

**Jonathan Schechter – “Corpus Callosum” Column**  
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If I were king of Lower Valley Energy, I would take three steps.

First, during the fiscal year beginning October 1, 2009, I would do everything I could to get LVE's customers to use as much electricity as possible. During those 12 months, I would urge them to leave on lights, turn up their baseboards, leave their doors and windows open year-round, and generally be wildly profligate with their electricity use. To incent this behavior, I would subsidize a huge one-year cut in electricity rates by drawing down LVE's financial reserves, cutting its annual dividend, and borrowing as much money as I prudently could.

Second, starting October 1, 2010, I would completely reverse course. Not only would I raise rates, I would vigorously enact the strict conservation program I would have designed during the previous “year of profligacy.”

Third, going forward and in perpetuity, I would make aggressive conservation the cornerstone of every LVE policy and action.

Why such mixed messages? Because, while Lower Valley Energy is a great utility, it's also one of the most conflicted organizations you'll ever encounter.

Grossly oversimplified, the core of LVE's schizophrenia lies in the economic, philosophical, and social differences between its Star Valley and Jackson Hole members. One result is that members and employees are split on issues such as global warming and the need to encourage conservation: Some folks feel both are hooey; others feel LVE is morally and economically obliged to actively address both.

Given such tensions, it's pretty impressive that LVE works as well as it does, and it's truly remarkable that it's among the nation's more progressive utilities. That LVE is a co-operative makes these accomplishments greater still.

As conflict-inducing as such issues are, though, each pales in the face of the biggest source of schizophrenia facing Lower Valley, the one which will hit on October 1. At its root lies the Bonneville Power Administration.

LVE is an energy retailer: it buys electricity and natural gas from wholesalers, then sells and distributes that energy to its customers. LVE's primary electricity provider is the Bonneville Power Administration (BPA), which generates and distributes electricity throughout the northwestern US.

BPA was formed in 1937 as part of the New Deal's efforts to modernize America; the 1937 Rural Electrification Act, which provided the seed money to form LVE, was part of the same effort. BPA's initial job was to market the electricity generated by the Bonneville Dam on the Columbia River; today, it's the nation's largest generator of hydroelectric power, operating 31 hydroelectric dams in the Columbia River basin. It also runs a nuclear plant in eastern Washington, and a few smaller conventional power plants. BPA sells electricity to 147 utilities throughout the northwest, 57 of which are rural cooperatives. Lower Valley is the easternmost utility served by BPA.

By design, BPA sells its electricity essentially at cost. Because river water is the “fuel” generating most of BPA's electricity, and because most of the system's dams were built long ago as huge public works projects, BPA-generated electricity is cheap, cheap, cheap. As a result, LVE's electricity rates are cheap, cheap, cheap, literally among the lowest in the nation (Table 1).

And that's where it gets complicated. As with most of the nation's great public works projects, damming the Columbia River was done without regard to environmental consequences. Additionally, for decades BPA encouraged maximal electricity use in its multi-state service area. But within the past decade or so, BPA has come to realize that, for reasons ranging from economic to environmental, it cannot continue to supply its customers with unlimited amounts of dirt-cheap (water-cheap?) energy. As a result, starting in 2011, it will begin using a two-tiered pricing system for the electricity it generates: its traditional low rate tier; and a new higher-rate tier. It's how BPA will get from here to 2011 that creates the confusion.

Here's the deal. In late 2010, BPA will determine how much electricity it sold to each of its utility customers during the October 1, 2009 - September 30, 2010 fiscal year. This amount will be called the utility's "high water mark." Going forward, BPA will sell each utility as much dirt-cheap electricity as it consumed during its "high water mark" year, and charge the higher rate for each additional kilowatt hour. Therefore, the higher Lower Valley's "high water mark" is, the more cheap electricity it will be able to buy. By extension, the higher its "high water mark," the lower LVE's overall cost of electricity will be, meaning the lower its long-term electricity rates can be.

Hence the incentive for Lower Valley to get its customers to use as much electricity as possible during the fiscal year starting three weeks from now.

Once the "high water mark" year is over, though, everything changes. Since every kilowatt hour beyond the "high water mark" will be relatively expensive, come January 1, 2011, LVE will have every incentive to cap its overall electricity purchases at the level of its "high water mark." That means doing everything it can to either discourage growth or, more realistically, encourage conservation – as LVE has acknowledged, the cheapest kilowatt hours available are the ones it doesn't have to buy.

So come January 1, 2011, will LVE cease to be such a conflicted organization? In a certain sense yes, for it will be freed of the Janus-faced "please simultaneously conserve and use a whole lot of energy" message it has sent out during the past few years (the former because that's what "green" Jackson Hole residents demand from their cooperative; the latter because that's what BPA is incenting it to do).

But in another sense, LVE will remain heavily conflicted, especially if it's successful in achieving a really high "high water mark." Why? Because the simple reality is that the cheaper LVE's long-term rates are, the more electricity consumers will consume, a reality at odds with LVE's long-term conservation goals.

