Bonneville Power Administration Response to Comments on the Renewable Option of the Conservation Rate Credit Program November 10, 2005

Over the past several months the Bonneville Power Administration engaged in a public collaborative workgroup called the Renewable Focus Group, consisting of BPA, customers and other interested parties, to review its existing firm power conservation rate credit program for customers' renewable resource activities, with a focus of modifying and/or refining the program.

This workgroup met regularly to define the renewable option of the Conservation Rate Credit program, designed to assist customers interested in pursuing renewable resources. In its 2007 Power rate case BPA has proposed to make \$6 million dollars available annually to customers that pursue renewable resources activities. The details of this program are described in the Draft Post 2006 Conservation Programs Implementation Guidelines, the proposed successor to the existing Conservation and Renewables Discount Implementation Manual. The draft guidelines can be found on the BPA Web site at http://www.bpa.gov/energy/n/post2006conservation/.

Prior to issuing this working draft, BPA held a 30-day public comment period to allow interested parties to comment on the proposed changes to the renewable option of the Conservation Rate Credit program. BPA received ten responses with a total of thirty distinct comments. Below is a review and evaluation of the comments received. Copies of comments received during the 30-day public comment period are posted on the Power Business Line Web site at

http://www.bpa.gov/power/pl/regionaldialogue/comments.shtml.

Proposal: BPA proposed \$6 million dollars for a renewable option as part of its proposed Conservation Rate Credit separately from its Renewable Facilitation Program levels.

Comment: BPA should expand the \$6 million cap and provide facilitation funding in FY 2009. The Renewable Northwest Project supports the trading proposal mentioned in the Bonneville Environmental Foundation's comments. (Renewable Northwest Project)

Response: Through the collaborative workgroup process BPA reviewed the existing program to determine what changes and or modifications needed to be made, if any. At the conclusion of that process BPA learned that the current level of the conservation and renewable discount was meeting the needs of those firm power customers wishing to engage in renewable resource activities and provided adequate incentive. BPA does not believe it is reasonable to increase the \$6 million dollars available for the renewable option given the increased conservation targets.

Separate from the \$6 million for activities under the renewable option to the

Conservation Rate Credit program, BPA will be facilitating renewable resources. In Fiscal year 2009 BPA anticipates that it may be purchasing the output from a geothermal resource, in which case, the facilitation budget reflects the use of such funds for that contractual commitment rather than for general resource facilitation.

Proposal: BPA proposed to base renewable rate credits for renewable generation on the difference between resource costs and a Proxy for Avoided Costs. BPA proposes that the Proxy for Avoided Costs be set at a value equal to the simple average of BPA's 2007 Flat Block PF rate and the 2007 Mid-C Flat Block market price as determined by the Flat Block Price Forecast need to determine settlement benefits (check term) for the Investor Owned Utilities in the 2007-2011 period.

Comment: BPA should consider recalculating the Proxy for Avoided Cost with a new market price figure if observed Mid-C market prices are less than the Forward Flat Block Price Forecast used in the investor-owned utility residential exchange settlement. (Public Power Council)

Response: BPA realizes that the closer the Proxy for Avoided Costs is to the New Renewable Facility Costs, the less incentive the program will provide and the less incentive will be needed because the resources will be commercially viable. We also understand that if the Proxy for Avoided Costs is higher than actual market prices the program will provide little incentive.

The Post 2006 Conservation Programs Implementation Guidelines will be reviewed annually. BPA retains the flexibility to make changes to the program as part of these reviews. BPA may consider revising the Proxy for Avoided Costs as part of this review process if FY 2007 flat-Block Mid C market prices are significantly less than that calculated for the IOU Residential Exchange settlement, and if BPA determines that the program is not creating incentive for new renewable development.

Proposal: BPA proposed a pro rata reduction in renewable rate credit claims if the \$6 million dollar cap was exceeded. BPA proposed to exempt small and federal customers from the pro rata reduction.

