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Restructuring of the Electric Utility Industry: Free Markets and Environmental Protection: A Response

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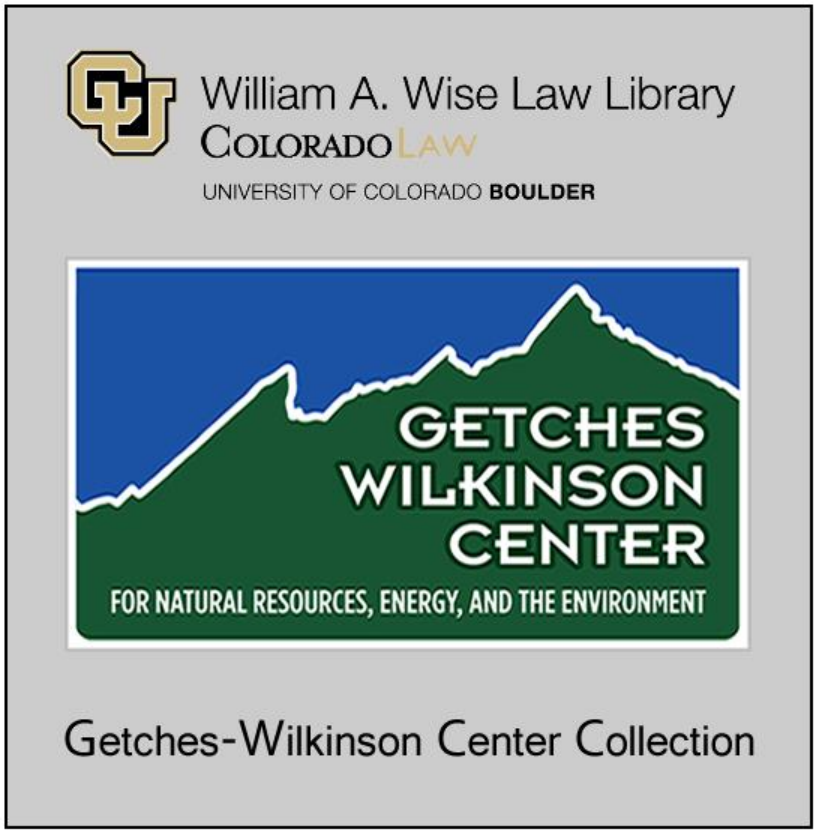

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Restructuring of the Electric Utility Industry:

Free Markets and Environmental Protection

A Response

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Free Markets and Environmental Protection

Do we have the right title for this presentation? I suggest the title chosen for this conference topic is a bit off the mark and may lead the audience to assume the italicized language represents compatible concepts. I think not. I say this because I believe the zealous introduction of "free markets" into the electric production industry threatens rather than enhances environmental protection. Perhaps a better title for this topic is: "Restructuring of the Electric Industry: Free Markets and Environmental Protection: Can They Co-Exist?"

The sales pitch for restructuring. Make no mistake about it -- key policymakers in critical positions who advocate restructuring the electric industry make their sales pitch on the basis of two catchy themes: consumer choice and lower electric rates. Look hard at the environmental records of the main legislative proponents of industry restructuring at the state and federal levels. Are they traditional supporters of environmental concerns? Hardly. Yet, these ideological purists argue that competitive markets will always efficiently allocate scarce resources and, left alone, the invisible hand of the market will properly regulate supply and demand in the electric production business. According to those who advocate change, consumers will have choices, future supplies of electric power will always be sufficient when and in the quantities needed, service reliability will not suffer, and we'll get all this at lower prices than the "monopolists" charge today. How can we go wrong if this is all true? If all these claims are even close to the truth, why didn't we think of this restructuring idea sooner?

The sales pitch threatens environmental interests. Carried to their theoretical conclusion, the arguments that restructuring will bring lower rates to consumers forms the very basis of the threat to environmental interests -- at least as far as I understand

the agenda of environmental organizations actively involved in the electric utility industry. As I see it, the problem for environmentalists is the gains obtained during the past ten years or so -- mandatory integrated resource planning, mandated energy efficiency and demand-side management programs, renewable energy portfolios, to name a few -- will all be subject to great stress in a free market economy for electricity production. Why is this so? Simply because in most parts of the West (California being a big exception of course), these environmentally friendly mandates are simply not the least cost option for consumers in the short term and in the foreseeable future.

