

Bonneville Power Administration
Conservation and Renewables Discount
FY2004 Public Review
Comment Log, BPA Responses and Actions
June 14, 2004

This document is based on the Comment Log for the FY2004 C&RD Public Review. After each comment, in italics, is a Summary of the Comment, the BPA Response, and the BPA Action.

Comment 1:

From: Jim Dolan [mailto:jim@pacificpud.org]
Sent: Friday, May 14, 2004 11:37 AM
To: Johnson, Mark E - PNG-1
Subject: C&RD Comment for Proposed Changes for FY2005

Hi Mark,
After reviewing the latest proposed changes to the C&RD renewable energy resources, I have some confusion in section 5.2 Definitions, Direct-Application Renewable means. Does this preclude any PV's? I am a little confused by what is meant by "useful non-electric products". A little clearer definition would be helpful, maybe an example or two.

Thanks,
Jim Dolan
Customer Services Manager
Pacific County PUD

Comment Summary: *The definition of Direct Application Renewables, in Section 5.2 of the C&RD Implementation Manual, is unclear.*

BPA Response: *BPA agrees.*

BPA Action: *BPA will replace the existing definition with one that is clearer.*

Comment 2:

From: Genconsolar@aol.com [mailto:Genconsolar@aol.com]
Sent: Thursday, May 27, 2004 11:12 AM
To: oseia@oregonseia.org
Subject: Re: FW: Reminder: Bright Way Pool Specifications comment period

John,
I have read Adam Hadley's Brightway solar pool heating proposed changes. Here are my thoughts which I have said before:
1) 2 hold down strap issue is OK (instead of 3)

Comment Summary: *BPA's original specifications required 3 straps, the proposed specifications require 2 straps and recommend 3. The commenter likes this change.*

BPA Response: *None*

BPA Action: *None*

2) flow meter requirement is a joke, They should compromise with either 2 thermometers (feed, return lines) or a flowmeter. Not ONE installer out there will tell you that flowmeters are accurate, they clog and are a waste of money and are a frustration to the owner and solar installer.

Comment Summary: *Flow meters are unnecessary in residential solar pool heating applications. They are unreliable over time because they degrade due to the chemicals in the pool water and they are sometimes difficult or impossible to install (due to space constraints). An alternative to the flow meter requirement is requiring a thermometer on both the feed and return lines.*

BPA Response: *BPA understands the issues installers have with flow meters. However, verifying proper flow through the system is important. In the last spec review, BPA modified the specification to allow the flow meter to be removed after inspection in order to save the flow meter from degradation. BPA's programs expect energy savings based on SRCC ratings, which assume adequate water flow. There is no way for utility inspectors to quickly and easily verify proper water flow (even on cool, cloudy days), other than with a flow meter.*

BPA Action: *Add language pertaining to requirement to install flow meter to manufacturer's instructions.*

3) check valve required on solar return line. This should be optional, it serves no absolute purpose in that at night water can be in the collector array anyway (if pool pump is "on"), What matters is if water is CIRCULATING AT NIGHT through that array. It would be better to require a check valve after the filter but before the 3-way diverter valve. If this requirement for a check valve is a substitute for a return line isolation ball valve that would not be good. I see lots of check valves leak water past the valve seals after years of operation.

Comment Summary: *It would not be good to substitute a check valve for a ball valve on the return line. A check valve should not be required on the return line from the collectors.*

BPA Response: *BPA does not intend to allow a check valve to be a substitute for a ball valve on the return line. BPA does not require a check valve on the return line.*

BPA Action: *None*

Thank you for your time.

Brent

Comment 3:

From: ecosystems [mailto:ecosystems@comcast.net]

Sent: Tuesday, June 08, 2004 2:36 PM

To: Hadley, Adam R - PND-1

Subject: Re: Reminder: Bright Way Pool Specifications comment period

Hi Adam,

Sorry to reply this way instead of a more formal letter, however, this time of year, I am too busy selling solar components.

As I did before, I am going to comment on individual sections of the revised specs:

1.5 I feel strongly that homeowners should be allowed to self-install pool systems. They are the easiest of all types of systems to do and a great way to save money. If such is the case, they should be allowed to buy components from any authorized dealers as determined by the manufacturer's exclusive distributor.

Comment Summary: *Homeowners should be allowed to self-install pool systems.*

BPA Response: *BPA intends to achieve savings from solar pool systems for at least 20 years. Measure life could be significantly reduced if someone without experience installs the system.*

BPA Action: *None*

3.C.4. I disagree with the need to have control and or motorized valve components covered to protect them from precipitation. They are made to be used outside. There is some theoretical benefit from the controller itself be shielded from direct sunlight and thus heat build-up, but even this has not shown to be necessary.

Comment Summary: *Controls and valves are made to be outside. They do not need to be protected from precipitation.*

BPA Response: *BPA intends to achieve savings from solar pool systems for at least 20 years. It would be difficult for utility inspectors to verify components are designed for installation without protection from the weather.*

BPA Action: *None*

3.C.9. I find this explanation confusing. Are you suggesting that for orientations of 41-90 degrees W on a roof pitch of 4:12 or less, it is necessary to tilt the panels up off the roof 10-20 degrees? Flush-mounted West facing exposures work fine if the panel to pool surface area ratio is increased 15%. Flush-mounted systems are always recommended on any roof surface to avoid unnecessary wind loading.

