

2009 IRP Advisory Council Meeting Minutes

Date: Thursday, September 17, 2009
Location: Idaho Power CHQ Auditorium

Introductions/Meeting Overview - Mark Stokes

Mark Stokes welcomed the attendees to the meeting, explaining that this meeting is the first after the break last spring. Since that time, Idaho Power has been involved with updating the Sales and Load Forecast and revisiting the portfolio analysis. Mr. Stokes reviewed the agenda and explained the meeting's focus would be to obtain feedback on the resource portfolios, adding that the afternoon session would be devoted to this subject.

Mr. Stokes mentioned that Idaho Power had forwarded an updated natural gas price forecast to the group and asked if anyone had any questions or comments regarding this material. Because there were no additional questions on this subject, Mr. Stokes requested IRPAC members to contact him directly if they had any further questions regarding this material.

Summer 2009 Demand Response Performance – Tom Noll

Tom Noll provided a presentation that demonstrated the impact of Idaho Power's demand response programs on the peak loads for the summer of 2009. Mr. Noll presented the IRPAC with a brief history of summer peak loads by showing the loads from a peak summer day in 2008 and contrasting them with a similar peak summer day from 2009. This comparison highlighted the voluntary load reduction from the commercial, irrigation, and air conditioning demand response programs. He then presented a stylized view of the day without the programs which showed a reduction of 150 MW.

Dave Angell from Idaho Power noted that this reduction did not include the demand response programs already in place prior to this summer. Rick Sterling asked whether Idaho Power could expect to receive more than 150 MW in the future, to which Cory Read responded that Idaho Power is forecasting a combined reduction of 310 MW with growth in all programs. Quentin Nesbitt, Idaho Power's Agricultural Representative, added that 280 MW of this reduction is from the Agricultural Irrigation Peak Rewards program. Lynn Tominaga added that there would be some additional reductions in the future, but they wouldn't be as large. Mr. Tominaga added that the irrigators are working with the canal companies and hoped to include smaller irrigation customers in the program in the future.

There were several questions from the IRPAC regarding whether adjustments to program dispatching would be beneficial. Pete Pengilly from Idaho Power stated that the company has a team looking into these issues and the programs will be adjusted based on analysis from this past summer.

Ken Miller asked whether the company had explored adjusting prices in order to change the outcome of the programs, such as in time of use rates. Mr. Pengilly explained that the program's value is based on capacity, not energy compared to the price of a peaker plant.

Betsy Bridge asked why demand response programs are the last to be dispatched. Tom Noll replied that this is not case, and explained how energy is scheduled on various levels such as day ahead, hour ahead and real time. Rick Haener from Idaho Power added that the demand response programs have program restrictions with regards to when and how often they can be dispatched.

Ken Miller commented that given the capacity constraints, he questioned whether it would make sense to place more of an emphasis on using demand response programs to reduce peak loads. Lynn Tominaga added that with regards to irrigators, demand response programs are not practical if they exceed 12 hours per week because serious crop damage could result, causing irrigators to withdraw from the program.

Vince Alberdi asked how much gas was available on the representative peak day. Tom Noll replied that there was approximately an additional 250-260 MW. Mr. Noll stated that he doubted that there was more than one unit generating at Danskin, and additional reserves were available.

Load Forecast – Brad Snow

Brad Snow provided the IRPAC with an update to the load forecast. Mr. Snow explained that the original load forecast, completed in August 2008 and presented in October 2008, had assumed a mild recession and that the credit market events unfolding in the fall of 2008 led to an update of the residential and commercial sector sales forecasts in December 2008.

Mr. Snow provided a brief review and timeline of the IPC load forecasting efforts in improving the forecast models and explained the decision to use Moody's Analytics economic drivers in the company's forecasting models. Mr. Snow stated that forecasting models must be robust, meaning they have the ability to respond to changes as they occur. Previous economic forecasts were updated annually, whereas Moody's data is updated monthly at a county and regional level. He stated that Idaho Power selected Moody's because of the frequent model updates, the various forecast scenarios available, and the national and regional (state, county and MSA level) data. The forecast Idaho Power is using for the 2009 IRP was completed in August 2009.

Mr. Snow compared Boise's Gross Metropolitan Product (GMP) to the US Gross Domestic Product (GDP), and reported that Boise is exceeding national output growth starting in mid-2009 and is forecast to continue to do so until approximately mid-2012. Mr. Snow emphasized that GMP is highly correlated to energy use, but other factors or drivers are also used in determining total energy use.

One rather significant change from the previous forecast model is the treatment of the carbon tax. Mr. Snow explained that the carbon tax was designed to provide economic disincentives to atmospheric carbon output. In the previous forecast, there was a minimal carbon adder (\$14 starting in 2012). The carbon price was utilized in the regression models for price elasticity on energy sales, but Moody's has yet to model the economic impacts of the tax at this time. Mr. Snow explained that the regression model develops the elasticity coefficients based upon historical responses to price changes,

providing a continuous response over the forecast period based upon the price forecast. The model utilizes real retail electricity prices that have been adjusted by the appropriate deflators for the respective customer classes.

With regards to the system load and system peak forecast, Mr. Snow compared the May 2009 forecast to the current forecast. Mr. Snow reminded the IRPAC that the May 2009 forecast included the residential and commercial update of December 2008, and a reforecast of the special contract customer sales forecasts completed in May 2009. He indicated that the August 2009 forecast included a reforecast of sales to the residential, commercial, industrial, and irrigation customers, and the special contract reforecast of May 2009 was the beginning of the update process for the August 2009 sales forecast.

Rick Sterling asked a question regarding carbon price and the short term versus long term elasticity response. Rick Haener asked what the price elasticity assumptions were based on, and Mr. Snow responded that it is based on historical relationships based on regression models. Rick Sterling stated that when customers experience price increases, there is an immediate response, but they eventually revert back to historical habits. Don Reading interjected that elasticity does make a difference and counts in the long run. Mr. Reading inquired whether the contract Idaho Power has with Moody's contractually precludes granting public access to the data that went into the model. Mr. Snow replied that he believed the contract prohibited data sharing, but that Idaho Power would investigate to see if there was any way to make this available.

Mike Heckler asked about adjustments to nominal price to arrive at the real price. Barr Smith replied that residential prices are deflated using the personal consumption deflator, and the commercial sector prices are deflated using the GDP deflator.

Mr. Snow also presented a graph depicting the net migration effect between California and Idaho, updated with 2008 data. The graph showed the impact of the downside of the housing bubble impacting the mobility of the population. Mr. Snow stated that Idaho Power has initiated discussions with Moody's to get a better handle on this relationship, with the hopes that Idaho Power can begin to forecast this specific migration relationship. Currently, Moody's provides a forecast of net migration of all states, which is consistent with the present trend. Mr. Snow added that migration is a wild card that is dependent on relative regional economic conditions.

A question was asked whether the 2009 IRP planning forecast will be with or without the carbon assumption to which Mr. Snow replied that it would be with carbon. Another question was asked about the certainty of Hoku coming on-line to which Mr. Snow replied that as far as Idaho Power was aware, there were no major changes with regards to Hoku at this time.

Demand-Side Management Update – Cory Read

Cory Read updated the IRPAC on the new energy efficiency and demand response resources proposed for the 2009 IRP while focusing on changes since the August 2008 forecasts. Mr. Read reviewed the sources that drive new DSM resources at Idaho Power and stated that there has been no change with regards to internal program development. The approach to adopting new resources for the IRP from the recently completed potential study has been modified, and calculation errors were identified and corrected allowing for resources to be chosen using a bottom up or measure level up approach.

Additionally, Mr. Read reported on efforts to adopt the Northwest Power Planning Council's 6th Power Plan measures and the incorporation of consumer electronics as part of the 2009 IRP new DSM resource acquisition.

Mr. Read then presented charts that provided cumulative comparisons between 2008 and 2009 for existing, new, and existing and new combined energy efficiency impacts on system load. The updated forecast for demand response peak reduction was also shown on slides. All slides showed increases over prior estimates from fall 2008.

Kevin Kitz asked a question regarding whether the charts incorporated the years previous to 2010. Mr. Read responded that this is cumulative, and 2010 was brought forward through the planning period end of 2029. He stated that 2009 impacts were assumed to be rolled into the sales and load forecast presented by Brad Snow. Mr. Kitz asked about the savings in 2009 that have accumulated since 2002. Because the information was not readily available, Mr. Snow replied that the graphs are going forward, but added that a DSM site on the web provides additional historical data in the annual DSM reports. Sid Erwin remarked that the graphs are linear, but inquired whether there is anything in the future that could make an impact. Mr. Read replied that the assumption is that new programs are added to keep the graphs linear along with the cumulative nature of DSM. Mr. Pengilly added that this covers both existing and new programs. He added that Idaho Power does not incorporate any measure that is not considered "market ready" into the forecasts.

Suzanne Leta Liou asked if all demand response programs focused on peak reduction. Mr. Read replied affirmatively, and stated that the company is not looking at new future peak reduction programs.

Don Reading remarked that he felt Idaho Power is missing an opportunity and should look at the implementation of an industrial interruptible program. Billie McWinn, Idaho Power's commercial/industrial program representative replied that Idaho Power is involved with a commercial interruptible program (FlexPeak) which was reported in a previous IRPAC meeting.

Roger Findley asked a question about Idaho Power's demand response programs being low in the WECC. Pete Pengilly replied that NERC ranked Idaho Power relatively high, and that the company has achieved great success in the region for both demand response and efficiency.

Resource Portfolio and Analysis – Rick Haener

Rick Haener presented the IRPAC with an update regarding portfolio development during the six month break. Mr. Haener's presentation focused on updating the participants regarding several major assumption changes, reviewing the primary portfolio considerations and constraints, and reviewing sample portfolios, broken down into two separate 10-year blocks.

With regards to the changes from previous IRPAC discussions, Mr. Haener reported the total hydro output is forecasted to decrease over the study period. Steve Munn questioned whether relicensing could potentially change the hydro outlook. Phil DeVol from Idaho Power stated that it could possibly have some operational impacts, but collectively would have little consequence, pointing out that the same amount of water would run through the turbines on an annual basis. Additionally, the Comprehensive Aquifer Management Plan will have a net effect on aquifer recharge, but should result

in only minor changes. John Velikoff asked about the length of the new license agreements, and Idaho Power responded that the license term is 30 years. Vince Alberdi stated that spring flows are down by approximately one-half of a percent from the previous year.

Mr. Haener reported on some adjustments to the CSPP forecast with regards to the near-term schedule and wind project construction. Rick Sterling asked when the forecast was updated and whether it included some of the recent wind projects that are presently with the Idaho Public Utilities Commission for approval. Randy Allphin replied that the forecast was requested a few months ago in order for the results to be utilized for the IRP schedule, and it did not include the current contracts that Mr. Sterling was referencing.

A rather significant change from the previous portfolios was the coal output decreases based on expected carbon allowances under HR 2454 (Waxman/Markey). Mr. Haener explained that these decreases would result in the way the coal plants are operated initially during the shoulder months of March through April and October in the early years. As the carbon allowances decrease, curtailments would extend to the surrounding months until 2028 – 2029, when the projects would be curtailed from January through December.

Kelcey Brown asked whether this coal plant operation scenario is considered to be the base case, and inquired as to why the decision was made to curtail the coal plants. She questioned whether decommissioning costs were factored into this scenario. Mr. Haener replied that Idaho Power is viewing this as a legislative requirement, and decommissioning costs were not included.

John Velikoff asked whether Idaho Power is anticipating that Langley Gulch will make up the difference, to which Mr. Haener replied that Langley Gulch would operate at a higher capacity factor depending on the level of carbon regulation in the future.

Steve Munn inquired whether this was a purely economic decision. Mr. Haener replied that this is legislatively driven, and that Idaho Power currently doesn't have enough information to make an economic decision. Rick Sterling interjected that in the end it will be an economic decision, and the assumption is that power producers will continue to buy allowances to run coal plants. Mr. Sterling stated that gas would be a problem as well, even though it has half the emissions of coal.

Kelcey Brown mentioned that other companies are still making investments in coal, and questioned Idaho Power's decision to curtail operations. Tom Noll replied that the decision was made to keep Idaho Power within the projected allocation of allowances. Suzanne Leta Liou commended Idaho Power for taking this progressive stance. Steve Munn pointed out that as legislation is implemented, there's nothing preventing Idaho Power from adjusting this position going forward. Mr. Munn stated that he didn't see any issues with taking a conservative approach in the beginning, and added that as technology changes, future IRPs can be adjusted to reflect these changes.

With regards to Idaho Power's committed resources, Mr. Haener briefly discussed the addition of Langley Gulch (July 2012), the current Wind RFP for up to 150 MW (January 2012), and the geothermal RFP (20 MW in 2012 and 2016).

Ken Miller inquired about the status of the wind RFP. Mr. Stokes replied that Idaho Power is still evaluating the bids received in June.

Rick Sterling wondered about the expectation of the future availability of these resources, and questioned whether renewable resources would be developed in Idaho to meet RPS requirements in California and other states. Mr. Sterling asked whether Idaho Power had considered acquiring some of these renewable resources now while they're still available rather than waiting to pick up the scraps. Mr. Sterling pointed out that the tax credits are also available now, and there is always the risk of those going away as well. Mark Stokes replied that Idaho Power is hesitant to ask the IPUC for cost recovery on renewable energy credits if there isn't a current requirement at the state or federal level.

Continuing with the presentation, Mr. Haener also reported that long-term WECC resource assumptions have changed given the various individual state RPS compliance, limited new coal, and significant natural gas. Also the approach to transmission planning has changed dramatically and is now being handled through a NTTG regional approach as the baseline scenario. Aurora will be utilized to identify the regional flows and inform the IPC Transmission Group to use this information for their planning with the NTTG. Mr. Haener added that the resulting effect of adding \$1.2 billion in transmission tariff costs to Idaho Power's tariff is not included in the modeling, and import and export quantities would be evaluated in a post modeling process.

Both Rick Sterling and Kelcey Brown discussed the assumptions regarding coal and gas sequestration and whether the cost of sequestration was embedded into the carbon adder.

Mr. Haener then recapped for the IRPAC the various portfolio considerations; carbon dioxide emission limits, a probable federal RPS, the risks associated with fuel (price, supply and transportation constraints), contract risks, future technologies, and Idaho Power's obligation to serve. Additionally, he reviewed Idaho Power's various supply-side resources and presented various charts which provided the IRPAC with an overview of Idaho Power's energy and peak-hour positions for existing and committed resources and new DSM.

In conclusion, Mr. Haener reviewed a sample portfolio with the IRPAC and due to the limited time remaining in the meeting, requested that participants review the information and forward any further questions or recommendations back to Mark Stokes.

Public Comments and Meeting Wrap-up – Mark Stokes

Mark Stokes thanked the participants for their attendance. He requested that individuals contact him with any additional input or questions into the possible resource portfolios and promised participants that additional information would be forwarded to the group as it becomes available.