Northwest Energy Coalition Renewable Northwest Project Sierra Club Natural Resources Defense Council Citizens' Utility Board of Oregon Climate Solutions

September 3, 2002

Stephen Wright, Administrator and Chief Executive Officer Bonneville Power Administration P.O. Box 3621 Portland, OR 97208

Frank Cassidy, Jr., Chairman Northwest Power Planning Council 851 SW 6thAvenue, Suite 1100 Portland, OR 97204-1248

Dear Mr. Wright and Mr. Cassidy:

The Northwest Energy Coalition, Renewable Northwest Project, Sierra Club, Natural Resources Defense Council, Citizens' Utility Board of Oregon, and Climate Solutions (Public Interest Groups) appreciate the opportunity to comment on the development of a creative and sustainable approach to the sale of power from the FCRPS, while ensuring that BPA continues to provide long-term benefits to the Pacific Northwest. The Public Interest Groups respectfully offer the attached proposal "Incorporating Regional Stewardship Obligations for Conservation, Renewables, RD&D, and Low Income Efficiency Services in a "Slice of System" Approach to BPA Service."

While the Public Interest Groups may offer individual comments and proposals regarding the broader issues surrounding the sale of power from the FCRPS, this submission focuses solely on how the regional stewardship obligations should be met for energy efficiency, conservation, renewables, RD&D and low-income services. We believe that fish restoration obligations must also be met in any comprehensive solution. However, those obligations will be addressed in a separate proposal.

This proposal attempts to address all applicable principles established by both BPA and the Planning Council for these public interest obligations. The proposal establishes regional targets for conservation and renewable resources, and adequate funding for achieving them. BPA retains ultimate responsibility and accountability to meet the conservation, renewables, low-income and RD&D obligations. It provides for acquisition at both local and regional levels as appropriate, in addition to a clear understanding of how conservation and renewable resources will be acquired and by whom. Strong accountability for results through measurement and evaluation of acquisitions, and crediting for acquisitions in Oregon and Montana are also key elements of the proposal.

We appreciate this opportunity for dialogue and look forward to presenting and discussing our proposal in the public meetings on Potential Changes to BPA's Supply Role after 2006, and to continuing discussions concerning the customers' proposal.

Sincerely,

Sheryl Carter
Sheryl Carter

Natural Resources Defense Council

On behalf of:

Northwest Energy Coalition [Sara Patton]

Renewable Northwest Project [Rachel Shimshak]

Sierra Club [Fred Heutte]

Citizens' Utility Board of Oregon [Jason Eisdorfer]

Climate Solutions [KC Golden]

Angus Duncan, Former Chair, Northwest Conservation and Power Planning Council

INCORPORATING REGIONAL STEWARDSHIP OBLIGATIONS FOR CONSERVATION, RENEWABLES, RD&D, AND LOW INCOME EFFICIENCY SERVICES IN A "SLICE OF SYSTEM" APPROACH TO BPA SERVICE

September 2002

BACKGROUND

The Northwest Power Act establishes regional stewardship obligations that accompany the economic benefits of the BPA system. For example, the customers of the BPA and their consumers must "continue to pay all costs necessary to produce, transmit, and conserve resources to meet the region's electric power requirements..." [16 U.S. Code section 839(4)] In addition, the Act prioritizes investment in resources. "Priority shall be given: first, to conservation; second to renewable resources..." [16 U.S. Code section 839b(e)(1)]

BPA's utility customers have released a proposal for a new approach to discharging the agency's electricity supply responsibilities. The proposal would divide the federal system's relatively inexpensive power supplies among the wholesale customer base through long-term contracts. Those consumer-owned utilities who want one would each get a contractually specified "slice of the system" in the form of a known quantity of BPA electricity at a common, FERC-approved commodity rate, for their proportion of the cost of the FCRPS. The investor-owned utilities would get a negotiated dollar settlement of BPA's residential exchange obligation. The remaining consumer-owned BPA customers would receive their full requirements from the existing BPA system. The customers propose that BPA "substantially reduce its future role" in wholesale power markets; instead, the agency would concentrate on managing its existing resource base. And the formidable economic benefits associated with that limited base would be allocated for up to twenty years among the region's retail utilities.