Comment Summary: *The explanation is confusing. Is it necessary to tilt panels off the roof 10-20 degrees when mounted on a roof with a pitch less than 4:12 with an orientation of 41-90 degrees West? Flush-mounted West facing exposures work fine if the panel to pool surface area ratio is increased 15%. Flush-mounted systems are recommended to avoid wind loading.*

BPA Response: *If the collectors are oriented 41 to 90 degrees W of south, they cannot be mounted on a roof with a pitch greater than 4:12, and they must have a tilt angle of 10 to 20 degrees. Flush mounting is allowed, as long as the roof is sloped more than 10 degrees.*

BPA Action: *None*

3.C.12. I think the words "if possible" should be removed. A common high point return is essential to balance pressure and thus flow in multiple panel banks. Sawtooth configuration should be considered as separate situation. On a level surface, sawtooth banks can be balanced with diagonal flow for each bank and for all banks as a whole by balancing feed

and return pipe length totals. For sawtooth banks on a pitched surface, a common high point should still apply.

Comment Summary: *A common high point return is critical. It should not be optional. Sawtooth configurations on a flat roof can be balanced by having equal supply and return lines for each row of collectors.*

BPA Response: *BPA agrees.*

BPA Action: *A common high point return is now required. A new specification will be developed pertaining to balancing sawtooth configurations on flat roofs.*

3.C.13. I still think you are making too much of panel/bank flow balancing, especially for residential systems. Unless the circulating pump is inadequate to pump sufficient water volume to the roof, most balancing can be adequately accomplished with parallel, diagonal flow to each bank of panels in the system and a common high point return. Period! I don't feel it is good to rely on adjustable valves that can and will be maladjusted over time. Eliminating the possibility of human error is always worthwhile.

Comment Summary: *If a common high point return and parallel, diagonal flow exists, balancing valves are unnecessary.*

BPA Response: *BPA agrees.*

BPA Action: *Removed entire specification.*

3.C.19. In C.14, it states that the "collectors shall be mounted according to manufacturer's specifications". Why not just leave it at that instead of altering them. E.g., FAFCO uses non-metallic straps that are either continuous strapping, if ordered that way, or segmented. I like continuous strapping myself because it is easier to use and more aesthetic not because it is better. FAFCO systems typically come from the factory with "panel packs" that contain all the mounting hardware and connectors. These packs have panels straps in 62" lengths that must be spliced between panels and knotted to prevent pull-out. If the manufacturer feel this is a proper way to mount their panels for over 30 years, why should you determine otherwise.

Comment Summary: *Manufacturer's mounting specifications should be adequate. There is no need to call out additional mounting requirements. Heliocol and Sunstar do not manufacture a strapping system. They are designed for mounting without straps.*

BPA Response: *Strong storms with high wind gusts in the PNW happen. The specifications are designed for a 20-year life for the entire PNW Region. BPA has reserved the right to require compliance with installation specifications that exceed or differ from those of a manufacturer.*

BPA Action: *Change requirement for non-metallic straps to be continuous and knotted at the ends to be a recommended practice rather than required.*

3.C.26. If you are going to require a flow meter, which I still feel is unnecessary in residential applications, make sure it is also installed according to manufacturer's specifications so that it reads proper flow. E.g., a Blue-White meter needs about two feet of horizontal pipe (18" before the valve and 6" after I believe). Then, with a meter, it is

possible to set the optimum flow per panel instead of relying on the ranges mentioned in 3.C.21. FAFCO's optimum flow rate is 4gpm per panel. System flow adjustments can be made with a simple ball valve between the solar feed and return piping.

Comment Summary: *Flow meters are unnecessary in residential solar pool heating applications. They are unreliable over time because they degrade due to the chemicals in the pool water and they are sometimes difficult or impossible to install (due to space constraints). Manufacturer's installation instructions should be followed.*

BPA Response: *BPA understands the issues installers have with flow meters. However, verifying proper flow through the system is important. In the last spec review, BPA modified the specification to allow the flow meter to be removed after inspection in order to save the flow meter from degradation. BPA's programs expect energy savings based on SRCC ratings, which assume adequate water flow. There is no way for utility inspectors to quickly and easily verify proper water flow (even on cool, cloudy days), other than with a flow meter.*

BPA Action: *Add language pertaining to requirement to install flow meter to manufacturer's instructions.*

3.C.28. With a vacuum relief valve at the highest point of the system, especially on a tall roof, the water flowing from the system is assisted by gravity and can cause the relief valve to have inadequate pressure to seal-off. Most require at least 2psi. This will allow air into the solar loop and push "champagne bubbles" into the pool. This can be easily corrected by restricting this return flow by using the ball valve in the solar return line enough to add an additional ~2psi to the filter pressure.