Thus, a movement away from a command and control regulatory regime to that of one dominated by "free markets" for the production of electricity can jeopardize the battles won by environmental interests in convincing policymakers and regulators the mandated programs, while more costly now, will eventually lead to lower rates and a cleaner environment.

Hydro power operations and competitive pressures in a restructured industry. In his paper, my co-presenter states that "Hydropower, as a very inexpensive resource, is utilized during peak periods to maximize economic benefits". While this may have been true in the past, it is not the case today, at least as it relates to hydropower purchases by consumer-owned electric utilities from the Colorado River Storage Project and from the Western Area Power Administration's ("WAPA") Loveland Area Projects. Due to mandated changes in the operation of the Glen Canyon Dam, that resource can no longer be accurately considered a peaking resource, thus diminishing its value to consumer-owned utilities as a competitive source of electricity. Moreover, the prices charged by WAPA for hydropower purchases are no longer the cheapest deal in town. In fact, the firm power purchased from WAPA by the consumer-owned utility I represent ranks as our second highest cost resource after taking into account delivery costs.

Left to its own devices, a "free market" for electricity production can motivate suppliers to walk away from commitments that are not competitive and embrace supplies, no matter the environmental impact, that are cost competitive in the short run. It will be a matter of financial survival. Like it or not, these alternative supplies, given the state of technology and cost, will be fossil fuel driven. I assume even the most optimistic advocate realistically acknowledges the renewable energy industry has a way to go before it will be cost competitive without the introduction of mandatory set asides or minimum portfolio requirements. If hydropower continues to increase in cost and decrease in value, "free markets" will seek out an alternative. And what is worse for environmental interests -- hydro or coal? Think about it.

Threat and opportunity. The threat to environmental interests flowing from electric industry restructuring also appears to present opportunity. The opportunity is simply to flex your political muscle and attempt to write into industry restructuring laws mandatory environmental programs such as minimum renewable energy portfolios and "system benefit" surcharges which prop up many uneconomic energy efficiency programs. This game plan is acknowledged by my co-presenter when he states in his paper:

> Within this new market-oriented industry structure, there is likely to be significantly fewer regulatory options available to manage the adverse environmental impacts associated with the electric industry. At the same time, a new electric industry is being created that can be structured to fund and protect a variety of environmental mitigation efforts. ... On balance, we believe that the opportunities arising from electric industry restructuring greatly outweigh the risks.

Of course the success of this strategy depends on how much political muscle you have now and whether you can sustain it in the future if the cost of these programs do not, even with legislative mandates, represent a truly competitive alternative to traditional sources of electric energy production.

Renewable energy mandates. As I understand the environmental interest argument in support of mandatory, minimum renewable energy portfolios, it goes something like this: The minimum portfolio standard will create the customer demand and stability necessary to get the development of renewables over the initial cost hurdle, which will lead to further technical innovation and cost efficiencies. Creating artificial demand, the theory goes, will eventually enable renewables to effectively compete with traditional generation resources.

But who pays the price? Make no mistake about this, however -- as long as the cost of a mandated renewable energy resource is more than an alternative, the customers pay the price and their rates go up. Two violations of the pro-restructuring argument have now occurred. First, customer rates have increased, not decreased. Second, customer choice has been restricted by the mandate. While advocates of restructuring beat the drum for lower rates, lower rates, they can't tell us the magnitude of the reductions we can expect, especially in the low cost states in the Rocky Mountain region and the Pacific Northwest. But, mandatory renewable energy portfolios and "system benefit surcharges"[1] clearly represent rate increases to the consumer as long as they cannot compete with other alternatives. This leads those of us who are concerned with industry restructuring to get the message out, especially in rural areas, that the advocates of change can't tell you how much you can save, but we know one thing for absolute certain -- you'll pay more for "system benefit" surcharges.

