Northwest Power and Conservation Council

May 28, 2009

DECISION MEMORANDUM

TO: Council Members

FROM: Tom Eckman and Charles Grist

SUBJECT: Decision on Draft 6th Plan Five-Year Action Plan Regional Conservation Targets.

PROPOSED ACTION: Adopt Five-Year Regional Conservation Target of 1200 Average Megawatts.

SIGNIFICANCE: Accomplishing any of the least-cost/least-risk resource plans under consideration requires the accelerated development of significant amounts of conservation. If these savings are not accomplished, decisions on the need to construct other resources will move forward in time and both costs and risk will increase.

BUDGETARY/ECONOMIC IMPACTS

Staff estimates that the total cost (consumer and utility bill payer) of acquiring 1200 average megawatts of conservation savings over the 2010 to 2014 period is between $4.8 and $5.0 billion. If historical cost-sharing arrangements between utilities and participants in conservation programs continue, it is anticipated that utility (i.e., "bill payer") cost of meeting these five-year targets would range from $3.5 to $3.8 billion. The current level of utility conservation investment in the region is around $300 million per year or $1.5 billion over the next five years if expenditures are held constant. Therefore, the incremental cost of meeting the Draft 6th Plan's conservation targets is between $2.0 and $2.3 billion over the next five years. To place this in perspective, current (2008) regional retail revenues from the sale of electricity totaled around $11.4 billion, including the approximately $300 million being used to pay for current conservation programs. In order to meet a regional target of 1200 average megawatts, regional revenue requirements (not rates) would be increased by roughly 3% - 5% over the period from 2010 through 2014.

These investments in conservation would create skilled jobs throughout the region as well as reduce the energy bills of those consumers, businesses and industries participating in regional conservation programs.

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BACKGROUND

The Power Act requires that the plan "set forth a general scheme for implementing conservation measures" including an "energy conservation program." The Council has historically interpreted this directive to mean that its plan's should set forth regional conservation goals/targets along with recommendations for other actions the region should pursue to assure the region of an adequate, efficient, economical and reliable power supply. These targets usually cover the five-year period encompassed by the action plan. They serve several important functions in the region. First, they focus the region's resource acquisition activities on the least cost, lowest risk resources. Second, serve as a metric that can be used to gauge progress towards a least-cost/least risk future. Third, utilities, system benefits charge administrators and regulatory commissions use the Council's targets to assess their own goals.

In is also important to note what the Plan's conservation targets are not. They are not year-by-year and measure-by-measure prescriptions for programs. They are not a prescription for who is responsible for accomplishing which measures or savings. Most importantly, they are not a substitute for what utilities or other program administrators are required to do under state law or utility commission rules.

ANALYSIS

The recommended five-year regional conservation target is based on the findings from staff's assessment of regional conservation potential, a review of the results of the portfolio model and the region's historical capability to ramp up conservation acquisitions. There is a significant quantity of low cost conservation available. Over 5800 average megawatts of conservation are available at an average cost around $35 megawatt-hour. Findings from the portfolio model sensitivity studies indicate that, if it were not for the annual conservation development constraints placed upon the portfolio model, the least-cost path would be to develop all of the conservation costing less than current market prices as early as possible. Therefore, the primary question in setting the near term targets is not whether accelerating conservation acquisition is the least-cost, least-risk strategy, it is whether a more rapid pace of development is realistically achievable.

The proposed 1200 average megawatt target for 2010 to 2014 assumes that the region can sustain and build on the pace of conservation acquisitions in achieved in 2007 and 2008. Table 1 below shows one set of annual acquisitions levels that would achieve the 1200 average megawatts of savings over five years. As can be seen from this table, the target for 2010 is 200 average megawatts, which is the same level of savings achieved by Bonneville, the region's utilities, NEEA and the systems benefit charge administrators in 2007. Preliminary estimates indicate that 2008 savings are likely to be in the range of 220 - 230 average megawatts, which is the target for 2011.