Comment Summary: *By slightly restricting the return flow (using a partially closed ball valve), the bubbling, introduced into the system by the vacuum relief valve, can be stopped.*

BPA Response: *This may be helpful information to installers who get complaints about bubbles.*

BPA Action: *None*

3.C.30. A check valve is only necessary after the filter if it has diatomaceous earth or DE as its filter medium. Sand and cartridge filters that are the most common respectively in this region, do not have a backflow problem.

Comment Summary: *A check valve is only necessary if the filter is the diatomaceous earth type. Sand and cartridge filters are more common in the PNW Region and they do not require a check valve. A check valve should be required between the filter and the 3-way diverter valve.*

BPA Response: *Most manufacturers recommend a check valve here. The filter medium may be changed in the future.*

BPA Action: *None*

I hope these additional comments are helpful. Call me if you have any questions. Thanks for asking for my input.

Mike Fitzgerald

Comment 4:

From: Anderson, Daniel J [mailto:daniel.anderson@pse.com]
Sent: Wednesday, June 09, 2004 10:29 AM
To: Johnson, Mark E - PNG-1
Subject: C&RD CFL Credit Changes Comments

Puget Sound Energy has been conducting an Energy Star lighting rebate program since 2003. In this time we have noted the trend of lower retail pricing in the market for screw-in Compact Fluorescent lamps (CFL's). However, we have noted that this decrease is not consistent throughout the region, or across all channels of the retail landscape. BPA's proposed reduction in the credit for Energy Star CFL's from \$7 to \$3 oversimplifies a complex market situation that will ultimately limit the ability of utilities throughout the region to tap into the large resource of available savings in the residential lighting sector.

The share of screw-in CFL sales in the residential lighting market is estimated at less than 2% today (Platts e-source, & DOE residential lighting studies). This is actually a decrease in sales compared to CFL's share at the height of the energy crisis in 2000 – 2001, which was estimated at almost 5%. Compare Energy Star CFL's market share with that of Energy Star Qualified clothes washers, Now over 40% according to current EPA sales data. There is still a significant amount of work to be done in transforming the residential lighting market.

We concede CFL prices have dropped over the past few years and BPA would be well served by reducing the credit from its current level of \$7 per bulb. Puget Sound Energy has reduced the rebate paid for a standard 60-watt equivalent CFL to \$2 per bulb. However, average pricing in WA for this type of bulb is still above \$5 per bulb. Pricing is available at a level at or below \$3 each for CFL's in "big box" retailers, warehouse clubs, and major discount chains. This level of pricing is not readily available to all consumers. Setting the credit at \$3 per bulb will exclude the participation of a significant number of consumers throughout the region.

Approximately 30 - 35% of fixtures in residences are not compatible for use with the lower cost twist CFL's that replace a 60w incandescent bulb. These fixture types include recessed ceiling "can lighting", 3-way lamps, vanity bath bars, and dimming fixtures. CFL's for these applications are more expensive than twist CFL's, and have not been readily available in many market channels. These bulb types represent a significant area of available savings. However, higher incentives will be necessary to promote these types of CFL's. Pricing for Reflector style CFL's averages \$8.17 ea. in the Seattle metro area. 3-way CFL's average \$9.98 in the Seattle metro area. Dimming CFL's (where available) average over \$10 each, and vanity CFL's average \$7.50 each.

PSE has instituted a program for 2004 that pays a higher incentive for these types of CFL's. The first of these "specialty coupons" rolled out in late March. Successes so far include encouraging retailers such as Home Depot, Bartell Drugs, Fred Meyer, McLendon Hardware, and Hardware Sales (Bellingham) to expand their selection of CFL's to include these

products. These rebates, from \$3 - \$4 per bulb, were a key factor in transforming their product selection. In addition, these of CFL's are replacing higher wattage incandescent bulbs. 15w - 28w CFL's are replacing incandescent bulbs ranging from 65w - 150w.

Many consumers have tried the twist style CFL's. These consumers represent the "low hanging fruit" of the available lighting savings. It will take more effort to reach out to a wider pool of consumers and get them to utilize more efficient lighting. Additionally, many consumers who tried CFL's several years ago were unhappy with the quality of the bulbs, color of light, or delay in startup. Reintroducing CFL's to this potential market will be more difficult than earlier efforts to gain consumer adoption of CFL's. This can still be done cost effectively, but it will require more marketing and promotions in conjunction with the use of more expensive "specialty" CFL's. The \$3 credit will not be sufficient to reach this sector of the market, which represents significant potential for long term savings.