Comments: Mid-sized utilities with a lack of Industrial/Commercial loads in their service territories will likely look to the renewable component of the rate credit program as a key component of their over all program in lieu of conservation. However, significant renewable claims could result in frequent and large overages of the \$6 million dollar cap. At this point pro-rata reductions are certain to occur. Mid-sized utilities are large enough to consider renewable generation investments, but the combination of uncertainty associated with Renewable Energy Production Incentive funding (appropriated funds allocated nationally) and BPA's pro rata reductions are a disincentive. BPA should review their options on the renewables and the pro rata reduction to alleviate this problem. (Milton Freewater City Light and Power, Oregon Municipal Electric Utilities)

Comment: There is a concern among mid-sized and small sized utilities that receiving the credit for only one year of new renewable resource operation is insufficient to get resources operational. BPA should make the credit available (to new resources) for more than one year of operation or open access to the renewables facilitation budget to mid-sized customers for this purpose. (Public Power Council)

Response: BPA understands there are risks and cost uncertainties in renewable resource development and that smaller utilities have smaller margins and cannot tolerate as much risk. BPA also recognizes that the goal of this program is to create incentive for new renewable development.

The \$6 million dollar cap limits the options to address these difficulties. Given its proposed exemption scheme, BPA does not believe it is prudent at this time to place additional burden on large customers for the benefit of small and mid-sized utilities. If BPA grants more credit for projects purchased by small or mid-sized utilities and exempts small utilities from the pro rata reduction, the costs and risks of a pro rata reduction due to small and mid-sized utility investments will be shifted entirely to BPA's larger customers. We also think it is premature to grant all new resources more than one year of rate credit, because doing so would put increased pressure on the \$6 million dollar cap.

BPA is willing to consider other methods for creating incentive for customer renewable investments, including the use of facilitation funds. BPA will be vetting a strawman proposal to use at least some part of the renewable facilitation funds (\$5.5 million in FY 2007 and \$11 million in FY 2008) with the Renewable Focus Group in late 2005. BPA will consider this comment when creating the strawman proposal and will bring it to the collaborative work group for discussion.

Comment: The proposed pro-rata reduction is a disincentive to renewable investments because it introduces uncertainty. If BPA cannot come up with a better solution, the renewable rate credits should be allocated according to the volume of power purchased from BPA and let customers trade credits among themselves. (Bonneville Environmental Foundation)

Response: In the workgroup process, utility customers expressed a desire for two outcomes in the 2007-2009 rate credit program. First, they wanted the ability to spend rate credit money on either conservation or renewable resources. Second, they asked for consistency with the current C&RD program (due to the short rate period). BPA proposed the \$6 million renewable option with an associated pro-rata reduction as a means to try and meet these customer desired outcomes while balancing BPA's and the conservation community's need to ensure that sufficient funds are available to meet the [increased] conservation targets.

A renewable rate credit allocation and trading idea was discussed with the focus group, but it did not gain broad customer support. The trading proposal would have increased the complexity of the program without really solving the potential shortage of renewable credits caused by the \$6 million dollar cap. In addition, the allocation and trading

proposal could make it difficult for utilities to dedicate the majority of their rate credit towards renewables since the \$6 million dollars would be allocated proportionally over the entire customer base, no one utility would receive more than their percentage of renewable dollars, and would be forced to find willing parties to trade with In other words, an allocation scenario would take renewable rate credits from those utilities that use it for renewables and give to those who do not. Instead, BPA proposes to continue to permit the pooling of existing customer rate credits. Pooling provides some of the same features as the trading proposal.

Comment: BPA should allow a utility doing 100 percent conservation to donate their share of renewable rate credits to another utility. (City of Ellensburg)

Response: BPA is not allocating renewable rate credits and therefore there are no tradable credits to donate to another utility. If a utility does not choose to participate in the renewable option, they are free to invest 100 percent of their rate credit on conservation, or pool their credit with other utilities.

Proposal: BPA proposed limiting rate credit eligibility to those renewable projects and programs which are incremental. BPA defined "Incremental" as being those activities and resources beyond those that required by law.

