



SPRINGFIELD UTILITY BOARD

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November 19, 2004

Mark Walker
Director of Public Affairs
Northwest Power & Conservation Council
851 SW 6th Avenue, Suite 1100
Portland, Oregon 97204-1348

Re: Council's Draft 5th Power and Conservation Plan

Dear Mr. Walker,

Springfield Utility Board ("SUB") appreciates this opportunity to comment the Council's draft Fifth Northwest Electric Power and Conservation Plan ("Power Plan"). SUB is a municipal utility that serves approximately 30,000 electric customers within the City of Springfield, Oregon.

Overview

The purpose of SUB's comments is to aid the Council in its compilation of a realistic Power Plan. SUB notes the Council is updating its Uncertainty and Risk portion of the Plan. Because uncertainty and risk are key factors in evaluating resources, it is SUB's position that specific comments on the Plan itself may be premature. SUB requests that the Council re-open a public comment period when a more refined draft plan is ready for public review.

SUB therefore, will focus its comments on issues that support a realistic outcome. Having provided power and conservation to customers from a variety of sources and programs for over 50 years, SUB has an understanding of whether theoretical plans produce realistic results.

While SUB appreciates the efforts made by the Council in its development of the draft Power Plan, we have reservations about the results – or at least the apparent results of the impacts of the plan. As explained below, there are a number of areas where SUB is concerned that the connection between theory and reality may be broken in the Power Plan. SUB's comments focus on problem areas and also provide realistic proposals to provide effective solutions.

Conservation – Is “Cost Effective” Realistic?

SUB has a strong track record regarding conservation and has implemented conservation programs since the 1980's. Over the past five years SUB has achieved the equivalent of 4% of its annual retail rate revenue in conservation program expenditures. SUB's goal from this process is to move forward with a sustainable conservation program for SUB and for the region as a whole.

SUB is participating in BPA's process to develop the framework to deliver conservation resources to the region over the period between 2007-2011. SUB assumes that the long term power supply role of BPA after 2011 will be resolved through a mechanism whereby low-cost BPA power is provided to preference customers over a prescribed, long-term methodology. This long-term power supply issue will provide individual utilities the incentive to aggressively pursue conservation as a resource. In the meantime, during the transition period (2007-2011) BPA relies on the Councils guidance and the 5th Power Plan and BPA and the Council need to focus on a realistic conservation program.

SUB's observation is that the term “cost effective” has been overused to the point where it has lost much of any of its intended meaning. The current Regional Technical Forum (“RTF”) conservation measure list which has been updated to account for the Councils “cost effective” methodology in the Power Plan effectively removes residential and low income conservation from SUB's conservation program. Heat pumps, windows, manufactured home weatherization and other proven programs are now at risk. SUB has been repeatedly assured by BPA and the Council that the conservation measure list will be robust and will address the needs of individual utilities. The Council's current approach appears to fall short of its intended outcome.

SUB prefers “realistically cost effective” conservation. “Realistically cost effective” conservation is conservation which has proven to have a customer demand and is provided at a price that has value to the region. In contrast, “cost effective” conservation is a list of conservation measures which may not be priced realistically and/or results in programs no one wants or removes programs which have been proven to deliver savings in the past. “Cost effective” conservation is where we are headed. SUB suggests that this is the wrong path and would encourage the Council to continually evaluate the Power Plan such that it produces “realistically cost effective” conservation.

Q. Why would anyone do anything other than “cost effective” conservation?

A. Because customers of utilities have their own set of values, and proven resources are being discarded in this process.

If the Council wants conservation to work, it needs to better define “cost effective” conservation to make it more in line with realistic conservation to provide proper guidance to BPA and the region.

SUB notes that the new gas fuel price risk assessment along with other aspects of the risk assessment analysis will increase the likelihood of a realistic outcome.