We propose a credit that reflects the many factors at work in the lighting marketplace. In keeping with BPA's desire to keep the C&RD program simple to administer, a flat \$5 per bulb credit would be sufficient to maintain momentum in all areas of market transformation. A more targeted, yet complex approach would reflect that the RTF has broken CFL's into categories based on the wattage of the bulb and estimated annual savings. This table could be updated to reflect that CFL's have evolved into a range of wattages and styles suitable for a given lighting application. A suitable credit could then be applied based on the type of CFL and its relative pricing in the market. The current RTF for CFL's examines only the wattage of a bulb, and doesn't take into account some of the major applications for lighting that do not fall into a category based on wattage Here is a proposed model of this approach

Current RTF Description	Proposed RTF Description	Wattage Replaced	Proposed Credit
INTERIOR CFL'S			
Energy Star CFL Interior – 15 Watt	Energy Star CFL Interior – 13 -15 Watt	60 watt Incandescent	\$3
Energy Star CFL Interior – 20 Watt	Energy Star CFL Interior – 16 - 20 Watt	75 watt Incandescent	\$3
Energy Star CFL Interior – 23 Watt	Energy Star CFL Interior – 21 - 26 Watt	100 watt Incandescent	\$4
N / A	Energy Star CFL Interior –3-Way	30 – 150 watt Incandescent	\$5
N/A	Energy Star CFL Interior –Flood R-30 to R-40	65 – 120 watt Incandescent	\$5
N/A	Energy Star CFL Interior –G-25 Vanity Globe	40 – 60 watt Incandescent	\$4
Energy Star CFL Average – Interior Wattage	Energy Star CFL Average – Interior Wattage	60 – 150 watt incandescent	\$5
EXTERIOR CFL'S			
Energy Star CFL Exterior	Energy Star CFL	60 watt Incandescent	\$3

- 15 Watt	Exterior - 13 -15 Watt		
Energy Star CFL Exterior - 20 Watt	Energy Star CFL Exterior - 16 - 20 Watt	75 watt Incandescent	\$3
Energy Star CFL Exterior - 23 Watt	Energy Star CFL Exterior - 21 - 23 Watt	100 watt Incandescent	\$4
Energy Star CFL Exterior - 26 Watt	Energy Star CFL Exterior - 26 - 40 watt	100 - 200 watt incandescent	\$5
Energy Star CFL Average - Exterior wattage	Energy Star CFL Average - Exterior wattage	60 watt - 200 watt incandescent	\$5

BPA could still institute a tiered approach to CFL credits that is easier to use by segmenting major CFL types.

- 13-15 watt CFL's \$3 credit
- 16 - 25 watt twist style CFL's \$4 credit
- Reflector / PAR style CFL's \$5 credit
- 3-way or dimming CFL's \$5 credit
- Average CFL credit \$5 credit

CFL prices have dropped over the past year, however they have stabilized over the past several months. There is room to reduce the C&RD credit for CFL's, however the proposed level of \$3 per bulb will be detrimental to one of the largest potential pools of savings in the Northwest.

Thanks,

Dan Anderson
EES Mgr., Eval. & Admin.
Puget Sound Energy

Comment Summary: *A lot of the market for CFLs is available in specialized uses. Bulbs for those uses are generally more expensive than the average bulb, and if the region wants to capture some of those resources, the C&RD credit will need to be larger than the \$3/bulb proposed. Not everyone lives in areas where the level of pricing in the proposed C&RD changes is applicable. In addition, some highly desirable applications such as reflector /PAR type lamps are more expensive. PSE recommends a tiered approach to setting credits that starts at \$3 and goes to \$5.*

BPA Response: *The vast majority of bulbs, when weighted by sales, are still the less expensive options. Although the cost may vary by geography, most of the population of the PNW lives in areas where the less expensive options are available. BPA is a supporter of the national PEARL testing of Energy Star CFLs (and fixtures), whereby labeled product is randomly selected off the shelves of retailers across the country and tested in a certified independent laboratory. Although the brands and model results are treated confidentially, we must use the information gained to warn our customers that the covered and reflector CFL products are performing so poorly that it would be a mistake at this time to push*

consumers to purchase those products until they improve. Whereas 8 out ten bare Energy Star bulbs passed all four tests for efficacy, rapid cycle stress testing, 1,000 hour lumen maintenance, and lumen maintenance at 40% of life, none (0) of the covered and reflector products passed all four tests. Further, BPA will not attempt to design any utility's incentive structure. A utility is free to pay \$2 for some bulbs and \$8 for others, but the credit will apply to the total number of bulbs.

BPA Action: *In response to this and other comments, BPA will raise the credit, from the proposed \$3/bulb, for all CFL bulbs to \$4/bulb providing for geographical differences, and provide greater leeway for utilities to best design program offerings.*

Comment 5:

TO: Mark Johnson, C&RD Program Manager, Bonneville Power Administration

FROM: Brent Barclay, Energy & Internet Services Supervisor, Columbia River PUD

RE: Proposed Changes to C&RD for FY 2005

DATE: 6/11/04

1) Reduce CFL Bulb Credits to \$3

CRPUD opposes this change as presented for reasons detailed below.

Background:

The NW Energy Efficiency Alliance conducted a market survey in Q12003 across the entire PNW to determine the availability, selection, and retail price for "60 Watt equivalent" spiral type CFL bulbs. The average price across the four NW states and across all types of retailers (a total of 148 stores including hardware, mass merchandisers, grocery, etc.) was found to be \$7.48. This survey validated a tremendous disparity in prices for mass merchandisers vs. hardware and do-it-yourself retailers. It also shows that the difference between the lowest prices and the maximum prices is a factor of 3 to 5 times, even when comparing within the same retailer type!

