From: CRAIG M PATTERSON

Sent: Thursday, January 31, 2013 12:54 PM

To: Walker, Mark

Subject: Comments on 6th Northwest conservation plan

Dear Northwest Conservation Council,

The main point I wish to make in regard to the 6th conservation plan is about methodology and approach. I believe the present emphasis on 'modeling' conservation savings is both inaccurate and ineffective from a number of critical perspectives. Please consider my thoughts and analysis and respond back if there is time and you take my criticisms as valid and important.

First let me share a brief recap of my history with energy and conservation. I have been directly involved with these issues since the oil embargo's of the 1970's. In 1982 I developed a sponsor designed conservation measure through Lane Electric Cooperative where we demonstrated that thermal drapery products could save the 50 mils per kW saved required to qualify, then the board refused to submit for reasons of energy surplus and the 10 life expectancy of the drapery products. I had argued this could not only help stimulate rural economic opportunity but could also education about solar gain, transmissivity and basic energy conservation.

I have been a long time opponent against Nuclear power and WPPSS certainly drove the reality home. I have testified against the Direct Service Industries as there benefit to the region in terms of jobs verses energy use is not consistent with cost/job benefit analysis when viewed against the job benefits of other industries across the region.

I have sold and installed direct solar and solar hot water systems, professional energy services including energy code compliance surveys, blower door and duct blaster tests and energy audits. I have an extensive and diverse energy and conservation background.

Thus when I see the goal of meeting new load through 85% conservation, I become concerned for the following reasons;

- 1) Modeled savings may or may not be verifiable, particularly in light of the increasing electronic appliances, gadgets and conveniences that enter the marketplace daily. How many times has someone taken their rebate from purchasing an energy efficient washing machine and purchased a bigger electric space heater for their RV? Modeled savings doesn't begin to measure true savings.
- 2) Modeled savings and paying for conservation on the front end misses the boat in regard to instilling an "ethic" of conservation. If conservation benefits were paid over time with 'verified' savings, an ethic would become common place. Instead the 'Jervon' principle that conservation can lead to greater use becomes common place, psychologically and in reality, I believe.
- 3) When the cost of electricity is kept low, the incentives to conserve are minimized. I believe a tiered rate structure that goes up geometrically would be the best incentive to really encourage conservation. Particularly if there were a number of tiers so achieving conservation would have an appropriate and reachable target and goal. If this tiered rate structure gave a life line rate for

say the first 300-400 KW at cost and then when up significantly every tier (3-400 kw) the design could either focus on a revenue neutral approach or could increase revenues that could in turn be used for greater funding of effective conservation measures. If BPA gave certain incentives to Utilities who applied these tiered rates, energy conservation could be adopted with much greater effectiveness. Certainly those Utilities who still have a decreasing rate with greater use which totally undermines the notion of conservation could be shown a more enlightened way toward effective rate design.

The last comment I would make regarding the 6th regional plan is that I don't believe we have done a good job regarding holistic analysis of environmental consequences as they are reflected in our rate structures. For example a study on the Eastern seaboard has suggested that if health consequences attributed to the burning of coal were captured in the KW charge the three scenarios would increase the present cost either 9 cents, 18 cents or 27 cents per KW, which for the middle and high end scenario would cost more than is charged now. Obviously omitting these costs/consequences isn't that they don't get paid, just not by the liable/responsible party. Similarly we haven't done a good job understanding how Energy return is affected by energy investment (Energy Return On Energy Investment work that Charles Hall has championed) Biomass for example rates just slightly above tar sands on this scale, something those who support the subsidies rarely if ever acknowledge. Thus our flawed analysis directly contributes to our unsustainable ways, masking the true costs that get passed on to future generations. A totally unacceptable reality and consequence, if we are concerned for our children's future.

If you would like to explore these ideas further, please don't hesitate to contact me. I would be happy to discuss or implement any of these ideas as interest and time allow.

Very Sincerely Yours,

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