

Schrepel, Eric

From: EDWARD D PERROTTI
Sent: Thursday, April 15, 2004 4:23 PM
To: Jenkins, Kris
Subject: Comment on Document 2004-2 (Council Recommendations for the Future Role of the Bonneville Power Administration in Power Supply).

The Bonneville Power Authority And The States It Serves

Dear Northwest Power and Conservation Council,

Today, in the mail, you sent me a letter requesting comments on the role of the Bonneville Power Authority. We now know that the cleanup at Hanford will not be funded (c.f the article in the Seattle PI today) and it is highly likely that BPA modernization will not be subsidized by lower rates.

<http://www.nwcouncil.org/library/2004/2004-2.htm>

Therefore, I have a suggestion for the states served by the BPA and one that would actually lower our rates to levels that we saw before the events of 1999 and 2000.

My background is included below the three passages, below. I worked with John Sawhill when he ran the Synfuels programs. We do have other options and ways to reduce our power costs here in the Pacific Northwest.

And reduce global warming, save the salmons and forests and keep the environment safe, for generations to come.

Very sincerely yours,

Edward David Perrotti (retired)
CEO, Risk Analytics
505 North B Street
Aberdeen, WA

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Bonneville Power And The States It Serves

If the BPA has huge losses, then on a cash flow value basis, it has a low cost of acquisition, that means it should be sold for far below book value. The opportunity for the States that the BPA serves is two fold and not paradoxical as some may say.

The States form a body or agency and the BPA is moved from the federal agency

to the one owned by the States. Then the states decide what to keep and what to sell off. The federal government just sold land in Utah to the State of Utah for around \$13 million. The property has a market value over the next ten years of over \$183 million.

See that is the key. Our PUD Boards now should think about an initiative and try hard to at least see what the benefits will be. The cost of acquisition is low and spread out over the states and can be financed. The federal government would let BPA go at a really good price. Then the states sell pieces off and they pay back the debt incurred to finance the purchase.

That is what many are missing. The cost to buy the BPA is lower than most think, as it will be sold at below book value, due to the losses, and once acquired and slices sold to the utilities that make up the three state region, the three states would have an agency that would pay for itself and most likely pay off most of the debt incurred to buy BPA.

This is what is best for our region. Surely, the states are now regionalized and can solve these problem, if they are given the chance.

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An Email Letter To Director Mark Walker - The Future Role Of The Bonneville Power Authority In Regional (Pacific Northwest) Power Supply.

Why Our Northwest Power System Needs to Be Regionalized Not Privatized.

Bonneville Power Authority is there now for the federal treasury. It should be moved from a federal agency to a regional one, controlled, on a pro rata, pooling of interest basis, by those states that pay for the resource. The states that buy BPA power should control that agency.

Then you have economies of scale, what is lacking now and why our rates are going higher. The system now is skewed toward a very fragmented model, where these small local PUD, in some cases, felt they had to invest in upstream power assets. They do not have the resources to finance these units from their current ratepayer base. Indeed, some fall deeper in debt and have eroding cash reserves and losses as far as the eye can see.

We should not have shifted this function to the local PUD as they also do not have the staff people expert in all the feedstock cost structures as well as all the various power technologies. In some cases, the system is biased and can not be optimized. We have to move to a central power production and distribution agency that realizes economies of scale and passes them along to the downstream PUD. Do not try to move risk management into these firms, that is a sole top down function and not bottom up. Any major corporation will tell you that you need a central hub for control, not spread out all over the operating divisions. But in the central headquarters, where planning and other functions, like risk management, purchasing are done optimally, at the top.

This is a formula for disaster and it was a mistake to allow this. How can the system realize true economies of scale from centralized supply chain management or in this case, power purchase supply contracts, when it

is tossed down into the lowest of units, that have no way to buy or make, with the kind of purchasing capability, had they been tied into a central function? Even the best military systems know this is wrong, you need central controls. Why Enron was such a mess, who was in control?

This is the reason for some to want to combine Aberdeen and Hoquiam, as you realize economies of scale in the supply chain or combined purchasing function. WE ARE PAYING HIGHER POWER RATES, IN PART NOW, BECAUSE WE HAVE A FRAGMENTED MODEL, SPREAD OVER MANY ENTITIES, THAT LACK COMBINED SUPPLY CHAIN CAPABILITY AND A BOTTOM UP SUB OPTIMAL SYSTEM.

In some cases, sell the assets up to the state controlled regional agency and re capitalize the PUD system. Build up cash, not power plants and remove this burden from the local ratepayer. Put the local PUD cash flow stream in the right direction, positive rather than negative and start to lower our rates. The regional agency, controlled by the states, can issue bonds and can best decide the mix of power sources that result in the lowest possible cost of service and therefore, electric rates.

We do not compete with ourselves, that is illusory. We compete with BC and BC hydro. BC has lower cost and more abundant hydro and a more favorable rate of exchange. While we are at it, we have to lift these soft timber tariffs, else all our mills, here on this side of the border, will be marginalized. We do not need further mill closures and layoffs in the forest product sector of our state economy.

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 The Electric Utility Business - The Opportunity Cost Associated With Purchased Power.

