BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER COMPANY'S APPLICATON FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE LANGLEY GULCH POWER PLANT.	)	CASE NO. IPC-E-09-03

IDAHO POWER COMPANY

DIRECT REBUTTAL TESTIMONY

OF

PETER PENGILLY

Q. Please state your name, address, and present occupation.

A. My name is Peter Pengilly. My business address is 1221 West Idaho Street, Boise, Idaho.

Q. By whom are you employed and in what capacity?

A. I am employed by Idaho Power Company as a Customer Research and Analysis Leader in its Customer Relations and Energy Efficiency group.

Q. Please describe your educational background.

A. In May of 1976, I received a Bachelor of Science Degree in Anthropology from University of Idaho, Moscow, Idaho. In 1986, I began attending Boise State University and, in 1992, I received Bachelor of Science Degree in Mathematics. I continued at Boise State University after graduation as an adjunct professor in mathematics while completing courses specializing in statistics.

I have since attended numerous seminars and conferences on statistical analysis and on pricing issues related to the utility industry and have attended seminars and courses involving public utility regulation. These courses include Edison Electric Institute's ("EEI") Advance Rate Course and New Mexico States University's Center for

Public Utilities Rates Course and The Restructuring Electric Industry Course. Additionally, I have attended numerous conferences and forums on energy efficiency and demand response, including the Demand Response Coordinating Committee ("DRCC") meetings, the E Source Forum, and Bonneville Power Administration post-2011 energy efficiency meeting.

Q. Please describe your work experience.

A. From 1976 until 1986, I worked as an archaeological technician on contract with various universities, government agencies, and private contractors. At the same time, I was involved in managing a small family-owned business. From 1986 until 1992, I was employed by the Idaho State Historical Society managing their Archaeology laboratory. In 1992, I went to work as a Research Analyst for the Idaho Department of Correction. In 1993, I transferred to the Idaho Department of Labor as a Research Analyst Supervisor under the auspices of the Bureau of Labor Statistics. This position included supervising a staff as well as performing a variety of economic and statistical analyses and reporting. I was employed by Idaho Power Company in December of 1999 as a Senior Pricing Analyst in the Pricing and Regulatory Services Department. My duties as a Senior Pricing Analyst

included the development of alternative pricing structures, management of pricing programs, the analysis of the impact on customers of rate design changes, and the administration of the Company's tariffs. In that position I helped develop several demand response programs, a time-of-use pilot program, and a critical peak pricing program.

In 2006, I was promoted to my current position as Customer Research and Analysis Leader in the Customer Relations and Energy Efficiency Department. In this position I am responsible for the research, analysis, forecasting, and reporting associated with Idaho Power's energy efficiency and demand response programs. As such, I am a member of the Northwest Energy Efficiency Alliance ("NEEA") cost-effectiveness expert committee, a representative at the Pacific Northwest Demand Response Project ("PNDRP"), Idaho Power's representative at the Regional Technical Forum ("RTF"), and a member of the E Source DSM Executive Council.

Q. What is the scope of your rebuttal testimony in this proceeding?

A. My testimony will address how Idaho Power accounts for energy efficiency and demand response in the Integrated Resource Plan ("IRP") process, and how Idaho Power's energy efficiency programs affect its winter peak.

ENERGY AND PEAK DEMAND SAVINGS IN THE IRP PROCESS

Q. Could you explain how energy efficiency and demand response are integrated in the IRP process?

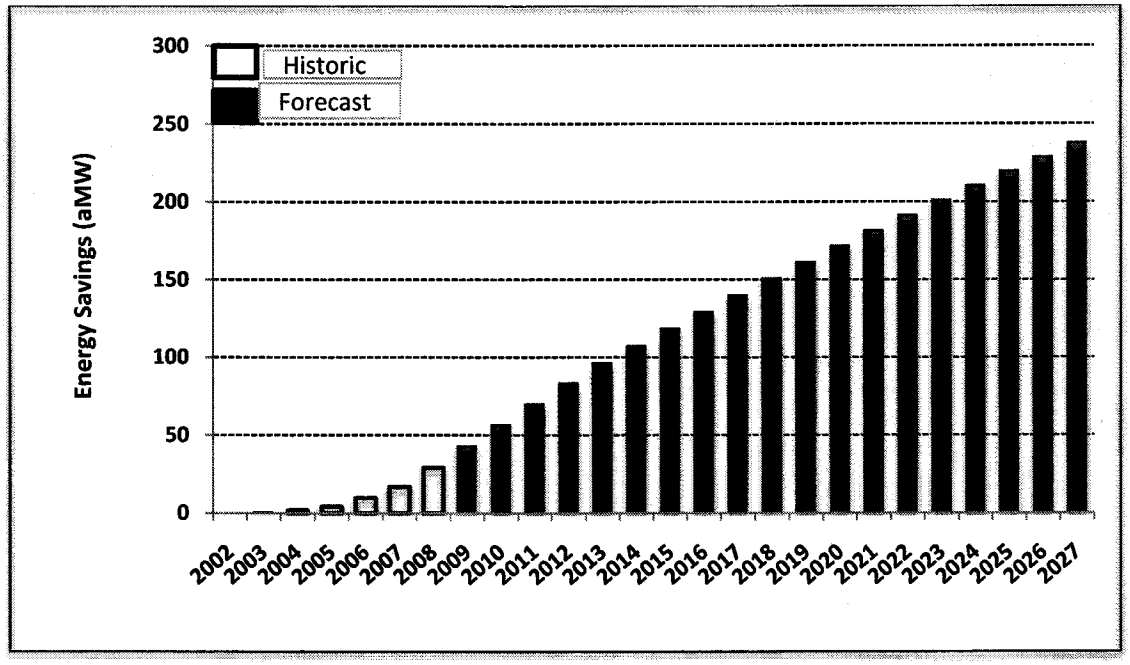
A. The energy and peak demand reductions that result from the energy efficiency and demand response programs are integrated into the IRP process in two distinct ways. Annually, all forecast results from the existing and committed energy efficiency and demand response programs are incorporated into the load forecast. This forecast is reassessed each year taking into account the results of the previous year. This annual forecast is used in the IRP process for those years when an IRP is produced. Additionally, for each IRP, new energy efficiency and demand response potential is identified as a new resource and is analyzed similar to a new supply-side resource.

Q. Could you describe the difference in how energy and peak demand savings are accounted for in the IRP or forecasting process?

A. To get a true picture of Idaho Power's projected reduction for **energy efficiency programs**, it is necessary to add the incremental annual forecast of existing and committed programs to the incremental annual new potential and then accumulate them over the years. The

cumulative impact that was originally produced for the 2009 IRP can be seen in Figure 1.

Figure 1: Historic and Forecast Cumulative Impact of IPC Energy Efficiency Programs 2002-2027



In contrast, to understand the forecast peak demand reduction from **demand response programs**, it is necessary to add the annual existing and committed demand response reduction with the annual new potential reduction. The demand response reduction is not additive across years.

Q. Do you agree with Ms. Mitchell's assertion on page 29 of her direct testimony that there should be new incremental savings included in the plan forecast for the next 15 years?

A. No. As stated above, peak demand reduction from demand response programs is not cumulative and is

independent from year to year. Idaho Power believes that when these programs mature the peak demand reduction will become relatively constant as seen in Figure 2 below.

Figure 2: Historic and Forecast Impact of IPC Demand Response Programs July Peak Hour 2002-2027

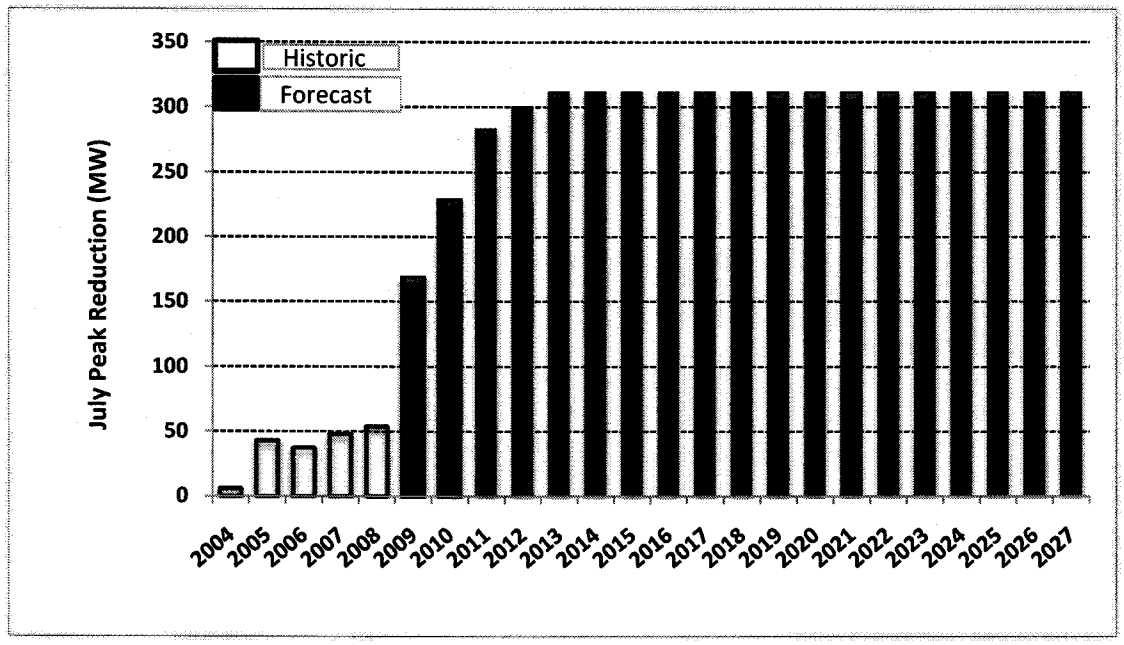


Figure 2 includes existing and committed peak demand reduction from the A/C Cool Credit program and the Irrigation Peak Rewards timer program as well as the forecast increased peak demand reduction from the FlexPeak Management and the Irrigation Peak Rewards dispatchable programs. The maximum peak reduction from these programs at maturity is expected to result in approximately 312 MW achieved by 2013. This represents a huge peak reduction - approximately 10 percent of Idaho Power's 2008 peak demand and about 8 percent of the forecast peak for 2013. In

fact, this amount exceeds the FERC's aggressive expansion of Idaho's potential peak demand reduction identified in its recent publication *A National Assessment of Demand Response Potential* published in June 2009 (Appendix A - State Profiles, p. 81). FERC reports that Idaho's potential peak demand reduction from "aggressively expanding today's programs" to be 6 percent of load by 2014 and reports the same percentage for 2019.

Q. Witness Mitchell compares expected peak demand savings from energy efficiency programs in the 2006 IRP and the 2008 and 2009 updates, then concludes that peak savings are surprisingly reduced in the 2009 IRP Addendum. Are Idaho Power's forecast peak savings from energy efficiency programs decreasing as shown in Ms. Mitchell's Figure 16?

A. No. In fact, these two forecasts are very similar and both only include the peak demand reduction from existing and committed energy efficiency programs.

Witness Mitchell's erroneous conclusion results from using the estimated peak reduction published in the 2008 Update and 2009 Addendum, which are from two different forecasts beginning with two different base years. The expected case peak savings from Table 8, p. 21, in the 2008 Integrated Resource Plan Update include **cumulative** savings

from 2007 through 2027. The expected case peak savings published in the Integrated Resource Plan Addendum - February 2009, p. A-24, begin in year 2009 and **accumulate** through 2028. These two forecasts should not be compared as they are in Mitchell's Figure 16 because the forecast from the 2008 Integrated Resource Plan Update includes more years of accumulated peak demand reduction data.

Q. How does Idaho Power account for its demand response programs in the Company's load and resource balance analysis?

A. Idaho Power accounts for its demand response programs in two ways, as existing and committed resources and as new resources. In the Company's Response to Staff Production Request No. 84, Idaho Power included in its committed peak reduction resources the A/C Cool Credit program, peak reduction from its energy efficiency programs, and the peak reduction from its existing Irrigation Peak Rewards timer program. Idaho Power included the new Flex Peak Management program, and the incremental difference of the new dispatchable Irrigation Peak Rewards as new resources. For the Irrigation Peak

Rewards program, the estimated load reduction was:

Irrigation Peak Rewards

	Existing	New	Total
2009	34	88	122
2010	34	132	166
2011	34	176	210
2012	34	176	210

Q. Is this the current level of peak reduction Idaho Power forecasts from the Irrigation Peak Rewards program?

A. No. Idaho Power made these estimates last year during the course of preparing Case No. IPC-E-08-23, prior to the implementation of the Peak Rewards program changes. Since the dispatchable option for the Irrigation Peak Rewards program is new this year (2009), it has been and will continue to be difficult for Idaho Power to forecast peak reduction until the Company has operated the program and can determine more precisely what the results of the program will be. The Company's current estimates are included in Mr. Bokenkamp's Exhibit No. 10.

IMPACT ON WINTER PEAK

Q. Could you explain how Idaho Power's energy efficiency programs affect winter peak?

A. The savings from Idaho Power's energy efficiency programs are achieved throughout the year, including winter peak. Depending on the energy efficiency

program and measure, different programs affect winter peak at different levels.

Idaho Power's programs incent customers with inefficient electric heat to convert to efficient electric heat and efficient air conditioning. For example, in the Heating and Cooling Efficiency program, customers are incented to either replace existing heat pumps, install heat pumps where natural gas in not available, or install a heat pump in new construction where natural gas is not available. In the Rebate Advantage program, customers are incented to buy new electrically-heated Energy Star® manufactured homes. In the Energy Star® Homes Northwest program, Idaho Power pays incentives to builders who build homes heated with any source, but the Company only counts the electric savings in its cost-effective analysis. To ensure that Idaho Power's programs are cost-effective, all of its programs must result in electricity or electrical peak demand savings.

Q. Does this conclude your testimony?

A. Yes, it does.