Conservation – Real Examples

Codes:

SUB conducts energy code enforcement for the City of Springfield. Many, cities in Oregon lack adequate, if any, energy code enforcement. It is SUB's observation that market transformation associated with energy codes is not as simple as modifying building requirements on paper. SUB has observed a number of instances where construction has not meet code and it has only been through code enforcement that code compliance is guaranteed. The point is, creating code changes on paper may be "free" but ensuring code compliance has a cost. The Council does not adequately address this lost opportunity cost in the 5th Power Plan.

In 1992, Ecotope conducted a study ("Current Building Energy Code Compliance In Oregon") that found that 54% of new commercial and industrial construction was found to not be in compliance with energy codes. This is consistent with SUB's field observations. While vitally important, in SUB's experience, code enforcement costs are inexpensive (approximately 0.01 mills levelized, \$208 per installed aKW first year). SUB suggests that the Council recommend to BPA to provide for a framework where conservation funds can be directed towards fully funding local energy code enforcement. At a minimum, the Council should not set up a methodology for evaluating resources that disallows recovery of the cost of compliance. Otherwise, SUB recommends that the Council reduce its projection of achievable energy conservation through code modifications by 50% percent.

Heat Pumps:

According to the Council's current numbers SUB's heat pump programs would not qualify – primarily due to SUB being in Zone 1 (a region where many the west-side utilities reside). The default heat pump is a 7.4hspf unit (the bulk of the units in inventory) instead of the more efficient 8.0hspf, 13 SEER (Summer Energy Efficiency Ratio) units that are part of SUB's program. SUB's program includes commissioning and duct sealing. In addition, many heat pumps are not correctly charged for a given installation and SUB's commissioning program ensures that the heat pump units are installed correctly. A summary study of the USEPA found 72% of heat pump units were incorrectly charged and 70% had incorrect air flows (Proctor Engineering Group, LTD. November 1, 2001).

Again, the Council ignores the cost of compliance and "hopes" that each unit is installed to optimum efficiency. However the Council's numbers don't reflect reality. SUB recommends that the Council work toward an outcome that captures the total customer benefit and cost of compliance.

Customers want heat pumps not only for the efficiency, but because they feel more comfortable with the moderated, even temperature throughout their home. End users don't have to fiddle with thermostats as often. The benefit of "comfort and convenience" is not captured in the Council's methodology.

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Windows:

Window replacement is another popular program that may be pushed out of SUB's conservation portfolio due to the Power Plan. The Council's societal cost of \$15.00 per square foot outweighs the benefit of \$5.70/ft² by almost a 3 to 1 ratio. SUB has been successful at providing an incentive through an interest free loan of \$3/ft² to generate a stable level of window replacements. The customer is willing to pay for the balance of the installation cost – they like not having the cool feeling when standing near inefficient windows during the wintertime. Because the Council's methodology evaluates societal benefits and costs without placing a value on the real benefits of what end users actually want and are willing to pay for, the Council's methodology effectively removes a proven resource.

The value and cost of compliance is an issue with windows as well. Without an inspection program, such as the one SUB has, installation is problematic. SUB has observed that half of window installations fail inspection (such as forgetting to caulk around the top flange) and installations through utility programs are corrected as a result. The Council incorrectly assumes 100% of the windows installed are 100% efficient 100% of the time.

Conservation doesn't just "happen". Utilities help make it happen, and we need the recognition and tools to achieve conservation goals.

These are just three examples of how the Council's "cost effective" numbers don't add up "realistically cost effective" conservation.

It is not reasonable to conclude that end-users would participate in heat pump, weatherization, or other programs if there were no financial support from utilities. Customers rely on utilities to provide and maintain lists of qualified contractors. Customers enjoy low interest loan programs to fund residential and other conservation whereby they do not have large up-front expenditures. SUB provides a loan guarantee to the bank should a customer default for whatever reason. These types of benefits and costs are not transparent. Conservation doesn't just "happen". Utilities help make it happen and we need the recognition and tools to achieve conservation goals.