Table 1 - Recommended 2010 to 2014 Regional Conservation Targets (average megawatts)

Resource Type/Year	2010	2011	2012	2013	2014	Cumulative
Lost-Opportunity	40	60	80	100	120	400
Discretionary	160	160	160	160	160	800
Total	200	220	240	260	280	1,200

Achieving 1200 average megawatts of savings during the next five years will require a significant acceleration over current activity levels, adoption new initiatives for measures not currently in programs and continued diligence to adapt conservation efforts to changing circumstances. The rate of acceleration from 200 to 280 average megawatts per year over five years, about ten percent per year, is well within the region's past capability to ramp up conservation acquisitions and in line with planned year-to-year increases at many of the region's utilities and system benefit charge administrators.

In staff's view, the region is better positioned to achieve the recommended regional conservation targets than in any of the Council's prior plans. Across the region, utilities have increased their conservation acquisition activities for five years running. This is the only time over the past 30 years that this sustained increased level of activity has occurred. At both the state and federal levels, there are policies in place and initiatives underway that will enhance the region's ability to achieve these goals. Bonneville is preparing to implement tiered rates so that the value of energy savings will be more transparent to its customers. The region's utilities face significantly increased cost of new generating resources and higher fuel price volatility, both of which are avoidable with more investments in energy efficiency. The Energy Trust of Oregon now has the ability to secure increased funding for conservation should the investor owned utilities in the state find through their Integrated Resource Planning processes that additional savings are cost-effective. The new federal administration has placed a high priority on energy efficiency, is directing stimulus funding towards efficiency and is using the federal appliance standards processes to pursue aggressively higher efficiency. State energy code improvements are underway or scheduled to take place within the near future in all four Northwest states. Finally, federal climate change legislation, which appears to be likely in the near future, would confer added value to energy efficiency.

ALTERNATIVES

Staff considered two alternatives to the proposed 1200 average megawatt regional conservation target. Tables 2 and 3 set forth these alternative target levels. Alternative 1, shown in Table 2 sets the five-year regional conservation target at 1000 average megawatts or about 20 percent below the staff's recommended level. Alternative 2, shown in Table 3 sets the five-year regional conservation target at 1400 average megawatts or about 20 percent above the staff's recommended level.

While staff believes that its recommended 1200 average megawatt target shown in Table 1 are realistically achievable, others, especially public utilities in Washington, have expressed concern regarding these goals. Initiative 937 is the state law directing Washington utilities to procure all cost-effective conservation and to meet an increasing fraction of their loads with renewable resources. Under Initiative 937, if a utility sets aggressive efficiency goals and fails to meet

them, the utility is subject to significant fines. On the other hand, if a utility sets conservative goals, and exceeds them it can avoid the risk of being fined and still secure the least cost, least risk resources. The lower targets set forth in Table 2 are an attempt to reflect the concerns expressed by utilities that might face fines for failing to me higher targets.

Table 2 - Alternative 2 Lower Regional Conservation Targets 2010 to 2014

Resource Type/Year	2010	2011	2012	2013	2014	Cumulative
Lost-Opportunity	20	40	60	80	100	300
Discretionary	140	140	140	140	140	700
Total	160	180	200	220	240	1000

Staff rejected the lower targets for two reasons. First, the Council's targets are viewed as both a "floor" and as a "ceiling." Lower targets do not encourage utilities to be vigorous in their pursuit of conservation. Consequently, adopting targets lower than what is achievable subjects the region to a higher cost and higher risk future. Second, while staff is sensitive to problems faced by Washington utilities, it does not believe that the penalty provisions in Washington's law should influence the Council's assessment of the amount of conservation that is realistically achievable, particularly at the expense of the Council's obligation to produce a least-cost plan.

Table 3 - Alternative 2 Higher Regional Conservation Targets 2010 - 2014

Resource Type/Year	2010	2011	2012	2013	2014	Cumulative
Lost-Opportunity	60	80	100	120	140	500
Discretionary	180	180	180	180	180	900
Total	240	260	280	300	320	1400

The targets set forth in Table 3 are more aggressive than recommended by the staff. While achieving these higher targets would reduce both cost and risk, staff does not believe that they are dependably attainable in the near term. That said, given the potential impact of federal stimulus funds and the increasing national support for energy efficiency, these levels of savings might be feasible in the near term. However, since impact of the federal stimulus, funding for energy efficiency is highly uncertain at this time and these funds will have a limited window of availability, staff rejected these higher targets.