ELLEN F. ROSENBLUM
Attorney General

FREDERICK M. BOSS
Deputy Attorney General

DEPARTMENT OF JUSTICE
GENERAL COUNSEL DIVISION

November 13, 2015

VIA ELECTRONIC MAIL ONLY

Attention: Filing Center
Public Utility Commission of Oregon
201 High Street, Suite 100
P.O. Box 1088
Salem OR 97308-1088

Re: *In the Matter of IDAHO POWER COMPANY, 2013 Annual Smart Grid Report*
OPUC Docket No.: UM 1675
DOJ File No.: 330030-GN0390-13

Filing Center:

On behalf of the Oregon Department of Energy, enclosed for electronic filing today with the Commission are the COMMENTS OF THE OREGON DEPARTMENT OF ENERGY in the above-captioned docket.

Sincerely,

Renee M. France
Senior Assistant Attorney General
Natural Resources Section

RMF:jrs/#6925633
c: Wendy Simons, ODOE

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UM 1675

In the Matter of IDAHO POWER COMPANY, 2015 Annual Smart Grid Report	)	COMMENTS OF THE OREGON DEPARTMENT OF ENERGY

Summary

The Oregon Department of Energy (Department) is pleased to provide these comments on Idaho Power Company's (Company) 2015 Smart Grid Report, dated October 1, 2015. The Department is encouraged to read such a detailed, comprehensive report on smart grid activities both ongoing and planned. The Company's smart grid technologies and programs, from customer information and demand-side management to transmission network and operations enhancements, demonstrate a good balance between innovations to solve emerging challenges and sensitivity to costs and impacts on current ratepayers. The Department offers specific comments in the following four areas:

1. Transmission Network and Operations Enhancements
2. Substation and Distribution Network and Operations Enhancements
3. Customer Information and Demand-Side Management
4. Distributed Resource and Renewable Resource Enhancements

Transmission Network and Operations Enhancements

Transmission Situational Awareness: The Department supports the activities undertaken in the Transmission Situational Awareness area, including the Oscillation Monitoring pilot project and the installation of advanced application tools for real-time contingency analysis. The Company has committed resources to deploy Phasor Measurement Units (PMUs) and to assess how the

data from these units can be most useful to system operators. The Department encourages the Company to continue installation of PMUs at locations identified as most useful to provide additional data to the power system analysis software. The Company is collaborating with Peak Reliability in implementation and operation of a remote application that gives the Company insight into real-time contingency analysis and the state of the region-wide grid, an activity which the Department supports. The usefulness and limitations of the current PMU data and region-wide state estimator should be evaluated and informed by system operators such as those at Idaho Power.

The future smart grid investment titled Transmission Situational Awareness Grid Operator's Monitoring and Control Assistant is a very encouraging approach. Under this initiative, the Company plans to join together with other investor-owned utilities, Peak Reliability, the California Independent System Operator and the Bonneville Power Administration to leverage U.S. Department of Energy grant monies to provide enhanced decision-making tools to system operators. The Department commends the company for engaging with Peak Reliability to identify the real needs of system operators, and for looking to the future to develop applications that will be even more useful to system operators and will enhance the reliability of the transmission system across the Western Electricity Coordinating Council's (WECC) territory. In the 2016 Smart Grid Report the Department looks forward to updates on confidence in the quality and usefulness of the PMU data, functionality of the tools under development, and acceptance by the system operators.

Substation and Distribution Network and Operations Enhancements

The Solar End-of-Feeder Project: This project described by the Company under future smart grid investments is of high interest to the Department. The combination of a variable renewable energy resource, such as solar photovoltaics (PV), with battery energy storage has the potential to be a cost-effective solution to distribution system operational challenges like low voltage. The Department encourages the execution of this project, and at the same time encourages the

Company to evaluate additional potential use cases for which the PV-battery system could be deployed. In the pilot project described, the use cases are most likely other distribution system benefits. The Department would like to see the Company consider the potential for solar PV integration benefits if multiple PV-battery systems are deployed across portions of Idaho Power's system with high penetration of solar PV generation.

Customer Information and Demand-Side Management

Advanced Metering Infrastructure: The Company has made a significant commitment to Advanced Metering Infrastructure (AMI) since 2011, completing the installation of AMI hardware and software system-wide. The Department appreciates the description on page 20 of the 2015 Smart Grid Report which lays out in detail how the Company leverages the AMI system for uses beyond consumption data collection.

myAccount: The Department commends the Company's utilization of the myAccount system to allow customers to access their near real-time energy consumption information.

Direct Load Control: The Company's utilization of three demand control programs, Flex Peak, A/C Cool Credit and the Irrigation Load Control Pilot, puts it on the forefront of utilities operating in Oregon. We encourage the Company to continue to utilize these programs, and possibly others, and have no recommendations for changes or additions at this time.

Online tool that demonstrates resources used for electrical generation: The Company's online tool also puts Idaho Power at the forefront in making information about generation resources available to utility customers. The Department requests that, in addition to making this information available through the myAccount tool, the Company also consider providing Hourly Generation vs. Demand information using individual household or business data so that each customer can see how his or her consumption pattern matches available resource supply.

The Department supports the Company's effort to streamline the Customer Relationship Management System to better target marketing of voluntary programs and service offerings. We recommend that, in particular, the Company use this new system to target potential demand

response and voluntary time-of-use rate customers. Likewise the Department supports the Company's efforts to streamline dispatch of Demand Response programs.

Distributed Resource and Renewable Resource Enhancements

Photovoltaic (PV) and Feeder Peak Demand Alignment Pilot: The Department supports the innovative thinking behind the pilot, and observes that the Company has achieved significant value to date for the relatively modest investment to install solar-intensity monitoring stations. The Department read with interest the interim conclusion that "…PV panel orientation can be aligned to more closely follow the peak demands on a summer afternoon; however, more study is needed to assess overall benefits as well as the detriments to this approach." The Department looks forward to updates in future smart grid reports, including estimated costs of lost energy capture for west-facing PV systems and estimated benefits of a better match between peak output of PV systems and feeder peak.

The Department commends the Idaho Power Company on its work and looks forward to future updates about the Company's smart grid projects.

DATED this Friday, November 13, 2015.

Respectfully submitted,

ELLEN ROSENBLUM
Attorney General

Renee France, #004472
Assistant Attorney General
Of Attorneys for Oregon