At the Harvard Business School, as well as Stanford, the MBA student is taught about portfolio management and the concept of asset and liability management, that is the best way is to match assets (the customer base or revenue stream) with how you finance that base (in the case of the PUD, the sources of purchased power). Drop by anytime and I will show you both the heuristic and deterministic models to use to see whether or not the PUD system is sub optimized.

But one thing missing in the energy policy debate is that the customer use profile has an embedded opportunity cost associated with it. If as a residential user, I use less, than less is indeed more. That means the PUD uses substitution for purchased power. Conservation is another source of power, because the more we conserve, the less the local PUD has to buy or make itself, thus saving as compared to the case where we just waste electricity.

Indeed if a user generates their own power with cogeneration or they use a fuel cell at their home, home office or office to partially carry the load, then the local PUD has savings that would otherwise not be the case, had that customer just consumed and not conserved or made power themselves.

So if the conservation efforts save 10% of load, that is 10% less required to buy on the market, or make yourself. Ten percent less natural gas fuel used, less in the way of new lines and stations. Lowers the capital and take or pay operating cost to the PUD system.

This means that local, state and federal agencies should be subsidized by the PUD system with lower rates, than would otherwise be the case, had they not used fuel cells and cogeneration. Indeed GH Paper and Weyco and others that employ cogeneration should receive lower rates for purchased power from the PUD, had they not generated part of their load themselves.

Why the BPA policy of raising rates to fund the federal treasury deficit is misguided and simply not working. Hurting the economy of this state and the entire Pacific Northwest. Why we need to elect US Senator Patty Murray. Return control of the US Senate to the Democrats.

The Bush energy plan does not take into account the intrinsic and imputed values, the opportunity costs. If we do nothing, as the Vice President says, the cost of not doing this is so much higher than the cost of doing this.

If rate setting uses this model, if user conservation is seen as a replacement and a substitute for generation, then we need fewer major power facilities and fewer high tension distribution lines. For conservation is the same as generation on site and fuel cell use and cogeneration are load reduction vehicles.

So less is more. More clean air and more savings to the PUD. Maybe it is time to study this and look at these rate models. The base case is maintain the status quo and the alternative - encourage use of on site generation, in the form of conservation, fuel cells and cogeneration.

What would be the optimization model. A deterministic dynamic programming model that applies slack and surplus variables and quantifies the opportunity cost that is saved due to means that lead to less purchased power by the PUD system.

And then maybe we can have our cake and eat it too. Pay the cost at these dams to save the salmon. These two are not mutually exclusive or exhaustive. If you do the math and some of it is rocket science, optimization models, we could have lower rates, less pollution, less high tension lines, fewer power plants and dams that save fish, not destroy them.

Edward David Perrotti (retired)
CEO and Founder, Risk Analytics
Aberdeen, WA

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Education:

Rensselaer Polytechnic Institute
BS, Aeronautical Engineering (1969), MS, Management Science (1973)

Harvard Business School
AMP, Executive Management Program (1975)

Experience:

Philadelphia Electric Company (1969)

Corporate Finance Dept.

Responsible for the development of new capital market financings for electric and gas utilities as well as energy capital equipment. Arranged debt and equity corporate offerings and created several original lease financing structures for use in power generating plant projects.

Fleet Financial Group (1973)
Vice President, Capital Equipment Finance

Pioneered the use of leverage lease financings in the utility and transportation industries. Lease financing structures for domestic and international carriers for DC10's, L1011's, 727's and 747's. Privately placed debt and equity offerings. Created innovative aircraft lease financing structures that employed joint venture partnerships with GE, GATX and the Bank of Tokyo. Expert in modeling equipment residual values and tax oriented lease optimization techniques.

Chase Manhattan Bank (1976)
Vice President - Capital Markets Group

International capital equipment finance. Created the initial off off balance sheet corporate financing arrangements for use in the international oil business. Developed the LTL structure as a means to facilitate the joint venture partnership financing of capital equipment sales. Developed multi-currency and cross border leverage lease financings for German capital equipment into offshore markets. Privately placed leverage lease equity and debt securities.

Texaco Inc (1980)
Director - International Project/Marine Finance

Responsible for negotiating and documenting all lease financings of VLCC marine vessels, refineries and production facilities. Financings included the Cool Water gasification plant, the LOOP offshore facility, the Highlander project, the Pembroke refinery and cogeneration investments in the US. In addition, arranged lease agreements in the US, Europe and the Pacific (Caltex) with a variety of commercial and investment banks.

Promoted to President, Texaco Marine Financial Services with responsibility for global fleet financial management.

Deutsche Bank Capital Corp. (1986)
Senior Vice President, International Leasing Group

The structuring of multi-currency cross border tax oriented lease financings for capital equipment exported

to the US. Work included the development of programs for Airbus, Daimler, Bombardier and Porsche. Devised a joint venture/partnership subsidiary for use by Messerschmidt in the financing of commercial helicopter sales in the US.

Other:

Adjunct Instructor - US Naval War College, Newport, RI (1975)

Co Founder - Expert Health Systems, Technology Planning Associates (1991)

CEO & Founder - Risk Analytics, LLC (1994)