Delighting an economist's heart, price clearly drives the behavior of LVE's customers. For example, right now LVE customers can buy two different types of electricity. LVE's plain ole' electricity is that which it buys from BPA, and that electricity is pretty green: roughly 90 percent hydro and 10 percent nuclear. Even though both sources of electricity have lots of environmental problems associated with them, neither produces any atmosphere-warming greenhouse gasses.

But for those people who want to reduce their environmental footprint even further, LVE offers "green" electricity, generated exclusively from wind. For an extra 1.2 cents per kilowatt hour – an extra 19 percent, or an extra \$23 per month for the average LVE household (although you can buy a block of "green" electricity for only \$3.50/month) – customers can buy power which is not only free of greenhouse gas emissions, but has far fewer environmental problems than either hydro-power or nuclear energy.

Even though LVE's "green power" takes the cost of a kilowatt hour from 5.8 cents to 7.0 cents, that 7.0 cents still ranks among the very lowest energy rates in the nation. (Table 2) But do you know how much "green power" LVE customers buy? Hardly any: just 3 percent of the cooperative's entire annual sales. And since the Town of Jackson accounts for 1/3 of that total, it means that the rest of Lower Valley customers are combining to buy only 2 percent "green power." Put another way, in 97 percent of their electricity purchases, LVE's customers are choosing to save a penny per kilowatt hour rather than be as "green" as they possibly

can be.

Now it may be that customers are making this choice because they're not convinced that Lower Valley's "green power" is worth it. Or it may be that LVE simply hasn't marketed "green power" very well. But it also may be that, despite how hip and green we like to think we are, we're basically environmental hypocrites. If the latter is the case, it doesn't augur well for Lower Valley's future conservation efforts; nor, for that matter, for any other "green" effort the community might undertake.

That is, unless we get the pricing right. And therein lies the key to Lower Valley's future perfect world scenario. Such a scenario would start with the cooperative's "high water mark," that quantum of electricity which will remain cheap for decades to come. Ideally, regardless of how much the Lower Valley service area grows in the future, Lower Valley's customers will never use any more electricity than available through its "high water mark" allocation.

How might that happen? Only through aggressive conservation. And how might that happen? Only by making it more cost-effective to conserve than use more energy. And how might that happen? By making each additional unit of electricity beyond the "high water" electricity very, very expensive. How best to do that – how to allocate the cheap energy, how to price the expensive energy, how to incent conservation – will all be subjects of intense debate among Lower Valley's board, staff, and membership. But while the details have yet to be worked out, the community's future energy-use patterns and costs are clear, as is the basic strategy.

What's less clear is how we – Lower Valley's member customers – will choose to act. Teton County is the wealthiest county in the wealthiest country in the history of the world. We also rank high among places where economic success and community character are inextricably linked to environmental health. As a result, not only do we have an economic and moral imperative to be as environmentally sustainable as possible, we can also easily afford to pick up the tab for acting on that imperative.

Yet we don't. In fact, if our electricity use is any yardstick, we're only 3 percent as green as we could be, a yawning chasm between the talk we talk and the walk we walk. The bad news is that this 97 percent gap is a damning indictment of our lives and lifestyle; the good news is that there's ample room for improvement. Figuring out how to take advantage of that opportunity is the challenge facing the community's leaders, environmental and otherwise.

**Table 1**  
**US Average Electricity Rates, by State**  
**Most and Least-Expensive States**  
**v. Lower Valley Energy Basic Rate**

Rank	State	Average Rate/kWh
1	Hawaii	\$0.300
2	Connecticut	\$0.187
3	New York	\$0.175
4	Rhode Island	\$0.168
5	Massachusetts	\$0.167
	US	\$0.106
43	Wyoming	\$0.077
44	Washington	\$0.074
45	Kentucky	\$0.073
46	Missouri	\$0.071
47	North Dakota	\$0.070
48	Nebraska	\$0.069
49	West Virginia	\$0.068
50	Idaho	\$0.066
	<b>LVE Basic Rate</b>	<b>\$0.058</b>

**Table 2**  
**US Average Electricity Rates, by State**  
**Most and Least-Expensive States**  
**v. Lower Valley Energy Basic and "Green" Rates**

Rank	State	Average Rate/kWh
1	Hawaii	\$0.300
2	Connecticut	\$0.187
3	New York	\$0.175
4	Rhode Island	\$0.168
5	Massachusetts	\$0.167
	US	\$0.106
43	Wyoming	\$0.077
44	Washington	\$0.074
45	Kentucky	\$0.073
46	Missouri	\$0.071
47	North Dakota	\$0.070
	<b>LVE "Green" Rate</b>	<b>\$0.070</b>
48	Nebraska	\$0.069
49	West Virginia	\$0.068
50	Idaho	\$0.066
	<b>LVE Basic Rate</b>	<b>\$0.058</b>