One other point on the issue of renewable energy minimum portfolios is how long will it be before there is any confidence the cost of generation from these resources will be competitive with traditional sources of supply? I have reviewed numerous legislative bills which would continue the mandate for over 20 years and at ever increasing

[1] A bill in the 1997 session of the Colorado legislature, SB 163, contained a provision requiring a 4 per cent surcharge on the electric rates of all Colorado consumers to fund energy efficiency and renewable energy programs. The bill was defeated in committee, but if enacted, it would have resulted in a revenue increase of over $85 million annually

percentages in the total resource portfolio. To me, these drawn out mandates show little faith among their supporters whether these technologies will ever be truly cost competitive. How does this position square with the propaganda that restructuring will (but we can't tell you how much) reduce rates?

Reliability of power supply and environmental mandates. One thing I believe we can all agree on is the notion that a reliable supply of electricity is vital to the health, safety and quality of life of everyone. Because electricity is essential to the public health and safety, consumers have a right under the existing system of regulation to obtain reliable electric service at an affordable cost. In a recent survey conducted by our member public power systems in rural Southeast Colorado, customers were asked to rank a series of preferences such as low rates, reliable service, energy conservation programs, and so forth. While the desire for low rates ranked high, it was decidedly outranked by the preference for reliable service.

Electricity, unlike natural gas which can be stored for use on peak demand days, must be instantaneously available to meet customer demand. If the telephone circuits get busy, what happens? We get a busy signal. But if electricity is not instantaneously available, the lights go out, the machinery shuts down, the life sustaining medical equipment shuts off. There is no "wireless" electric service.

Renewable energy resources must not only be cost competitive, they also must be as reliable as traditional sources of supply. This imperative can indeed be a challenge for wind and solar power. What happens when the wind isn't blowing or the sun isn't shining and the demand for electricity is reaching peak levels? Hydropower, on the other hand, while increasingly criticized by some for environmental impacts, is an extremely reliable source of electricity. If hydropower comes under increasing pressure to transform from a peaking to base load generation resource (e.g., Glen Canyon), it

cannot backup electricity generated by solar or wind when peak demands are on the horizon. What will?

In the ideal power markets envisioned by some if restructuring takes place on a widespread basis, the national transmission network will resemble a vast pool where electricity is pumped in at any point and sold to anyone, anywhere who simply draws an equivalent amount of power out of the pool at another point and pays for it by sending the seller an electronic check. As one report recently pointed out, if you believe in this fantasy you are either a stock broker, an economist, or a politician. But I submit this is where the level of political debate is on the issue of restructuring -- at a simplistic level where faith takes precedence over fact. Let's just do it and we'll work out the details later! Where do the environmental interests weigh in on the subject of reliability of electric power supply? How will you answer this question when asked by consumers, especially those in rural areas: How can your programs assure us that sufficient quantities of electric power will be immediately available to us upon demand?

While environmental interests may indeed see opportunity in the debate on restructuring, the issue of reliability of electric power supply is undeniably too important a public policy issue to be avoided.

Restructuring and assurances of adequate future power supply. Under the existing regulatory structure, electric utilities have a duty to plan for and meet the future electric power needs of all their consumers. Because new power plants take many years of lead time to design, finance, and permit, efficient economic planning in the electric industry requires a fairly predictable quantification of the future demands customers will place on the electric production and delivery systems. This fairly predictable quantification of electricity demands is made possible by virtue of the service territory concept of regulation in effect in most all states for over seventy-five years. But all this

will change under restructuring of the electric industry and the ability of power suppliers to predict future demands and arrange for adequate supplies over the long term to meet those demands will be decidedly affected.