Comment: The Incremental definition will cause problems for small customers if a state renewable portfolio standard is passed. It sets an unfortunate precedence. (Oregon Municipal Electric Utilities)

Response: It is important to separate the purpose of the rate credit program from BPA's requirements services. The renewable rate credit option was retained for the purpose of creating incentives for customers to make renewable investments which they otherwise may not make. In the future, if a renewable portfolio standard is applied to BPA's small public customers, BPA will consider appropriate actions in another forum, independent of the renewable rate credit.

Comment: Did BPA inadvertently omit the term "State" from the definition of Incremental Activities? (US Department of Energy, Richland)

Response: Yes, the term "State" was inadvertently omitted. The definition will be revised to exclude those activities required by "State law" as being Incremental Activities.

Proposal: BPA proposed several new renewable resource categories and provided associated Proxy for Project Cost values. BPA included these new categories because the Northwest Power and Conservation Council had data to support project cost estimates. Some of these resources are inexpensive (small landfill gas) in comparison to others (small wind). Neither BPA nor the Council had cost data on micro-hydro projects; therefore, we did not include a separate category for them.

Comment: Existing small renewable facilities (less than 150 kW) should be eligible for 33 percent of the maximum renewable rate credit (estimated to be \$8.91/MWh), regardless of actual facility costs or whether the facility is hydro, wind or biomass. All small facilities, regardless if they are new or existing, should also be eligible for the maximum credit. (Wells Rural Electric)

Response: The objective of the rate credit program is to create incentive for new renewable investments which otherwise would not occur. To unilaterally grant existing small renewable facilities the maximum rate credit would not incentivize new development and could deplete funds that would otherwise be available for new resources. In addition, some new small projects are not eligible for the maximum rate credit because the cost data indicate they are relatively inexpensive.

At this point in time, BPA is not open to a wholesale revision to the criteria to allow all small facilities to be eligible for 100 percent credit. Data supports leaving some of the small resource costs at their current proposed levels (for example the posted costs for small landfill gas and small wind are supported by fairly robust data sets).

With the exception of small landfill gas projects, hydropower, and geothermal, renewable resource cost data were obtained from the Council. BPA will consider revising the proposed cost value(s) when the Council revises its cost estimates and evidence supports the change. BPA realizes the proposed new hydropower cost may be too low as it was based on only one facility. BPA also realizes there is a need to provide a separate cost estimate for micro-hydro projects and has worked with Council Staff to provide such an estimate, which will be included in Chapter 4, Table 1 in of the Guidelines (see attached Memo from the Council dated October 17). BPA is also working with Council staff to derive new hydropower cost values. Interested stakeholders with new hydropower or micro-hydro cost information are encouraged to share such information with Council staff and BPA.

BPA is aware that communities in the region are developing small renewable projects in which BPA customers wish to participate. Known as Community Owned renewable projects they are defined as having more than one member of the local community having a significant direct financial stake in the project outside of land lease payments, tax revenue or other payments in lieu of taxes and such resources comprise projects that are too large to qualify for net metering but are less than 3MW in capacity. BPA is proposing that customers participating in such projects be eligible for a dollar for dollar rate credit for annual investments. BPA will approve application of this credit amount after the customer demonstrates the proposed project meets the definition of Community Owned renewable project.

Subsequent Comment:

Received during Conservation Sounding Board Meeting on October 27, 2005. The definition of Community Owned Projects should not exclude projects that are partially funded or partially owned by utilities (but not rate based).

Response: The definition has been changed to include utility investments to account for this concern.

Proposal: BPA proposed the same accounting and reporting requirements for small renewable generation facilities as required for large facilities.

Comment: Accounting requirements are burdensome and not justified given the small effect small projects have on the renewables budget. Small (less than 150kW) facilities should be exempt from accounting requirements, specifically the estimation and true-up requirements, and should be granted an exception from the pro rata reduction. BPA should consider a straightforward approach to all very small facilities. (Wells Rural Electric Coop)

Response: In order to run the program equitably, we cannot exempt existing small facilities from accounting requirements, nor can we grant a wholesale exception from the pro rata reduction for existing small facilities, but we are exempting Federal and small customers.

Proposal: BPA proposed to continue to offer Environmentally Preferred Power and to allow it to be fully eligible for the rate credit.

