

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO  
DOCKET NO. 08I-227E**

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**IN THE MATTER OF THE INVESTIGATION OF  
ELECTRIC TRANSMISSION ISSUES AND THE OPENING  
OF AN INVESTIGATORY DOCKET**

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**Interwest Energy Alliance Comments  
on Colorado PUC Transmission Policy Statement**

The commission decision (Decision No. C08-0607) to open this docket asks three questions:

- “...have we identified the appropriate issues, should any be deleted or modified and are there others that should be added;
- with respect to...Senate Bill 100 and CCPG, what would be the appropriate level of involvement for the PUC and are there other generation resource and transmission facility planning activities being pursued by utilities and others that we should actively follow; and
- ...are there suggestions regarding priorities to pursue in light of budgetary and resource restraints.”

Interwest believes that the right policies are included. We make some suggestions about emphasis and possible additions to the list below. We propose that the commission staff role in transmission planning needs to be revamped or out sourced. Since the commission is not alone in its interests in transmission, we suggest that its role should emphasize leadership, convening parties to work on the issues, and mobilizing allies to get things done.

## **Interwest Comments on the Draft Policy Statement:**

**“These resources are generally more dispersed, with lower capacity availability factors, than traditional fossil fuel plants.” Page 1**

Interwest suggests that it is important to distinguish capacity factors from availability. We think capacity factors are the percent of time out of the total of time that the generation facility is producing power. Project “availability” represents the percentage of time out of the total of time that the facility is physically ready to produce power. Wind power capacity factors in energetic wind development areas in Colorado are typically between 30 and 40 percent. Wind industry availability factors are in the high 90s, among the highest availability factors for any power production technology.

**“Effective planning for expansion of the transmission grid will require decisions that are made many years in advance of the need. Such long-term planning is complex...complicated by incremental increase in generation resources expected to be added...require planning horizons different than the planning horizon required needed for transmission facilities.” Page 2**

In Colorado, public policy helps to bridge this timing gap between transmission that can require five to seven years (or more) to mobilize and renewable energy projects that can be developed and producing power in about two years. Colorado’s people and legislature have decided that the state’s enormous renewable resources will be developed for the benefit of the state and its citizens “...to the maximum feasible extent.” This

requires a new process for planning long-lead time transmission projects to match the timing of beneficial energy resources. This is precisely the policy now in place in SB07-100. What remains is to implement this new policy fully and effectively by speeding up transmission.

**“We anticipate that the Colorado Coordinated Planning Group (CCPG) will approach these issues as “one utility” within Colorado, coordinated with Southwest Area Transmission (SWAT) within WestConnect, and with neighboring subregional planning organizations.” Page 3**

Interwest has been driving toward this end for the last three years. Our comments on the CCPG CLRTPG 2006 “coordinated” transmission plan pointed out that that plan was not coordinated at all.<sup>1</sup> By its own terms, the plan pointed out that there were two plans incorporated there that were mutually exclusive and needed to be coordinated, one for Xcel and one for Tri-State. But the coordination never got done.

Our experience to date suggests very strongly that this split between Xcel and other Colorado utilities has persisted and continues today. Today’s planning exercises, SB07-100 and the CCPG CLRTPG, meet on the same day in the same place and involve the same transmission planners and stakeholders. But they have different planning horizons, 2015 and 2018, different assumptions about amounts and markets and timing for generation resource development, and they aim to inform different

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<sup>1</sup> See comments letter at [http://www.interwest.org/documents/documents/2007-02-09\\_ccpg\\_ltr\\_9feb07.pdf](http://www.interwest.org/documents/documents/2007-02-09_ccpg_ltr_9feb07.pdf)

decision makers. As a state, Colorado still needs a “one utility” approach.

The commission must insist on this approach and make it stick.

**“Any additional transmission infrastructure will need to be funded. To accelerate transmission investment, alternative cost allocation methodologies must be explored.” Page 3**

Exploring alternative cost allocation methods is always a good idea, but Interwest is concerned that this exploration not provide any excuses for not exercising the existing methods to the fullest possible extent, not delaying progress that could be had under the existing methods.

Generally, the FERC cost allocation manual allocates costs based on relative use. States and FERC both use these techniques and they work together to improve and change these methods over time, so there is an ongoing discussion about improvements. These traditional cost allocation methods are certainly the basis for moving forward, since they are the methods that have successfully allocated costs of the existing system, which is obviously quite extensive.

Cost allocation is the process by which joint and common costs are allocated for accounting purposes, and in the regulated utility sector, the allocations provide the basis for cost recovery. Cost recovery is the process of assigning allocated costs to rates. The commission should respect the differences between these two processes and encourage parties that address the commission on these issues do likewise.