If the crusading faith of the restructuring zealots proves in error concerning the "magic" of the marketplace in efficiently allocating resources for power production, what will be the impacts? One likely impact will be a shortage of supply with opportunities to extract exorbitant prices for the product by those suppliers fortunate to own or control the sources of excess production. Another likely impact will be the motivation to extend the life of existing power plants, many of which may not be up to par with future technological advances in environmental protection equipment. A third likely impact will be the increasingly short term planning horizon for construction of new generation -- a scenario most likely to lead to increased dependence on natural gas as a fuel source and the almost childlike faith that natural gas prices will remain stable over the long term.[2]

Planning to adequately meet future electric power needs with assurances customers will have the quantity of power needed upon demand carries with it significant public policy issues. Restructuring and "free markets" could adversely affect this significant public policy objective and exacerbate, not mitigate, environmental concerns.

Will the opportunities presented by restructuring outweigh the risks to environmental interests? While admittedly a crapshoot, I suggest the risks of weighing in on the pro-restructuring side may present considerable risks for the environmental community. This may especially be the case when considered in the

[2] An unlikely occurrence. On January 1, 1997, Public Service Company of Colorado raised its residential rates for natural gas service by 22% -- its largest increase ever. The explanation for this whopping increase was volatility in the price at which Public Service buys gas in deregulated gas markets

context of recent gains and the prospects for further advances while working within the existing system of regulation.

While I believe the "risk list" can be extensive, here are several that readily come to mind: There is always the risk the legislative mandates will look good upon bill introduction, but they will be whittled away to little more than window dressing during the legislative process. There is the risk the mandates will be scrapped later if the promises for cost competitive improvements in renewable energy supply sources do not come through. A third risk is degradation in the environmental impacts of existing power plant resources where short term market economics dictate extending plant life rather than replacing these older units with cleaner technologies. A fourth risk is the incentives which restructuring will create for profit making utilities to increase market power and become true monopolists, not subject to rate or resource planning regulation. If this happens, the environmental community will essentially forfeit all the gains made in recent years working within the existing system of regulation.

Maybe these risks are worth the potential upside for further advancement of environmental interests. Maybe not.

We are seeing dramatic changes in power supply issues within the existing regulatory framework. While it is often said by those who strongly favor a stepped up pace for environmental considerations in the electric power business that the current system is unresponsive, the fact of the matter is that change is occurring within the existing system of regulation. I encourage environmental interests to work within this dynamic system before all hope is lost and your lot is irrevocably cast with those who would radically restructure the industry. While the upside gain may be slower, I submit it will be steadier and the risks to environmental interests minimized.
One example of how consumer-owned utilities are responding to power supply issues and environmental considerations is the Wind Power Pilot Program recently introduced

by the municipal electric utility owned by the City of Fort Collins, Colorado. This program offers customers the opportunity to participate, on a voluntary basis, in the purchase of a portion of their power needs from a wind generation resource. Customer interest in this program has been very enthusiastic and at last count over 650 customers have signed up for it. The City of Colorado Springs municipal electric utility is participating jointly with other regional utilities in the development of a wind generation resource located in Wyoming. These examples are merely illustrative of many innovative programs being implemented that reflect consistency with the position of environmental interests.

Community-owned utilities are particularly well suited to address these issues for several reasons. First, municipal and other types of public power systems came into existence in the first place as a direct result of consumer choice -- the choice of local communities to provide for their own power needs, to work out community based decisions on how this is to be accomplished, and how local citizens and businesses would be treated in fulfilling their need for reliable, competitively priced electric power. Second, municipal systems are non-profit operations. Any margins earned by a municipal system are reinvested in the local community, not siphoned out of our cities and towns. Third, municipal systems are run by and regulated by locally elected officials. Citizens elect their neighbors to make sure the community based electric system continues to be responsive to the needs of the community at large. Because municipal systems are consumer owned, consumer operated, and consumer controlled, they adopt policies that reflect consumer desires and needs.

This is exactly what is happening in Fort Collins. And it is happening without mandates, without pitting some consumers against others which restructuring will do, without implementing discriminatory and preferential rates for the largest consumers which restructuring will inevitably do, without disadvantaging further those consumers least able to participate effectively in a "free market" electric industry which

restructuring will inevitably do, and without risking the reliability and continuity of electric power supply. We invite environmental interests to work with us as we experiment with new programs while maintaining the essential fairness of the existing regulatory system.