Comment: We would like to have the option of contracting annually for EPP. (Wells Rural Electric Coop)

Response: BPA will continue to allow customers to contract annually for EPP purchases, subject to availability of EPP inventory.

Proposal: BPA proposed the Large Landfill Gas Proxy for Project Costs should be \$50/MWh. BPA based this value on Council estimates. BPA adopted Council costs for several other types of renewable generation as well, including wind and biomass. The integration charges assumed by the council and adopted by BPA are \$4.55/MWh scheduled energy.

Comment: The Large Landfill Gas Proxy Costs are too low. BPA should canvas landfill gas generation facility owners for their operation costs and revise the table accordingly. (Public Power Council)

Comment: We see a potential increase in the wind integration charges in coming years and advise BPA to revise this number over the course of coming years if reality seems to be out of pace with the assumed integration costs. (Public Power Council)

Response: BPA understands the posted cost for large landfill gas facilities may be too low. The Council's large landfill gas costs are based on data available to Council staff at the time the Council's 5th Power Plan was published in July 2005. Likewise, wind integration charges were based on data available in early/mid 2005.

The Council intended the 5th Power Plan to be a living, breathing document and plans to revisit the generation assumptions before the end of 2006 and revise them if necessary. As the Council revises the generation costs, BPA will revise the Proxy for Project Cost values in the Post 2006 Conservation Programs Implementation Guidelines. We encourage customers to provide the Council with recent landfill gas cost data and wind integration cost data. Additional data will greatly enhance the quality of the Council's data set and may increase the rate credit. Customers will receive 6-month notice of revisions to the Post 2006 Conservation Programs Implementation Guidelines.

Proposal: BPA proposed that credits for new renewable resources be limited to one year of operation.

Proposal: BPA proposed rate credit eligibility for solar water heaters at \$500/system and photovoltaic systems at \$500/kW.

Comment: Include fractional kWh solar claims. (Ashland)

Response: The reporting software will be modified to accommodate such claims.

Comment: Explain why the solar credit is so small and limited to one year. (Ashland and City of Ellensburg)

Response: The credit for solar was reduced to \$500/kW as a compromise between eliminating solar from the rate credit program altogether since the Council has suggested that solar projects are not cost-effective and continuing to support solar under the assumption that it may become cost effective in the future. The credit level of \$500/kW was determined to be a fair and cost effective credit. Any amount less than \$500/kW would not provide incentive and credits greater than \$500 would not be cost-effective. Credit for solar installations is limited to one year to be consistent with other resources and because the \$6 million dollar cap.

Comment: Clarify that the solar photovoltaic credit is \$500/kw not \$500 per system. (Ashland)

Response: The solar PV credit is \$500/kw. BPA has corrected Table 1 in Chapter 4 of the Post 2006 Conservation Programs Implementation Guidelines to clarify.

Subsequent Comment

Received during Conservation Sounding Board Meeting on October 27, 2005. BPA should allow credit for education and community outreach (e.g. Solar Schools Programs).

Response: BPA will revise the criteria to allow up to \$25,000/year eligibility for renewable education and community outreach programs. This is the level currently allowed under the existing C&RD program.

Proposal: BPA proposed to award credit for existing renewable projects whose contracted energy and integration costs are higher than the Proxy for Avoided Costs. Projects energized prior to May 1, 1999, are not eligible for a rate credit unless they have undergone a significant rebuild.

Comment: This proposed program is not be responsive to existing projects. There should be a credit or incentive offered to utilities to continue energy purchases from existing facilities that is not linked to fluctuating short-term market prices. (Snohomish County PUD)

Response: The objective of the renewable rate credit program is to provide incentive for new renewables development and investment. Because of the annual cap on renewable rate credit claims, every dollar directed towards existing projects is one less dollar available for new projects. Existing projects currently participating in the conservation and renewables discount program could consume 100 percent of the proposed renewable rate credit if limits were not put into place.

In consideration for those utilities that have continued commitments to existing renewable projects, BPA will allow credit to be awarded for existing renewable facilities whose costs remain higher than the Proxy for Avoided Cost value. Given the cap and the focus on creating incentives for new renewable development, BPA was forced to limit credits consumed by existing resources. BPA believes that awarding credit to only those existing facilities that are able to demonstrate high-energy costs was determined to be the most equitable approach.

BPA agrees that the market can be variable and may not be the best yardstick by which to measure long-term investments. BPA considered the downsides of the market when designing the renewable rate credit option. BPA dampened market fluctuations by basing the renewable option to the conservation rate credit on the average of the FY 2007 Flat Block Priority Firm (PF) rate and the investor owned utility settlement Flat Block Price Forecast. If we used either of these two indicators individually, the rate credit would have either been too large or too small. The Flat Block PF rate would generate large rate credits and the \$6 million dollar rate credit could be consumed by one or two projects. At the other extreme, the market value could generate small or negative rate credits.

BPA also wanted to avoid using fluctuating short-term market prices. Barring radical changes in the market over the next rate period, BPA intends to fix the Proxy for Avoided Costs at the proposed FY 2007 level for the duration of the rate period as a means to avoid the variability associated with short-term market fluctuations.

Comment: Hydropower facilities energized prior to 1999 should not be forgotten. New rewinds and upgrades should be eligible. (Snohomish County PUD)

Response: BPA has not forgotten hydropower projects energized prior to May 1, 1999. Existing hydropower projects will be treated the same as all other renewable projects energized prior to May 1, 1999. Existing facilities, regardless of fuel source, are not eligible for the criteria unless they have undergone significant reconstruction and are

Bonneville Power Administration Response to Comments on the renewable option of the conservation rate credit program Issued November 10, 2005 independently metered. By significant reconstruction we mean the fair market value of the old facility cannot be more than 20 percent of the fair market value of the new facility to be classified as "new" and to be eligible for the rate credit (see section 4.5 of the proposed Post 2006 Conservation Programs Implementation Guidelines). If an existing hydro project passes this test, it would be eligible for a rate credit.

In addition, if an additional turbine is placed in an old hydropower project and the turbine is separately metered it may be eligible for the rate credit; however, rewinds and retrofits of existing equipment which improve generation, but which are not independently metered are not currently eligible because the incremental generation cannot be verified. All renewable resources, hydro or not, must be metered to qualify for the rate credit.

Proposal: BPA proposed that Research Development & Demonstration (RD&D) be eligible for a dollar for dollar rate credit (subject to BPA approval) and that RD&D credit eligibility be capped at 20 percent of each utilities total rate credit.

Comment: BPA should increase the amount of eligible renewable rate credit for RD&D projects from 20 percent of the total conservation rate credit to 40 percent. (Central Lincoln PUD)

Response: BPA will increase the RD&D rate credit eligibility to 40 percent of the total conservation rate credit and may be open to waive this limit on a case-by-case basis. BPA retains the right to approve all RD&D claims.

Proposal: BPA proposed that donations to 501c(3) non-profit organizations that promote renewables in the Pacific Northwest be eligible for the rate credit and that the individual utility contribution be capped at 20 percent of each utilities total rate credit.

Comment: Why are donations capped at 20 percent? (City of Ellensburg) If there is not a strong reason for this, we would suggest that the provision be removed from the final program. (Ashland)

Response: BPA has a preference for activities, which directly result in installed generation. Donations may or may not result in installed generation. Donations were also discussed in the focus group. It was the sentiment of the focus group that donations should be capped to prevent their consuming the \$6 million dollar cap without producing megawatts. The 20 percent was suggested as an appropriate level that would limit nongeneration expenditures/activities. At this point in time BPA is not contemplating a wholesale increase in the amount allowed for donations. However, BPA may wave this limit on a case-by-case basis if there are compelling generation-based reasons to do so.

Proposal: BPA proposed to allow dollar for dollar credit for the purchase price of Renewable Energy Certificates (REC) generated by Qualified Renewable Energy Facilities – if the RECs are retired within the purchasing utilities service area (either rate-based or resold into a green pricing program) and if the revenues from both the green pricing program and the renewable option rate credit are reinvested in the green pricing program.

Subsequent Comment:

Received during Conservation Sounding Board Meeting on October 27, 2005. Clarify what BPA means by "revenues".