Confusing these two different processes, or conflating them into one issue as is too commonly the case, makes resolution of the issues that new conditions raise more, not less, difficult.

Cost allocations can be usefully analyzed in two categories: joint costs of production and common overheads. The challenging problem is that there is no precise, economically justified method for allocating these costs.

Common overheads are typically a small fraction of the total of joint and common costs. These are costs like management salaries, lawyers, accounting, and similar costs that are common to a total business enterprise. Joint costs of production are the costs of products that have several benefits. Joint costs are by far the larger fraction of costs that must be allocated. A transmission system in an electric utility is a good example, because transmission systems provide a bundle of benefits that all come together: reliable service, access to generation, reserves that provide power when unanticipated events disturb system operations are examples. These benefits can't be provided one at a time. They all come together, or none of them are available.

The usual teaching example of the problem with joint costs of production is a farmer that raises a sheep, selling it for mutton, hide, and wool. The three products of the sheep are the joint products. Costs for growing and selling the sheep are joint costs of production. How much did it cost to

produce the mutton? How much the wool? How much the hide? While there might be some of the total costs that can be assigned to each joint product, it is generally accepted that trying to achieve some precise allocation of joint costs is futile. These allocations become judgment calls. It is the province of utility commissions to determine how to allocate joint costs of these joint products when regulated utilities make the investments, like additions to the transmission system, that lead to joint products and joint costs.

Cost recovery takes the allocated costs and assigns them to rates or charges so they can be assigned to those from whom payment of the costs will be expected. The general principle of cost recovery is that “cost causers should pay costs” and again the notion of relative use is a means used to think through how to recover costs.

Since we have systems for allocating costs, and cost recovery that follows, Interwest believes that the burden of persuasion should be on those who think that the current system should be changed to make a cogent case for the problems that they perceive and for the solutions that they present.

**“These incremental additions to the transmission infrastructure can be accomplished while impacts to the public’s quality of life and the environment are minimized.” Page 4**

Interwest believes goals for building out Colorado's transmission infrastructure to will be materially assisted by engaging the best information provided by those whose professional carriers have been spent protecting the state's environment, wildlife, and natural resources. By engaging this information early in transmission planning processes there might be more time spent up front, but we believe that the time saved at the end of the process, avoiding hassles that could have been anticipated with early effort, will more than pay back the time invested early. The goal should be "no surprises" on these issues.

**"Our policies will include the following: Appropriate planning horizons (short term and long term)" Page 4**

Interwest's experience as a stakeholder in ongoing transmission planning projects in Colorado and in the region, suggests that while there continues to be a need for better short term transmission planning, there is a crying need for longer term planning. The utility transmission planners that we interact with typically tell us that a ten-year horizon is all they feel is relevant to their work. With transmission build outs taking five to seven years, a ten year planning horizon seems to us to be a minimum required to justify the next building and investment cycle. Without looking farther down the road than ten years it is hard to come to the conclusion that the ten year plan is building the right options for the next twenty, thirty, or fifty

years. We think the technique of “scenario planning” is a good way to handle these longer term issues.<sup>2</sup>

**“Transmission pricing across multiple utilities (“postage stamp” rates vs. “pancake” rates); improvements to the transmission interconnection queue process; expansion of control areas; and full compliance with FERC Open Access, Order 890, and Order 2003 policies;” Page 5**

Interwest supports postage stamp rates. Pancake rates are one of the most important barriers to power markets that can deliver Colorado’s resources to export customers. WestConnect’s through rate experiment coming up in the Fall of 2008 should provide an opportunity to test this concept, albeit in a very circumscribed way. We think the commission should encourage Colorado jurisdictional utilities to use this rate to the maximum possible extent. They should, with active leadership from the commission, report on their experience with it. Based on that experience, we hope that Colorado utilities will become more active advocates for more experimentation and rapid movement toward elimination of pancaked rates.

There are a number of proposals now being entertained by FERC as a result of its technical conference on interconnection queues. These generally move toward area or vintage studies, and combine projects for studies. A useful activity for the commission would be to monitor and

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<sup>2</sup> See, “The Art of the Long View” Global Business Network Peter Schwartz

report on the status of Colorado jurisdictional utilities' queues. Analysis of the best proposals coming forward in other locations to address these issues should be readily at hand to address problems with queues that frustrate development of Colorado's resources.

There are two issues that are priorities. One is improved responsiveness and shorter timelines on interconnection requests and transmission service request process. Tri-State and Xcel simply don't take requests seriously. There are a range of options including more commitment from IR customers, new structures, transition to a third party administrator, etc.

The other is utilities treating independent power producer input taken seriously in the transmission planning processes, SB-100 and CLRTPG. No new plans match utility transmission planners' statements and commitments to date. