TESTIMONY OF BRUCE C. DRIVER
FOR
WESTERN RESOURCE ADVOCATES
ON HOUSE BILL 2711

INTRODUCTON

Mr. Chairman and distinguished members of the Committee, I am Bruce Driver.[1] I am an energy and water lawyer and consultant, today appearing for Western Resource Advocates (WRA).

WRA is an environmental law and policy center serving the American Interior West. Since 1991, WRA has promoted a western electric system that lowers electricity costs, reduces economic risk and protects the natural environment of the region. Ordinarily, WRA does not appear before the Kansas legislature. However, because the legislation before the Committee will affect the future of the planned Holcomb pulverized coal units and because a substantial share of the power generated at these units would be available to Tri-State Generation and Transmission Association (Tri-State) in Colorado and elsewhere in WRA's region, WRA believed it could offer some perspectives that would be useful to the Committee. In this regard, I do not take a position on House Bill 2711. Rather, I provide information that may provide context for the Committee's consideration of the legislation.

SUMMARY

[1] My background includes working as committee staff in the U.S. House of Representatives for both parties on energy and environmental issues; serving as Scholar-in-Residence for the Western Governors' Association; and serving WRA as its Energy Program Director and, then, Executive Director. I have a B.A. from Yale University, an M.B.A. from Columbia University School of Business and a J.D. from the School of Law, University of Michigan.

I. Climate and related utility regulatory policy in Colorado.

It is my understanding that there are those who say that Kansas might as well build pulverized coal (PC) units in Kansas for the economic benefits, since these units will be built in Colorado anyway, if they are turned down in Kansas. While no one can be sure of Colorado's response to an application by Tri-State to build PC capacity in Colorado, it does not seem likely that such application would be any better received in Colorado than it has been, so far, in Kansas.

Last fall, Governor Bill Ritter issued his "Colorado Climate Action Plan, A Strategy to Address Global Warming." In it, he stated that "Specifically, Colorado will…by 2020, reduce greenhouse gas emissions by 20 percent below 2005 levels [and] by 2050, reduce [such emissions] by 80 percent below 2005 levels."[2]

In 2007 Colorado legislators and Governor Ritter approved measures requiring electric utilities, including cooperatives, to meet a state renewable energy portfolio standard; increase utility attention to energy efficiency; increase financing and planning for transmission lines designed to deliver renewable energy to market; align city, town and county building codes with the 2003 International Energy Conservation Code; require co-ops to offer net metering and many other measures and several other measures[3]. Earlier legislation promotes IGCC with CCS in Colorado.[4] Colorado is now fully committed to a "green" energy future across all sectors.

In 2005 Colorado sources emitted 118 million metric tons of CO2 equivalent gases, up from 87 million tons in 1987. Electricity consumption was responsible for 36% of 2005 emissions or about 42 million tons.[5] If the electricity sector, specifically covered by the Governor's plan, is to play its proportional role in emission reductions to meet the

[2] "Colorado Climate Action Plan, a Strategy to Address Global Warming," Office of the Governor, November 2007, p. 3.
[3] **Id.**, p. 11.
[4] **See** 40-2-123, C.R.S.
[5] **Op Cit.**, fn 2, p. 9.

Governor's targets, this sector will have to find a way to decrease its emissions by over 8 million tons by 2020 and by almost 34 million tons by 2050.

The Governor's plan carves out a special process for cooperative and municipal utilities, ending with a request that those entities submit plans showing how and when they propose to meet goals comparable to the 2020 20% reduction goal. The Governor's plan states that "…we believe that all of Colorado's electrical utilities and their wholesale providers should contribute to reducing the state's greenhouse gas emissions."[6]

Each 700 MW pulverized coal unit planned by Sunflower and Tri-State would add over 4 million tons of new CO2 to the atmosphere per year.[7] It seems unlikely that the state of Colorado would look favorably upon one or more large new sources of CO2 in the state when state policy is markedly to reduce these emissions well within the lifetime of any new PC unit.

II. **The larger picture: PC unit cancellations and deferrals**

Is Kansas, in denying the permits for the Holcomb units, alone in questioning the appropriateness of PC technology? I t does not appear so.