In late 2003 NEEA spot-checked retail prices at 40 stores to determine the average price on just the lowest priced CFL's in the store. That price came in around the \$3 mark. This is consistent with the minimum prices found in the larger survey. From this data, it is not at all clear to me that prices really fell between the 1st quarter and the 4th quarter of 2003.

Recommendation:

Instead of capping all credits at \$3 for all CFL types, we recommend that there should be two tiers of credit caps as a way to differentiate between lower price "commodity" CFL bulbs (sub-19 Watt spirals for example) and higher price "non-commodity" types such as dimming, 3-way, high Wattage, wet location rated, globes, and reflectors. Non-commodity CFL's are retailed for prices which are typically much higher than commodity types. We believe a credit of \$4 - \$5 for commodity CFL's and \$7 - \$8 for all other types and Wattages would be a far better method to control C&RD costs. These credit amounts recognize that many consumers around the Region do not have reasonable

access to mass merchandisers that carry low priced multi-bulb packs. It also accounts for the significantly higher prices charged for specialty and higher Wattage CFL types.

We have been told in the past by BPA staff, that one of the un-stated goals of C&RD is to help support market transformation within the region. To this end, it is important to allow credit amounts that are sufficiently large enough for Utilities to offer their consumers financial incentives that will “move the market”. Ultimately, we want consumers to adopt CFL technology that will work in the broadest possible range of screw-based socket applications.

Bottom line, it’s just simply not appropriate to cap the credit at the \$3 level on the basis that it represents the lowest price in the Region.

Comment Summary: *Not all bulbs cost the same and not all customers see the expected prices cited in the C&RD proposed changes. Setting a credit based on the lowest available product is not fair to utilities without easy access to mass-market stores. CRPUD suggests a two-tier incentive structure.*

BPA Response: *A credit based on a reasonable average cost will permit utilities to design their own incentive structure around a consistent credit. They may offer a higher incentive for more rare, more specialized products and a lower one for commodity product if they wish. However, we agree with the argument that the lowest available cost in the region is probably not the price point upon which to set the C&RD credit.*

BPA Action: *In response to this and other comments, BPA will raise the credit, from the proposed \$3/bulb, for all CFL bulbs to \$4/bulb providing for geographical differences, and provide greater leeway for utilities to best design program offerings.*

2) Change Energy Star Refrigerator Deemed and Deemed Calculated Measures

CRPUD supports the proposal as stated.

Comment Summary: *None needed.*

BPA Response: *None needed.*

BPA Action: *This change will be implemented as proposed.*

3) Two Tiered Clothes Washer Incentives

(1) First, CRPUD is troubled by the reference to “incentives” in the title of this proposal. It is not BPA’s role within the context of the C&RD program, to concern itself with determining or even influencing what particular incentive level the Utility wishes to design into their program implementation. Remember, this program is founded on the “value” in monetary terms of the measures that we facilitate the installation of.

(2) That said, we do support the idea of differentiating between the minimum Energy Star qualifying 1.42 MEF and the higher future standard of 1.8 MEF in terms of the electrical savings and hence credit amount.

(3) In the proposal, there is reference to prior Utility requests to make the selection of credits a simpler process. This may be what works best for some, but not for all Utilities in all cases. We urge BPA to keep the DHW and dryer fuel breakdowns within the proposed two efficiency tiers. For those

Utilities who desire more simplistic ways in which to administer the C&RD program, we recommend BPA provide the two proposed tiers as weighted averages so they can be selected as alternatives.

(4) I am questioning the consistency in the way that credit dollars are computed for the current measures vs. those being proposed. For example, measure RAP00003 (Energy Star clothes washer – electric DHW & dryer) indicates an annual buss-bar savings of 362 kWh with a credit of \$154.60. The new proposed Tier 2 measure indicates an annual buss-bar savings of 347 kWh with a credit of \$100.00. Why in the existing case is the credit \$0.43/kWh and in the proposal it is only \$0.29/kWh? Why this difference? We strongly object if the value per kWh is being lowered as part of these proposed changes!

Comment Summary: (1) *The word “incentive was in appropriately used.*

(2) *CRPUD supports a two tiered C&RD credit for ENERGY STAR clothes washers.*

(3) *Many utilities may want the C&RD reporting process simplified by offering fewer choices, but CRPUD would prefer to have multiple options for each measure category and a weighted average that for those utilities that want measure reporting to be simpler.*

(4) *Has the C&RD credit amount been computed correctly for this measure: It appears that not only has the deemed energy savings levels have been adjusted, but that the \$/kWh credit was lowered as well. CRPUD strongly objects to BPA arbitrarily lower \$/kWh credit levels.*

BPA Response: (1) *”C&RD credit” would have been more appropriate.*

(2) *BPA agrees.*

(3) *BPA has heard repeatedly that there are too many choices when utilities look for the correct measure to report. This proliferation has happened mainly in the Heat Pumps, but it exists in other categories as well. BPA has taken this message to heart and is reducing the number of measure combinations, when possible. Weighted averages is the approach that is currently being taken to ensure that, on average, the region is getting the energy savings that was anticipated by the RTF.*

(4) *In FY2003, for ENERGY STAR clothes washers, the deemed energy savings was 503 kWh annual savings and C&RD credit was \$154.60. In FY2004, the deemed energy savings was lowered to 336 kWh annual savings and but the C&RD credit remained at \$154.60. This was done, due to the fact that the ENERGY STAR standard changed on January 1, 2004. The change happened out of sync with the fiscal year (FY) time frame used by BPA and the C&RD Program. BPA decided to avoid making changes in the middle of a FY, to ensure that appliance dealers had time to move existing clothes washer stock out of the supply chain before lowering the credit. To make sure that the energy savings was not over reported, the kWh savings was lowered in the C&RD software. So the C&RD credit level has not been arbitrarily lowered, the change was implemented in two stages to help utilities.*

BPA Action: (1) *None.*

(2) *BPA will implement a two tiered credit approach for ENERGY STAR clothes washers.*

(3) *BPA will continue to reduce the number of choices that utilities are forced to make and only go with weighted averages when ever possible.*

(4) *None.*

Comment 6:

From: Eckman, Tom [mailto:teckman@nwcouncil.org]

Sent: Friday, June 11, 2004 1:14 PM

To: Cody, Bruce - PND-1; Johnson, Mark E - PNG-1; Callahan, Jack M - PND-1; Keating, Ken - PNG-1
Subject: FY 2005 C&RD Changes

Gentlemen,

While I haven't had time to think through all of the proposed changes, but most of them appear pretty straightforward.

I do have one concern regarding moving from a "eligibility" to and "ineligibility" list. That is, the RTF may be asked to review and "rule" on substantially more measures at a time when we are "staff resource limited". If this turns out to be the case, I want to make sure we can count on getting some help from you all or \$ for contract help so as to be responsive to customer requests. Moreover, since the RTF has an existing "petition" mechanism in place that allows utilities request that the RTF modify any of its recommendations I think it would be helpful if you add a section in the Policy Manual that requires them to use this process. I would also suggest that you reference this fact on the "List" and "Protocol" pages so that utilities who wish to have the RTF review a measure for addition to the "eligible" list or to have one declared "ineligible" to use the software and follow that process-- otherwise it could get out of hand in a hurry.

That's it from Lake Wobegon -- where all the protocols are simple and the savings are above average.

Tom Eckman

Manager, Conservation Resources
Northwest Power and Conservation Council

Comment Summary: *If BPA chooses to remove "Attachment B – Conservation Measures and Activities Eligible for BPA's C&RD" this will result in utilities using the RTF petition process more often. The RTF will need more funds to be able to deal with this change.*

BPA Response: *BPA does not believe that this change will result in more use of the RTF's petition process, but rather allows utilities more freedom in determining what is an eligible measure. It requires that utilities use an established criteria and to document their choices.*

BPA Action: *BPA has decided not to eliminate the existing "Attachment B – Conservation Measures and Activities Eligible for BPA's C&RD." But instead will add two new attachments to the C&RD Implementation Manual. The new Attachment E will have "Measure Eligibility Criteria, a "List of Ineligible Measures," and the "Deemed and Deem-Calculated Measures List. The new Attachment F will have the "Basic Protocol #1, which utilities will use to estimate the energy savings of a proposed project and to develop an Monitoring and Verification Plan for programs or project that realize less than 100,000 kWhs of energy savings annually.*

Comment 7:

From: Tucher, Annie [mailto:ATucher@idahopower.com]

Sent: Friday, June 11, 2004 3:54 PM

To: Lewis, Margaret - PNG-1; Johnson, Mark E - PNG-1

Cc: Nemnich, Darlene
Subject: FY05 Proposed C&RD Changes -- Idaho Power comment

Greetings Margaret and Mark!

Thanks for the opportunity to comment on the FY05 Proposed Changes.

Idaho Power would like to request a clarification on Page 3 of Document 3, titled "Proposed Attachment B." The Deemed and Deem-Calculated Measures List for residential customers includes Performance Tested Comfort Systems duct sealing and heat pump/AC commissioning. Idaho Power would like to request the following change:

Performance Tested Comfort Systems or RTF-approved equivalent duct sealing and heat pump/AC commissioning.

Given the current efforts underway at the RTF to clarify how entities would be eligible to provide duct sealing under the C&RD program, the above suggested change would allow for the inclusion of any newly-authorized provider that does not operate under the PTCS trademark.

Please let me know if you have any questions about this.

Sincerely,

Annie Tucher
Program Specialist
Idaho Power Company

Comment Summary: *Idaho Power requests that the words "RTF approve equivalent" be added to the Deemed and Deem-Calculated Measures List for PTCS Duct Sealing and PTCS Heat Pump Commissioning to allow other duct sealing program and heat pump commissioning to qualify if the RTF decides to recommend such a change.*

BPA Response: *BPA agrees.*

BPA Action: *The new language has been added to Attachments F's Deemed and Deem-Calculated Measures List.*

Comment 8:

From: Eugene_Rosolie@pngcpower.com [mailto:Eugene_Rosolie@pngcpower.com]

Sent: Monday, June 14, 2004 3:39 PM

To: Johnson, Mark E - PNG-1

Subject: C&RD Comments

Dear Mr. Johnson:

On May 12, 2004, BPA announced the C&RD **Proposed Changes for FY2005**. Following are the comments of PNGC Power.

In comments submitted to proposed changes for FY 2004 we wrote:

...When PNGC Power and its members agreed to the C&RD program in the PF '02 rate case, and agreed to participate when the program was initiated early, it was with the understanding that the program would be based on objective valuation of the conservation measures and that a structured decision-making process would be established and adhered to. We believe this structure is embodied in the form of the Regional Technical Forum (RTF). Our concern stems from the fact that we are witnessing an ever increasing whittling away of this basic structure through unwritten "policy" decisions. This trend is troubling.

...Now we face the situation of credits becoming more and more difficult to obtain because of ever changing standards, lowering measure values, credit caps, etc. year after year. This situation raises questions as to the prudence of continuing on that sustainable course of action.

We restate those comments here because upon review of the FY 2005 changes we see evidence, albeit to a lesser degree, of the situation manifesting itself again this year. Given the inequities involved in the arbitrary manner in which the credits are changed, the number of utilities that have earned all of their credits, and that only two years will remain of the program, we suggest that BPA make no changes to compact fluorescent light credits and the rate for clothes washers remain at \$0.439 per kWh. (See below for details.)

Comment Summary: PNGC objects to BPA moving away from the original premise that C&RD credit levels will be based on the measures monetary value to the Federal Power System, as determined by the PROCOST model used by the RTF.

BPA Response: BPA has, from the beginning, adjusted some credit levels when they appeared to be too high, compared to the cost of the measure.

BPA Action: None.

Following are PNGC Power's comments on specific policy and technical changes proposed by BPA:

Proposed Change:

I) Proposed Changes to Policy Issues

1) Change in Site specific Rules for projects with more than 100,000 kWh in Energy Savings.

PNGC's Comment:

We understand BPA's concern that measures be incremental. We realize that the installation of the measure or the ordering of equipment may signal that the measure is not incremental however we believe that a flat prohibition is not the answer. The reality is that we are entering the last two years of the program and given the time to develop a Monitoring and Verification Plan (M&V), have BPA approval, order equipment, install the measure, and do the verification could very well mean the project will not occur. This outcome could very well mean a lost opportunity in the commercial and industrial sector, something we should try to avoid. While we do not have a concrete proposal at this time we do believe that BPA should state its flexibility and desire to work with the utilities on this issue.

Comment Summary: PNGC objects to this change so close to the end of the program and believes that this change will result in more lost opportunities.

BPA Response: BPA disagrees. Measures that have already been installed or projects where the equipment has already been ordered do not represent lost opportunities.

BPA Action: Proposed change will be implemented as proposed.

Proposed Change :

II) Proposed Technical Changes

1) Reduced Compact Fluorescent Light (CFL) Bulb Credits to \$3

PNGC's Comment :

PNGC Power is opposed to lowering the credit to \$3 per bulb. We have several concerns on this proposed change. Those concerns include, BPA acting unilaterally on technical issues, continued lowering of credits, and failure to recognize the needs of rural utilities. We are dismayed that BPA has proposed this change without consulting with the Regional Technical Forum (RTF). BPA gives no technical justification or evidence except to say, "It is possible to purchase CFLs for as little as \$3 per bulb." BPA fails to recognize that in rural communities in order to realize this possibility means traveling a hundred miles or so. We believe if BPA wants to change the credit it should at least make an effort to get all the facts and not rely on selected anecdotal evidence.

Recently PNGC Power members have had to purchase bulbs wholesale because the local area outlets, hardware stores etc., do not have enough bulbs and the bulbs they do have generally cost more than the current credit of \$7. In one case, the cost of ordering 500 20 watt bulbs was approximately \$3.75 per bulb. This example also points another flaw in BPA's recommendation. There are a variety of bulbs not only in terms of wattage but also in features and quality. While it may be possible to get a 13 or 15 watt bulb for \$3, getting a light with the quality that a consumer prefers, will install and keep will cost more.

For these reasons and given the inequities involved in the arbitrary manner in which the credits are changed, the number of utilities that have earned all of their credits, and that only two years will remain of C&RD we propose that BPA make no changes to compact fluorescent light credit.

Comment Summary: PNGC believes that BPA failed to provide evidence for its justification for lowering the proposed credit. BPA appears to have acted without recognizing the needs of rural utilities, and did not consult with the RTF before making the proposal to lower the credits. PNGC recommends that the current credits be left alone for the two remaining years of the C&RD.

BPA Response: BPA does not believe that the RTF is necessary to initiate policy decisions about relating the C&RD credit to costs. BPA also believed that information on costs of CFLs and their trend was widely known (see Columbia River PUD's comments above), so that a full explanation was not necessary. However, we agree with the argument that the lowest available cost in the region is probably not the price point upon which to set the C&RD credit. The average credit should ideally be set to better reflect the diversity of the region, while not over-paying for the bulk of the bulbs that will be sold in the population centers.

