Avista Idaho Applied Research and Development Initiative

Order Description

On November 1st 2014 the Idaho Commission granted Order 32918 to account for customer revenues that will fund selected research and development projects from Idaho's four-year universities. The order prescribed $300,000 per year of research and development from revenue collected through Avista's Tariff Schedule 91.

Applied Research and Development Team

Upon approval, Avista assembled a team of engineers to develop the request for proposals, evaluation matrix and selection process. The team consisted subject matter experts in following research domains: 1) Transmission Planning, 2) Distribution Engineering, 3) Hydro Generation, 4) Demand Side Management, 5) Transmission and Distribution Operations.

RFP Evaluation

On December 13th Avista sent out request for proposals to Idaho State University, Boise State University and University of Idaho. On February 3rd Avista received ten proposals from the University of Idaho, six proposals from Boise State University and zero proposals from Idaho State University. The applied research and development team reviewed and ranked the proposals on the following criteria: 1) Research Redundant or Overlap, 2) Value to Customers, 3) Results Measurable and 4) Proposal Costs. The applied research and development team met and debated the merits of each proposal to determine a final project ranking. The proposals were awarded on February 18th.

Selected Proposals

At the completion of the selection process the University of Idaho had three proposals selected and Boise State University had one proposal selected. The awarded proposals, primary investigator and project ranking are summarized in the table below.

Institution	Project Name	Primary Investigator	Proposal Cost	Ranking
Boise State University	Residential Static Reactive Load Compensator	Dr. Said Ahmed-Zaid	$60,000	1
University of Idaho	Hydropower Generating Efficiencies	Jim C. P. Liou	$72,539	2
University of Idaho	Simulation Energy Control Management System	Dr. Kevin Van Den Wymelenberg	$50,847	3
University of Idaho	Bidirectional Charger	Dr. Herbert L. Hess	$78,697	4

Illustrations

1 – Reactive Load Compensator 2-Hydropower Efficiencies 3-Simulation Energy Management 4- Bidirectional Charger