Increased costs of construction, the availability of cleaner, low-cost and lower-risk alternatives coupled with the risk of climate-change legislation have slowed plans to construct PC units in the U.S. For example, in 2007 roughly 14,000 MW of announced coal-fired capacity was cancelled and another 32,000 MW was deferred.[8]

Perhaps chief among the causes of the turn-around in the fortunes of coal is the risk of climate-change legislation. Every $10 in cost per ton of CO2 of the purchase of emission

[6] **Id.**, p. 19.
[7] Assuming emission of 1,747.05 pounds of CO2 per MWh of generation and an 80% capacity factor. See also "A Balanced Energy Plan for the Interior West," Western Resource Advocates in collaboration with Synapse Energy Economics, Inc., and the Tellus Institute, 2004, p. 64.
[8] See "16 U.S. coal-fired plants scrapped this year, Utilities struggle with global warming concerns, construction costs," Matthew Brown, Associated Press, Boulder Daily Camera, October 18, 2007, based on U.S. Department of Energy data.

allowances adds about 8.7 mills per kilowatt-hour generated by burning coal from a PC unit.[9] For planning purposes, it is prudent to assume that the cost of buying an allowance to emit 1 ton of CO2 will rise well above $10 per ton during the life of new PC units. Indeed, it appears that the price will rise to whatever it takes to reduce GHG emissions by 60%-80% by 2050, the range of targets included in the leading climate-change bills before Congress.[10] At this cost power from PC units may no longer be competitive with power from combined-cycle natural gas units or even concentrating solar technology, not to mention the enormous amount of demand-side management investments that would then be cost-effective. It is no wonder that a growing number of utilities, if not Sunflower or Tri-State, are reconsidering PC technology.

Perhaps an even stronger signal to utilities about PC technology is coming from Wall Street. In an article published in the Wall Street Journal on February 4, 2008, Jeffrey Ball writes that "Three of Wall Street's biggest investment banks are set to announce today that they are imposing new environmental standards that will make it harder for companies to get financing to build coal-fired power plants in the U.S. Citigroup, Inc., J.P Morgan & CO. and Morgan Stanley say they have concluded that the U.S. government will cap greenhouse-gas emissions from power plants sometime in the next few years. The banks will require utilities seeking financing for plants before then to prove the plants will be economically viable even under potentially stringent federal caps on carbon dioxide, the main manmade greenhouse gas…'We have to wake up some people who are asleep,' says Jeffrey Holzschuh, vice-chairman of institutional securities at Morgan Stanley."[11]

Could it be that Sunflower and Tri-State are "asleep?"

III. **Tri-State's resource plan**

[9] $10/ton is 5 mills/pound. A kWh of electricity generated from a PC unit carries with it 1.747.05 pounds of CO2 (see fn 7). Thus, a $10/ton cost of carbon emissions adds about 8.7 mills to the cost of each kWh.
[10] In its 2007 Resource Plan Tri-State modeled the effect of its resource mix of carbon costs of $10/ton, $25/ton and $35/ton. See Tri-State's 2007 Integrated Resource Plan, p. 172.
[11] "Wall Street Shows Skepticism Over Coal, Banks Push Utilities to Plan for Impact of Emission Caps, " Wall Street Journal, February 4, 2008, p. A6.

At least half of the power generated at the new Holcomb units will be used on the Tri-State system. Thus, before Kansas adopts legislation to facilitate the construction of these units, it makes sense to take a look at whether Tri-State really needs to build and finance these units.

The contents of a recent report, "A Commitment to Serve: A Cooperative Board Member's Guide to G&T Resource Planning," authored by Summit Blue Consulting, suggests that Tri-State may not need to build and finance these units, indeed, that to do so would expose Tri-State, its member co-ops and their member-owners to unnecessary and significant risks.

Summit Blue is a well-known electric-industry consultant with utility and other consultants across North America. At Western Resource Advocates' request, it described the elements of good resource planning for G&T electric utilities, of which Tri-State is one. As well, Summit Blue reviewed Tri-State's existing resource plan, on the basis of which Tri-State believes it should build and finance the majority of the capacity of the Holcomb units.