BPA Action: In response to this and other comments, BPA will raise the credit, from the proposed \$3/bulb, for all CFL bulbs to \$4/bulb providing for geographical differences, and provide greater leeway for utilities to best design program offerings.

Proposed Change :

II) Proposed Technical Changes

4) Two tiered Clothes Washer Incentives

PNGC's Comment :

PNGC Power agrees with the two tier incentives concept as recommended by the RTF and as outlined in the Proposed Changes including the limiting of the deemed credit to the "Weighted Average." We disagree with the change in the credits as proposed by BPA. BPA has failed to provide a basis for changing the credit amount.

At the February meeting of the RTF a presentation on clothes washers was made by Tom Eckman in which proposed credits for FY 2005 were given at a rate of \$0.326 per kWh. This rate compares to the current weighted average rate of \$0.439 per kWh. A review of the presentation and the RTF minutes indicate that no justification for the reduction was given. The RTF recommendation was:

After a brief discussion, a participant moved that the RTF recommend that BPA **put this concept** in its April 1 draft document. This motion carried unanimously. (Emphasis added.) (REGIONAL TECHNICAL FORUM MEETING NOTES, February 10, 2004.)

This recommendation in our view provides no guidance on the issue of the rate of the credit but speaks to the issue of having two tiers. Given these facts BPA manages to lower the rate of the credit even further than what is in the RTF presentation, from \$0.326 to \$0.28 per kWh with no explanation.

For these reasons and given the inequities involved in the arbitrary manner in which the credits are changed, the number of utilities that have earned all of their credits, and that only two years will remain of C&RD we propose that BPA keep the rate of the credit for each tier of clothes washers at the current \$0.439 per kWh and set the overall credit at \$90 for tier 1 and \$150 for tier 2.

Comment Summary: PNGC agrees with the two tier C&RD credit approach to ENERGY STAR Clothes Washers. However, it appears that BPA is arbitrarily lowering the C&RD credit per kWh from \$0.326 to \$0.28 per kWh.

BPA Response: In FY2003, for ENERGY STAR clothes washers, the deemed energy savings was 503 kWh annual savings and C&RD credit was \$154.60. In FY2004, the deemed energy savings was lowered to 336 kWh annual savings and but the C&RD credit remained at \$154.60. This was done, due to the fact that the ENERGY STAR standard changed on January 1, 2004. The change happened out of sync with the fiscal year (FY) time frame used by BPA and the C&RD Program. BPA decided to avoid making changes in the middle of a FY, to ensure that appliance dealers had time to move existing clothes washer stock out of the supply chain before lowering the credit. To make sure that the energy savings was not over reported, the kWh savings was lowered in the C&RD software. So the C&RD credit

level has not been arbitrarily lowered, the change was implemented in two stages to help utilities.

BPA Action: *Proposed change will be implemented as proposed. If customers feel that the C&RD credit per kWh is too low, they can petition the RTF to review BPA's approved credit level.*

Proposed Clarifications :

Document 3

Proposed Attachment B

PNGC's Comment :

Under the section Eligibility Criteria, 2 and 4a contain the phrases "exceptionally high energy efficiency" and "high quality measurement and verification" respectively. We have to ask, what exactly is expected here? Both phrases are open to a wide range of interpretation and thus result in disagreements in the future. For this reason and to help us better understand BPA's intent we would propose that BPA define what it means in more detail. Alternatively we would suggest the following:

1. Remove "exceptionally high energy efficiency" and replace with "energy savings."
2. Remove "high quality" and leaving "measurement and verification."

Comment Summary: *PNGC believes that some of the language in the Eligibility Criteria is too limiting and request that phrases such as "exceptionally high energy efficiency" and "high quality" be removed.*

BPA Response: *BPA agrees.*

BPA Action: *Language in the proposed Eligibility Criteria has been modified as requested by PNGC.*

Proposed Clarifications :

Document 4 Proposed Basic Protocols No. 1

PNGC's Comment :

(1) We support the general direction of this proposal but would suggest a change. Under the section entitled Protocol Review by BPA it states:

(2) Protocols for measures submitted under the Basic Protocol will not be reviewed by BPA. We are concerned the PNGC Members could put together a project with a customer, work our way through the project, issue out a rebate and then be at risk of not having the project accepted by BPA at some point after the credits were actually claimed. Therefore we suggest that submittal be optional. With the option if there is any question a utility can submit the protocol and BPA would give approval. That way we will know for sure if we will or will not be receiving credit for any given project.

Comment Summary: *(1) PNGC supports the addition of a protocol for site specific projects with energy savings of less than 100,000 kWhs annually. (2) However, BPA should be willing to review customer proposals for project eligibility and be willing to offer written approvals for those projects that BPA determines meets the eligibility criteria found in the proposed Attachment E.*

BPA Response: *BPA agrees with both points (1) and (2) summarized above.*

BPA Action: *BPA will implement this proposed change and will offer, customers who request, assistance in determining project eligibility and energy savings verification methodology.*

Thank you for this opportunity to comment.
Sincerely,

Eugene Rosolie
Senior Economist/Conservation Administrator