring last year's effort and in accordance with Utility Reporting Requirement 1.b. in Order No. 12-158, the Company solicited stakeholder input to contribute and develop the report. Stakeholders included utilities, advocacy groups, and the public. IPC placed ads in the *Argus Observer* and *Hells Canyon Journal* newspapers and sent an email to all parties on the service list for Smart Grid Docket, UM 1460; the Company's last general rate case Docket, UE 233; IPC's integrated resource planning Docket, LC 58; and IPC's 2013 Smart Grid Report Docket, UM 1675. The Company satisfied Staff's recommendation to include a draft version of the Report when disseminating notice. The Company did not receive any comments or suggestions as a result of the newspaper advertisement or email. Though Staff finds that these efforts satisfy the requirements of III.B.b, additional efforts to engage the public would be beneficial. As discussed later, ways to further increase customer education and participation is essential for the success of certain Smart Grid initiatives.

In the report, the Company continues to clearly identify their smart grid strategy goals and objectives as required by the Commission's requirements regarding elements of annual reports, specifically requirement C.1. (Order 12-158 at 5.) Staff finds that the Commission's policy goals and objectives line up with the Company's smart grid vision and seven major smart grid characteristics noted by the Company.

Staff is pleased to see both continued and expanded efforts in transmission network and operations. In addition to ongoing Transmission Situational Awareness efforts such as increased PMU installation, monitoring, and software analysis, the new Peak Reliability Hosted Advanced Application and Grid Operator's Monitoring & Control Assistant reflect IPC's commitment to both Company and Commission goals, strategies, and objectives. Staff appreciates IPC's work in challenging areas such as Western Electricity Coordinating Council contingency modeling and data gathering in Hell's canyon. Staff looks forward to results from these efforts and others that can enhance reliability and renewable integration.

Developments have occurred in various aspects in Substation and Distribution Network and Operations, including topics on which the Staff and Commission previously made recommendations. Staff appreciates the detailed reporting and has comments and questions on a few subjects. Staff appreciates the continued reporting of the A/C Cool Credit Program and Grid System Planning, and is pleased to see advances in the Geomagnetic Disturbance Study and Irrigation Load Control Pilot. Revisions to the online tool for customers, now called “myAccount,” are welcomed; enhancements to features that benefit customers align well with Commission and Company goals.

Staff is pleased to see that the Company responded to the second recommendation stated in Order No. 13-481, which was to provide an update and timeline for current analysis of conservation voltage reduction (CVR). Staff finds the response in Appendix G comprehensive and sufficient. The Company has initiated a CVR Program Enhancement project that began first quarter 2014 and is expected to be complete in 2016. The table below lists the major milestones for the CVR project.

Report	Due Date
Validation Method Definition and Procedure Document	Dec. 31, 2014
Complete Data Collection/Report on Data Repository Contents	Dec. 31, 2015
CVR Cost/Benefit Analysis Report	May 31, 2016
CVR Program Structure and Layout Document	June 30, 2016
CVR Operating Procedures Manual	June 30, 2016
CVR Enhancements Project Final Report	September 1, 2016

Staff supports the Company’s pilot to embed its CVR program with its Automated Volt/Var management System (VVMS) pilot. This flattens the voltage profile along the feeder thus allowing a stable voltage at customers’ premises and potentially reducing feeder losses. If successfully implemented, customers can experience a reduction in energy use thus saving customers money. This embedment is enabled by the Company’s plan to implement a Distribution Management System (DMS); Staff looks forward to seeing further Smart Grid discussions and ideas that can be realized through a DMS. In general, Staff also has questions regarding the VVMS and CVR pilot programs. Staff acknowledges that costs are still being determined as of September, 8, 2014. Staff would like to see estimated or actual costs in the Company’s reply comments.

Staff appreciates IPC’s response to the third recommendation the Oregon Commission made in Order No. 13-481, but would like to see additional information regarding two of the pilot programs. In the TOD pilot plan, we noticed that in July 2014, the Company concluded the final behavior impact study of the residential TOD pilot. Over the 12 month study period the reduction in peak time period consumption was approximately three percent of total kWh use, while off-peak consumption increased nearly one percent. The impact study estimates a total

revenue reduction of \$119,000.00, which equates to energy billing revenue impact of a reduction of 5.48 percent. Staff would like to see this reduction in revenue presented as savings for those customers who participated. Additionally, projections of savings and revenue impacts for customers in the Oregon service area assuming all business requirements are met would be appreciated. As mentioned earlier, Staff would like to see additional delineation of obstacles the Company anticipates facing when offering residential TOD to Oregon customers, found at the bottom of page 53.

Staff would like to see more analysis if IPC were to expand the TOD offering to all of the residential customer population. In addition to the Company showing the TOD pilot findings graphically, Staff would have appreciated the TOD pilot findings communicated numerically as part of the Company's summarized TOD pilot section. Staff would like to know what additional measures are available to encourage greater customer participation – such low participation warrants further investigation. Finally, ideas and suggestions for how the Company can continue to pursue TOD while minimizing or eliminating revenue losses are encouraged in future reports.

This concludes Staff comments.

Dated at Salem, Oregon, this 4th day of November, 2014



Michael Breish
Utility Analyst
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Paul Rossow
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CERTIFICATE OF SERVICE

UM 1675
Comments

I certify that I have, this day, served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-001-0180, to the following parties or attorneys of parties.

Dated this 4th day of November, 2014 at Salem, Oregon

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