Based on the resource plan filed by Tri-State with the Western Area Power Administration about one year ago, the Summit Blue report points out that:

1. There appear to be incentives for some Tri-State member co-ops to over-forecast load growth on their systems.
2. Tri-State has failed properly to consider the role that energy efficiency, renewable resources and efficient combined heat and power resources could play in cost-effectively meeting load growth on the Tri-State system.
3. Tri-State's resource plan increases neither diversity nor flexibility on its system, leaving its members open to risk of federal climate-change regulation.

Summit Blue sees the denial of the Holcomb permits as an opportunity for Tri-State to review its existing plan, including much greater attention to clean resources for the purpose of introducing more diversity to a utility already heavily reliant on coal. In particular, Summit Blue sees additional diversity on the Tri-State system as providing system reliability benefits, offering the ability to better manage their energy costs, and maintaining a competitive regional energy economy as businesses increasingly look for locations with robust, diverse energy supplies from demand-side and supply-side resources."[12] In this regard, it is clear that the Tri-State system contains abundant resources of demand-side management, renewable resources and combined heat and power.[13] For example, Tri-State co-operative customers serve loads in an area with one of the best wind and solar resources in the country.

I should reveal that I have a personal stake here. I am a member-owner of the Gunnison County Electric Association (GCEA), a Tri-State co-op in western Colorado. It matters to me, and a growing number of GCEA and other co-op owner-members, that Tri-State review its existing resource plan and consider a more diverse and less risky mix of resources.

The result is that, if Kansas legislators think they would be doing those of us who purchase our electricity from a co-op served by Tri-State a favor by making it much easier to build the Holcomb units, we would hope that you might spare us this favor.

IV. Federal Climate-Change legislation

The leading bill under consideration in Congress to address climate change is S. 2191, authored by Senators Lieberman and Warner. This legislation would require reductions of GHGs below levels of covered sources (86 percent of U.S. emissions and including electricity production) of 4 percent by 2012, 19 percent by 2020 and 71 percent by 2050.

[12] "A Commitment to Serve: A Cooperative Board Member's Guide to G&T Resource Planning," Summit Blue Consulting, November 2007, p. 40. Http://www.summitblue.com/dyn_download/irp_white-Paper-final.pdf

[13] See "Tri-State Generation and Transmission Association's Resource Plan, Analysis and Alternatives," Western Resource Advocates and Southwest Energy Efficiency Project, April 2006.

The bill would also create a cap and trade system administered by the EPA and would allocate a growing percentage of allowances, reaching 100 percent by 2030, to activities that would provide public benefits, such as renewable and other green technologies. It would allow up to 15 percent of a facility's compliance obligation to be met through the purchase of verified offsets, defined as reductions from sources outside the capped sectors.

Of course, it is not known today whether or when this legislation will be enacted. Yet, the bill is the result of significant negotiation, and it has been reported out of Committee to the floor of the U.S. Senate. S. 2191 is an indication of the direction in which Congress is going on climate change. Moreover, the leading presidential candidates in both parties support cap and trade legislation. My impression is that federal climate-change legislation is nearly inevitable, even while its provisions are up for debate.

It is likely that any state legislation that is not at least as strong as that contained in federal climate-change legislation will be preempted by it. That is the way virtually all federal environmental legislation works. Moreover, if one or more states are allowed to implement less stringent legislation, it would jeopardize the ability of the U.S. to meet the cap on emissions, suggesting the likely importance to federal policymakers that individual states not be permitted to implement climate-change programs that are less stringent than national policy.

If Kansas goes ahead and enacts its own coal-plant, climate policy and offset legislation, and it or elements of it are later pre-empted by federal legislation, there may be trouble for those who made investments relying on Kansas's legislation.

Are there elements of the pending Kansas bill that are likely to be weaker than and inconsistent with federal climate legislation? No one can know for sure now, but some provisions of the Kansas bill appear vulnerable. In particular, the Kansas bill's very liberal offset policies could well be pre-empted, in particular offsets for investments in

research with no necessary results and credits for investment in offset measures that may occur anyway or may have already have occurred.

Kansas needs to be careful not to send its energy economy down a road that may be preempted by federal legislation after money has been spent and expectations raised.

CONCLUSION

Thank you for the opportunity to present testimony before the Committee. I hope the information I present is useful to you as you grapple with the contentious issues that you face.