Response: BPA inadvertently omitted the term "net" (as in "net revenues") from Section 4.9(b). BPA will include "net revenues" in the final version of the document.

Subsequent Comment:

Received during Conservation Sounding Board Meeting on October 27, 2005. Must the revenue from RECs sold outside of the utilities service area be reinvested in the green pricing program to quantify for the rate credit?

Response: BPA stated in Section 4.9(b) that "only RECs which are retired within the purchasing utilities services area are eligible for the renewable option (RO)" to the Conservation Rate Credit. RECs sold outside of the utilities service territory are not eligible for the RO. Therefore BPA cannot place reinvestment requirements on these revenues

General Comments

Comment: BPA should conduct workshops on the renewable rate credit option to improve customers understanding of the program. (Public Power Council)

Response: BPA will conduct a workshop in conjunction with the conservation workshop planned for March 2006 at the Portland Convention Center.

Comment: Developing an incremental resource locally is very staff intensive; a way needs to be found to recognize this. (City of Ellensburg)

Response: Because of the cap on the renewable rate credit, BPA cannot allow administrative costs to be an eligible expense under the renewable rate credit option. However, BPA is proposing that community owned renewable projects should be eligible for a dollar-for-dollar rate credit. This extra credit for capital investments is being proposed because of the extra administrative costs associated with these projects.

Comment: The one-month period given to utilities to revise their claims is too short.

Response: In response to this comment, BPA proposes the following changes:

- Move the initial utility reporting date back to June 15th from July 1st.
- Move BPA notice to utilities of pro-rata reduction to July 30th from August 31st.

This change will give utilities 60 days, rather than 30 days, to revise their rate credit claims if they are affected by the pro rata reduction.

Subsequent Comment:

Received during Conservation Sounding Board Meeting on October 27, 2005. Clarify that the resource size limits presented in Tables 1 & 2 refer to the Project size, not the size of the utility purchase.

Response: The Tables will be revised to clarify that the Resource Types refer to project capacity, not the purchase size.

Attachment: Memo from the Northwest Power and Conservation Council

Melinda S. Eden Chair Oregon

Joan M. Dukes Oregon

Frank L. Cassidy Jr. "Larry" Washington

> Tom Karier Washington



Jim Kempton Vice-Chair Idaho

Judi Danielson Idaho

Bruce A. Measure Montana

Rhonda Whiting Montana

October 17, 2005

MEMORANDUM

TO: Debra Malin, Bonneville Power Administration

FROM: Jeff King

SUBJECT: Electricity cost for an example hydroelectric project

Shown below are estimated electricity production costs for the 511kW City of Albany Hydroelectric Project. These are levelized lifetime values expressed in service year (then current) dollars per megawatthour. The costs are based on the "benchmark" cost assumptions of the 5th Power Plan for comparability to the estimated costs for other resources appearing in the August 11, 2005 memo. Because of the special circumstances of the Albany project including the Energy Trust grant for about 40% of capital costs, and tax-exempt municipal financing of the remainder of the capital costs, the costs shown below are unlikely to resemble the actual cost of this project.

	Albany Hydro
Capacity	58%
factor	
2006	77
2007	79
2008	82
2009	84
2010	87

Capacity factor: 1% allowance for transmission loss included in Energy Trust proposal is removed for consistency with benchmark system integration assumptions, below.

Financing: 5th Plan assumptions - 20% publicly-owned utility tax-exempt, 40% investor-owned utility, 40% independent.

Service life: 20 years.

System integration: Assumed to sell to the market and incur 1.9% transmission losses and transmission costs of \$15/kW/yr (year 2000 dollars). (The actual project will offset local loads).

Federal production tax credit: Mean value of the portfolio analysis of the 5th Plan. (Levelized value of \$5.49/MWh in year 2000 dollars; \$6.53/MWh in year 2007 dollars.)

Renewable energy credits: Mean value of the portfolio analysis of the 5th Plan. (Levelized value of

\$3.71/MWh in year 2000 dollars; \$4.41/MWh in year 2007 dollars.)

General inflation rate: 2.5%/year.