

OTTER TAIL POWER COMPANY

Docket No: EL10-011

Response to: Otter Tail Power Company

Analyst: Bryan D. Morlock

Date Received: 02/25/2011

Date Due: 03/11/2011

Date of Response:

Responding Witness:

Question No. : SD-OTP-10

On page 10 of your testimony (lines 2-10) you criticize the Company for not comparing the cost of wind to combustion turbines and coal fired generation. Please provide copies of IRPs developed by other utilities in the 2005-2007 time period where they compared the cost of wind to combustion turbines and coal fired generation. Please indicate any IRP that concluded that a wind project with a levelized cost of less than \$38/MWh was more expensive than a combustion turbine or coal generation alternative. Provide the cost of combustion turbine and coal fired generation reflected in every IRP prepared in the 2005-2007 time frame that you have reviewed

RESPONSE:

See the IRPs provided in response to SD-OTP-06. These IRPs compared wind projects to other generating resources using a computer simulation (such as Strategist or IRP-Manager). It is not reasonable to develop dollar per megawatt-hour costs for the various forms of generation, and then compare those dollar per megawatt-hour costs to choose among generating alternatives. The industry standard technique requires that generating alternatives be chosen using a computer model such as Strategist. Otter Tail followed a similar process with IRP-Manager. The dollar per megawatt-hour costs are sometimes used to screen alternatives prior to detailed modeling, but never to select resources. Resources with low dollar per megawatt-hour costs may not be the selected resources in a final plan because the energy they provide does not minimize overall costs in the system dispatch. In any case, as described in Mr. Evans' testimony, the \$38 per megawatt-hour figure presented by Otter Tail does not include the costs of wind integration.

Mr. Evans is not aware of any IRP that includes a wind project with a levelized cost of less than \$38 per megawatt-hour.

The following costs (in dollars per megawatt-hour) were extracted from the IRPs supplied in response to SD-OPT-06:

	<u>Wind</u>	<u>Coal</u>	<u>CT</u>
Idaho Power 2006 IRP - Page 47	\$60.00	\$61.00	\$110.00
Avista 2007 IRP - Page 6-25	\$72.00	\$70.00	\$60.00
PacifiCorp 2007 IRP - Page 95	\$50.87	\$51.46	\$82.53