Marginal Market Cost vs. the Fixed and Variable Cost of a Marginal Resource

It is SUB's understanding that the current Benefit/Cost methodology uses a forecast of market prices as the basis for measuring whether a conservation resource is cost effective. Market prices reflect the variable dispatch cost of the portfolio of resources in the region – not the full (societal) cost of the resources. Once a resource is built it will run once the market price exceeds its variable costs (with the expectation that eventually fixed costs will be covered and profit will be realized). Because the Council's B/C methodology evaluates conservation benefits by comparing marginal regional resource costs to the full societal cost of a conservation measure the Council is comparing apples and oranges and handicapping conservation resources as a result.

When comparing the cost of investing in and developing an actual resource, one includes fixed (e.g. capital) and variable (e.g. fuel, O&M) cost of the resource.

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Conceptually, if one were to level the playing field, only the marginal cost of conservation (~\$0) would be compared to benefit of avoiding the marginal regional market (dispatch) price. This is particularly true in periods where the region has a surplus and new generation is not brought on line. If this were the case, all conservation would be "cost effective".

20% More Work – With Fewer Resources To Meet The Goal

In prior comments, SUB has discussed the three-legged stool that makes up sustainable conservation implementation. Another analogy is the task of digging a hole. Currently SUB has a balance of adequate funding and an adequate list of measure to chose from in order to implement current expected conservation targets. For illustrative purposes, picture a situation where 10 people (funding) with 10 shovels (measures list) are digging a hole (task).

The Council 5th Power Plan currently proposes to increase the task region-wide by 20% while at the same time results in reducing the level of credits for measures by 40% and cuts the measure list itself by 60%. The outcome of the 5th Power Plan, as it relates to conservation is that rather than 10 people with 10 shovels are digging a hole, there are 6 people, with 4 shovels, digging a hole that is 20% larger. In many cases, the hole can't be dug because the Council's process tells many utilities that they'll have to get by digging with their hands because the tools won't work. It is confusing that, on one hand, the Council proposes spending more money on conservation but doesn't provide realistic measures for utilities to offer customers. SUB has tackled difficult tasks before and achieved results, but the Council is on a path to make the difficult task of achieving higher conservation problematic, if not impossible.

The good news is that the Council still has an opportunity to change course and provide regional guidance to promote realistic conservation.
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From SUB's perspective on some level there is some "finger pointing" going on. BPA points to the Council as driving the measure list and the Council points to BPA as finding a solution. At this point, in defense of BPA, the Council 5th Power Plan does not lay an adequate foundation to provide regional guidance on effective conservation. The bottom line is that the Council is responsible for setting the goal, BPA needs to help provide the tools, and then BPA and the Council need to step out of the way to let the utilities get the job done.

The good news is that the Council still has an opportunity to change course and provide regional guidance to promote realistic conservation.

SUB's Recommendations Regarding Conservation

The Council should either:

- 1) Abandon the Benefit/Cost ("B/C") methodology altogether and use the full cost of a marginal resource as the basis for evaluating which measures are effective conservation.
- 2) Substantially modify the Benefit/Cost methodology to create an outcome that results in the promised, robust measure list that will achieve "realistically cost effective" conservation. SUB suggests that instead of using societal cost as a measurement of

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effectiveness, that the ratio of the societal benefit to the utility cost be used as a basis for evaluating eligible measures. In the windows example above, the ratio would be \$5.70 over \$3.00, or 1.9.

- 3) Modify the Benefit/Cost methodology to increase the extrinsic societal benefit associated with providing programs that a utility's customers want. In this case, heat pumps, weatherization, and windows would all be eligible measures because these, and other programs like them, are what end-users want.

In addition, the Council should:

- 1) Acknowledge the cost of compliance and recommend BPA reflect the benefit and cost in its development of programs.
- 2) Discourage an outcome whereby measures are subject to "compression" and are not evaluated on their true measure life. "Compression" is an artificial shortening of a measure life that handicaps conservation measures compared to other resources. Residential weatherization programs, for example, which have a measure life of up to 40 years are currently being artificially compressed to have a 15 year measure life when evaluating eligible measures.
- 3) Encourage BPA to expand the measure list to allow for new construction to be captured under BPA's programs. These "lost opportunity" programs are part of BPA's current program. In many ways, code enforcement falls under this category as well and should be recognized as a valuable component of delivering conservation savings.
- 4) If the B/C is retained, the Council should clearly explain exactly what factors are evaluated in calculating benefits and calculating costs and provide specific examples (on a two or three page section of the Plan). Right now, the B/C method is a black box.

Regional Policy Issues

SUB agrees with the Council that the future role of BPA (post 2011 in particular), Resource Adequacy, and Transmission are key policy issues for consideration.

BPA

Regarding the role of BPA, SUB appreciates the Council's timeline and concept and finds it consistent with the proposal presented to BPA by the Public Power Council. SUB also appreciates that tiered rates has been removed from the discussion, at least for now. Tiered Rates, in SUB's observation, does not send a long-term price signal to customers to develop alternative resources. Tiered rates only works for as long as the rate period (3 years). This is too short of a planning horizon to expect customers to invest in resources to avoid Tier II costs given that load growth in the current rate period has an opportunity to fall under Tier I service in the next rate period.

Resource Adequacy

SUB is confident that it will be able manage the resource needs of its customers once access to BPA's low cost system is individually defined for each utility. SUB is directly accountable to its customers. SUB also recognizes that region-wide (west-wide) coordination would allow for loads to be met in times where load/resource balance is stressed and appreciates the Councils attention to this matter.

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Transmission

While SUB agrees that the transmission system can be improved, it is SUB's belief that many issues can be resolved with modifications of existing relationships (e.g. enhanced resource coordination through the Northwest Power Pool) or increased coordination through shared scheduling system (OASIS). Distributed generation and conservation are also key elements to grid efficiency. These are low-cost solutions that can provide extensive benefits.

Should the Council choose to promote a new entity with broad transmission-related authority, SUB would encourage the Council to better define what is "necessary" to meet the needs of the transmission needs region. Is the goal a zero tolerance for outages no matter what the cost or a reasonable level of reliability at a reasonable cost? The Council should clearly define what outcome it desires rather than focus on prescribing solutions.

Suggested Actions

The following are comments on actions proposed by in the Power Plan:

One overarching comment that is important to emphasize is that the Council should avoid doing everything. The Council should be focussed on assisting the region on establishing goals (what is the desired outcome). The Council should not be setting up forums and establishing policies which result in prescribing specific tasks to regional parties (e.g. BPA, utilities) to get achieve the goals. Work with us to define the goal and we will figure out the best mechanism to get there. A path of tasks strewn with roadblocks (e.g. the current conservation framework) is frustrating the valuable role the Council has in providing education and establishing regional goals.

Action CNSV-3: Develop a strategic plan for conservation acquisition.

The Council appears to want to set in motion a "big tent" strategic comprehensive plan for conservation. SUB would suggest that these discussions be kept at a very high level and not result in unrealistic expectations being placed on utilities. The council should set realistic goals and then let utilities move forward with trying to implement them on the ground.

Action CNSV-4: Increase local acquisition budgets.

This is a detailed issue whereby the Council reaches directly into a utility's pocketbook. This may be a suggestion or observation, but should not be an "action item" that the Council should move forward with.

Action CNSV-5: Expand market transformation.

SUB does perceive regional education on conservation in general as area where the Council can provide guidance.

Action CNSV-6: Revise and adopt state and federal energy codes.

SUB supports this, with the reminder that code enforcement is just as important as the code itself and the council should support funding of code enforcement along with any rule changes.

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Action CNSV-7: Establish a mechanism for acquisition and coordination of conservation not related to market transformation within the next 12 months.

SUB recommends that the Council stay away from tactical issues associated with conservation delivery. It is not the Council's strong point. A big tent process, driven by the Council or anyone else, which dictates how utilities would achieve conservation would most likely result in disaster.

Action CNSV-8: Establish a mechanism and funding for annual reporting and tracking.

SUB supports the Council's action on this item. This along with regional education, are key areas where the Council's efforts would yield productive results.