An open question is how the agency would meet its long-standing stewardship obligations, which are embodied now in investments in energy efficiency, renewable energy development, low-income energy services, and fish restoration. ² Current annual investments in these resources by BPA, though much reduced from historic and regionally beneficial potential levels, are estimated at approximately \$150 million. ³ The customers' initial proposal said only that "[u]utility systems and BPA shall continue to use the opportunities provided by the FBS to facilitate the encouragement and development of conservation and renewable energy resources."

This proposal focuses on how the regional stewardship obligations should be met for energy efficiency and conservation, renewables, and low-income services. **Fish restoration obligations will be addressed in a separate, but related proposal.**

1

¹ "IOU/Public Power Discussion Draft" (4/12/02 DRAFT).

² One approach with little or no credibility is simply to invite BPA's wholesale customers to take up these obligations themselves. BPA tried this when it "reinvented" itself during a fiscal crisis in 1993-1994. Energy efficiency investment collapsed across the region when BPA cut back sharply (a drop of roughly 80% in "Annual Pacific Northwest Utility Conservation Investments" from 1994-2000 – a decline of more than \$250 million/year), and the recent renewable energy renaissance has been led by BPA itself, with extremely inconsistent regional support (although strong efforts by EWEB, Seattle City Light and PacifiCorp bear note). Low-income energy services continue to rely heavily on BPA leadership and financial backing. The fish restoration obligations of the federal hydropower system cannot be met without a reliable (and growing) dedicated regional revenue stream.

³ BPA's current commitment to renewables is about \$22 million per year (a base allowance of \$16 million is supplemented by about \$6 million more from the conservation and renewables discount). The key elements of the current energy efficiency and low income services budget sum to \$126.5 million, broken down as follows: NEEA/market transformation \$12M; Conservation and renewables discount \$37M; ConAug \$50M; G&A \$7.5M; Debt service/legacy conservation \$10.5M; Additional regional conservation services (incl. education) \$6.5M; Low-income efficiency support: \$3M.

⁴ <u>Id.</u>, p. 3, item 17.

PRINCIPLES

- 1. BPA must ensure that it can meet its long-standing stewardship obligations, identified in the Northwest Power Act, under any "slice of system" model, or any other model that would allocate the economic benefits associated with its valuable resource base.
- 2. Since the Northwest Power Act explicitly assigns top priority to energy efficiency and renewable energy in meeting regional resource needs, any delegation by BPA of its obligation to meet any regional load placed upon it requires a concurrent customer commitment to finance sufficient stable investments in conservation and renewable resources as a way of meeting system needs.
- 3. Funding for cost-effective energy efficiency, conservation, renewables, RD&D and low-income efficiency services must be enhanced and stabilized at a specified minimum level of funding for the length of the contracts.
- 4. BPA must retain ultimate responsibility and necessary acquisition authority to invest the funds collected to meet stewardship obligations, recognizing the regional nature of the benefits involved, and the need for substantive, verifiable results. BPA will provide customers, through contracts, with the opportunity to implement verifiable, cost-effective energy efficiency and conservation programs, reasonable renewable resource acquisitions, RD&D and low-income efficiency programs to allow for an appropriate measure of local control, creativity and flexibility.
- 5. The portfolio of conservation investments must include significant investment in the design and/or implementation of regional market transformation, and centralized programs such as low income, RD&D and CFL-type programs.
- 6. Meaningful performance and accountability standards, including energy savings, and new renewable energy production, must be established, and independently verified, to ensure appropriate and adequate investment results.
- 7. Strong, regional least-cost planning must continue with a commitment to providing adequate funding to support Planning Council responsibility to carry out planning activities. This commitment must include regular updates for conservation and electricity projects as required by law. Comparison statistics on average bills, total energy costs, and other measures of progress should also be developed by the Council, with the assistance of the Regional Technical Forum (RTF).
- 8. Any proposal that concerns the Columbia/Snake River hydro system must achieve the legal obligations set forth by salmon recovery laws and treaties, and must provide adequate funding for recovery efforts.

PROPOSAL DESCRIPTION

The objective of this proposal is to develop all cost-effective conservation and sufficient renewable resources necessary to ensure an adequate, efficient, economic and reliable power system for

the region. To do so, this proposal establishes stewardship obligation levels for conservation savings, renewable resource development, low-income efficiency services and RD&D based on total electric loads of the region. ⁵ The Act envisioned meeting all regional load with least-cost resources as measured by their lifecycle costs, including environmental costs and benefits. In addition, setting the obligation to acquire conservation and renewables only on that portion of a slice customer's load served by a 'federal' resource creates a competitiveness issue. The larger the slice, the more the customer must invest in "above market" resources and "front loaded" conservation capital investments. The effectiveness of the customers' proposal in addressing regional responsibilities for conservation and renewables hinges in great part on its ability to demonstrate that it will fulfill the regional obligation for these system benefits.

Responsibility

BPA will retain ultimate responsibility and accountability to meet the conservation, renewables, low income, and RD&D obligations. This will be accomplished through specific contractual agreements between BPA and its customers concerning the elements below, and a combination of direct implementation and rigorous accountability mechanisms and safeguards. BPA's authority to acquire conservation and renewables, or adopt wholesale rate levels based on customer acquisitions, will be established in contract language under which customers agree to place load on BPA as necessary, or develop such resources for the purpose of meeting their own requirements.

Mechanism

Regionally based minimum average megawatt (aMW) targets will be established for both conservation and renewables (dollar requirements will be established for low income weatherization, and RD&D and for funding the RTF). These aMW targets will be translated, using average cost/premium estimates, to a total dollar figure for each. Both the aMW and dollar figures will be included in contracts, divided proportionately by total utility load. The utility will be held accountable for the aMW goals for the portion of the obligation for which they remain responsible (eg, local conservation programs), and will pass along the dollar per aMW equivalent for the aMW obligations for which BPA has responsibility (e.g. regional conservation programs), as well as for any unmet utility obligations. BPA will be responsible for achieving the aMW targets for their portion of the obligation and the aMWs necessary to make up for any unmet utility obligations.

Minimum Obligation Level

The overall aMW goals for conservation, renewables, and financial obligations for RD&D and low-income efficiency services will be based on regional potentials and need, and established up front (with the limited flexibility discussed below) and represent a minimum obligation for the life of the contracts. The Council will review established levels at least every five years, but no more often than every three years. The baseline investment levels must represent aggressive, stable investment over the life of the contracts, while allowing for flexibility due to significant changes in technology advances and long term changes in avoided costs.

Conservation

The Council will establish the conservation target based on achieving all the cost-effective energy efficiency and conservation available over the next 20 years, taking into account new technology potential. Separate and fixed percentage targets for local and regional conservation programs, with a percentage of the total funds reserved for allocation based on need and opportunity, will be established at the outset. The Council will allocate the reserve, with the assistance of the RTF between the local and

⁵ Exceptions include the loads of any utility or DSI that is unable to or does not sign a contract with BPA.

regional programs. Allocation of this "swing" amount can be revisited and modified by the Council at least every five years, but no more often than every three years.

Preliminary estimates from new regional studies show that the baseline obligation is reasonably expected to be about 175 aMW per year. Using an estimated average investment of \$2 million/aMW, the total minimum annual investment for this savings level is estimated to be approximately \$350 million. These cost-effective investments will produce regional benefits well in excess of cost. The estimated cost-effectiveness potential must be reviewed at least every five years by the Council, but no more than every three years. The requirement may be adjusted no more than 10 percent from the base requirement at this review if significant changes in technology or avoided costs are discovered and determined to have long term effects.

Renewables

"Renewable Resources" are defined as electric energy from $\underline{\text{new}}$ solar, wind, geothermal, incremental hydro⁶ and biomass resources installed after January 1, $\overline{1997}$.

We anticipate that over the next rate period many renewable energy projects will prove cost-effective (if not pre-empted by commitments to fossil-fuel generation) and require no above-market cost premium. In order to ensure a substantial and consistent level of regional investment (and to ensure that a mix of renewable technology choices is developed and available for portfolio diversification), a renewables average Megawatt target is established along with an obligation to pay an above-market premium if necessary. The premium level is capped, to limit BPA and customer risk.

The renewables target is based on relatively conservative assumptions, and the premise that long-term system needs (including regional load growth and replacement resources) will be met entirely or substantially with cost-effective energy efficiency and new renewable resources. An average annual requirement for new resource was estimated based on the Power Council's projects average annual growth rate of 1.49% for the period 2006-2025. This produced an estimated 350 MWa annual growth. Assuming an estimate of all cost-effective conservation of 175 MWa annually, 175 MWa of renewables would be needed each year. We estimate that the maximum average annual above market cost of implementing 175 MWa of renewables per year is \$98 million. The calculation assumes that the region will be prepared to carry above market costs of new renewables for the first ten years of the project life, and that the maximum level of such costs would be one cent per kWh for projects commenced in the first ten years of the contract rate period and one-half cent for projects commenced in the last ten years of the period.

The megawatt target for renewables would be written into the utility/BPA contracts at this estimated cost of achieving the goal. If the MWa goal can be achieved for less than the stated investment level, the obligation will be considered met. If the MWa target cannot be achieved within the required

5 "'Incremental hydro' is defi

⁶ "'Incremental hydro' is defined for the purposes of this document as additional hydroelectric generation achieved from increased efficiency at already existing hydroelectric facilities or as additions to hydroelectric generating capacity in irrigation pipes and canals. Other, environmentally-exemplary hydroelectric proposals might be considered on a case by case basis."

⁷ "Biomass resources" are a generating resource fueled by animal waste, solid organic fuels, including waste wood, forest and field residue, and dedicated energy crops. If waste wood is used as a fuel, it may not contain any wood treated with chemical preservatives such as creosote, pentachlorophenol or copper-chroma-arsenic.

⁸ Per phone inquiry to Terry Morlan, NWPPC, 8-30-02. The projection assumes only price-induced conservation, and further assumes the closure of two aluminum plants. While this last assumption may not prove out, the estimated new resource requirement also does not include any amount of replacement resource, and so is likely conservative with respect to overall system needs.

⁹ All figures are in real 2002 dollars.

investment level, then this amount would act as a cap. The targets are annual, but there is flexibility for utilities to move dollars to the best investments.

Every five years, the Council will evaluate regional trends in electricity use and project trends in loads over the following twenty years. Depending on the outcome of this assessment, the renewables MWa and dollar standard can be adjusted up to five percent from the baseline.

To encourage investment in solar or other distributed renewables in reasonable applications, utilities could invest in the resources up to a dollar cap and be excused from meeting the MWa target for that amount. The Council will periodically set diversity targets among the renewable resources, and strongly encourage BPA and its customers to meet them. BPA will provide periodic reports to the Council with the actual MWs achieved and the resources used in the region. As part of the BPA renewables responsibility, approximately 5% of total funds should be used for renewables RD&D that has regional benefits, such as resource data, development and demonstration projects.

Implementation of Programs

BPA is responsible for implementation of (but can contract out for) regional, and a specified portion of local conservation programs, low-income programs, RD&D, and a portion of the renewables. The utilities are responsible for implementation of a portion of the local programs and for any contracted regional or BPA-administered local programs. In addition, the utility can decide to give BPA authority to carry out its program implementation responsibility if it so chooses.

Conservation

The initial split in funding for the conservation programs will be:

30% Regional (NEEA and BPA regional and multi-utility programs including codes and standards, low income, and RD&D)

60% Local programs administered by utilities

10% The split for this component between regional and local will be decided by the Council with the assistance of the RTF based on local and regional needs. The proportions will be revisited at least every five years, but no more often than every three years.

Funding for the regional programs is transferred from the utility to BPA. The utilities do not directly transfer funds for local programs to BPA, as long as they have filed a proposed portfolio of local programs, which BPA must acknowledge, to be implemented. If the utility has filed a plan and BPA has acknowledged it, then equivalent amounts accrue in a debit account at BPA that are subject to collection if results are not achieved. (See accountability section below) BPA has the flexibility to contract with utilities or other third parties for implementation of regional programs, and utilities have the flexibility to allow BPA to administer some or all of their local conservation programs should they prefer.

The Council will determine the annual amount of conservation funds that should be used for low-income weatherization based on one twentieth of the estimated regional need. Based upon a rough extrapolation from Oregon's estimates, this would result in a regional total of approximately \$30-35 million per year. BPA shall allocate approximately 3% of total regional conservation funds for conservation-related RD&D.

Renewables

Implementation responsibility for achieving the renewables objectives must balance preservation of utility flexibility and the capability of BPA to continue and build upon its renewables development efforts. To achieve this balance, Customers pay through their BPA rates for BPA to acquire 50% of the

yearly total, and customers can elect to develop up to 50% of their own renewables obligation. Customers who do not elect to develop their own renewables will compensate BPA for meeting any residual obligation. BPA could also partner with individual utilities on their projects (agree to purchase additional power from the utility's project allowing both to achieve economies of scale) to meet BPA's portion. ¹⁰

The customer proposal assumes that secondary power and ancillary services associated with an allocation of firm power will accompany that allocation to each customer. However, certain ancillary service capability may be critical for system stability and fish migration needs. The services may also be more useful in aggregated regional form for shaping and firming certain renewable resources. Thus BPA should retain first call on the ancillary services capability of the FCRPS to meet regional needs with customers then receiving appropriate allocations.

Accountability

Measurement and verification

Performance in meeting the established obligations will be evaluated through pre-specified mechanisms.

Conservation

All program implementation must follow accepted protocols and M&E plans established by the RTF. The cost of M&E must be built into programs. M&E results must be publicly available. Dispute resolution must be provided for.

The RTF will become a more formalized technical group, with a small core staff and an Advisory Council comprised of experts from representative regional organizations. Evaluating the effectiveness of measures and delivery mechanisms, and updating the "list" of measures will be accomplished by the RTF. This is not a policing function. The RTF will evaluate programs for cost-effectiveness, delivery problems, etc with an eye toward improving the programs prospectively. The RTF, under BPA guidance, will also continue to play its primary Conservation Discount role of keeping track of each individual utility's accomplishments. The RTF will advise on issues including, but not limited to, eligible measures, and recommended savings values and methodologies. The RTF should also develop guidelines to ensure that appropriate education, market transformation and other hard-to-measure programs are included in the utility portfolio of programs. BPA and the Council will provide staff for the RTF. To accomplish its goals, the RTF will be able to request information from utilities and BPA and conduct spot checks of programs, but not for the purpose of policing individual utilities. BPA will retain final decision-making authority on matters addressed by the RTF. However, significant deviations from RTF recommendations will require a public process. C&RD would continue as a mechanism that could be used for conservation compliance with modifications. BPA, in concert with the Council and the RTF, will conduct regional evaluations on the regional and multi-utility programs.

BPA is responsible for ensuring that individual utilities deliver on their obligations and comply with protocols used to deliver measures. BPA will also conduct financial audits of utility programs.

Renewables

The targets are annual, but there should be some level of flexibility for utilities to move dollars from year to year to capture the best investments. Utilities will file an annual report with BPA and the

¹⁰ We recognize that this assignment of renewables funding and project responsibilities raises issues for investor-owned utilities and regulatory bodies. We are open to alternatives that can achieve the same outcomes effectively and with accountability.

RTF on the status of their investments. The RTF will evaluate the report to ensure that projects are on a development track or are producing power.

Credit for OR and MT System Benefits Charge Investments and any other similar program

The RTF will be responsible for determining the credit level, and comparable measurement and evaluation will be required.

Compliance

Conservation

A debit account will accrue in separate utility accounts at BPA, from which BPA will collect for noncompliance. Funds will be collected on a regular basis (different time/flexibility periods established for conservation and renewables) and used by BPA to achieve the unmet utility MW targets. The utilities must meet a minimum of 80% of requirements annually, and have trued up to 100% of requirements by the end of every three years.

Compensation for noncompliance will occur as follows:

A dollar amount sufficient to fund the utility's total conservation obligation accumulates in a debit account at BPA. The utilities are credited, under pre-established mechanisms, for the MWs actually achieved. A utility must meet 80% of its conservation obligation annually. Each year, utility performance can go no lower than 80% of their annual obligation, and must catch up to their total obligation by the end of three years.

- 1) If a utility does not meet its minimum 80% in one year, it must pay BPA for the remaining MWs at the end of that year, and BPA will implement complementary programs in order to achieve the MWs. 11
- 2) Likewise, if at the end of the three years, a utility has not achieved 100% of its obligation, it will pay an amount necessary to achieve the remaining obligation to BPA for implementation. (minus the amount the utility may have already paid BPA for its annual shorts)

Renewables

At the end of some reasonable period of time, the utility has to have met its cumulative target or be assessed by BPA so that BPA could meet the target on its behalf.

¹¹ Precedents for this type of mechanism include the current C&RD program and the authority under the Model Conservation Standards in 16 U.S. Code section 4(f)(2).