Action CNSV-9: Evaluate the value of conservation as a hedge against future risks.

SUB evaluates conservation on a regular basis and notes that the Council's Benefit/Cost methodology appears to not capture the extrinsic value of conservation associated with hedging against risk. SUB suggests that the Council follow-up on this action item regarding its own processes.

Action CNSV-10: Evaluate rate design strategies to mitigate impacts of conservation impacts on cost recovery.

SUB evaluates this on a regular basis. SUB notes that SUB has implemented tiered rates in the past to its customers and tiered rates did not have the intended result.

Action CNSV-11: Consider financing conservation investments.

SUB continues to evaluate this – however the Council should not predetermine that BPA should finance conservation investments. In SUB's opinion, BPA's limited borrowing authority would be best spent upgrades to transmission infrastructure. Utilities and end-users could be encouraged to leverage their more flexible borrowing authority rather than BPA.

Action CNSV-13: System Benefits Charges

SUB would discourage the Council from activities that would result in dictating rate design to utilities. SBC is a problematic issue due to the fundamental problem that once the SBC charge is collected, the money is encouraged to be spent. There is less accountability to ratepayers for cost-effectiveness and maintaining local benefits and local control.

Action CNSV-14: Avoid Disincentives to utility conservation due to BPA's future role

The Council states "Customers are concerned that the allocation [of BPA power] would create a disincentive to conservation." All customers do not have this opinion. SUB is on record with the council stating that Allocation will enhance the role of conservation – not hinder it. However, SUB strongly agrees with the Council's underlying concern that customers should not be penalized for conservation in an allocated world.

Action DR2: Develop cost-effective methodology for demand response

The Council should avoid stepping into this type of detailed implementation issue. The economics and physics associated with demand response are often a localized issue and SUB suggests an attempt to arrive at a region-wide solution may be counter-productive.

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Action DR6: Explore ways to make price mechanisms more accessible

Again the Council should avoid big tent processes which result in dictating terms and conditions to utilities. We understand the demand response is an issue. Your point is well taken. The Council needs to understand that demand response is a complicated issue highly dependent on individual characteristics of plant operation. SUB suggests a region-wide solution is counterproductive while region-wide education may be a valuable role the Council can assist in.

Generating Resources (generally)

All actions regarding generating resources that are directed at the utility level (GEN-1 through GEN-9) should remain recommendations in the final plan. Dictating solutions at the utility level should be avoided.

Action GEN-9: develop products for the shaping of wind

This is problematic as a wind resource acts as a "negative load". The Council should be cautious about promoting large-scale wind development will create a strain on the remainder of the power system.

Action TX-3: A high priority to work through the Grid West RRG process

The Council should be discouraged from promoting the Grid West process and instead should focus on the Transmission Issue Group's ("TIG") process. Grid West is demonstrated to be an expensive proposal and it would be irresponsible for the Council to endorse Grid West. Alternatively, in the final plan the Council could drop Action TX-3 and any reference to any transmission group efforts.

Action BPA-1: BPA post-2011

SUB supports the allocation proposal presented by the Public Power Council. As mentioned above, due to the short rate period window, tiered rates does not provide the proper economic signal to utilities to develop alternative resources.

Action BPA-3: BPA and customers should acquire cost effective conservation identified in the Council's Power Plan

As discussed above, the Councils Power Plan is unrealistic when it comes to conservation identification. The Council should step back from providing a detailed role that dictates programs to utilities. All indications are that, despite the Council's best intentions, the Council is creating a broken system and unrealistic expectations. The Council then places responsibility on BPA to be the backstop if the system poised to fail actually fails. Utilities and ratepayers are not being well served in the draft Power Plan in this respect. The Council should stick to recommending goals and letting utilities figure out how to achieve them.

SUB supports all Action items where the Council proposes continued monitoring of a variety of issues. This is important in the Council's role to promote regional awareness and education.

Respectfully Submitted,

Jeff Nelson
Springfield Utility Board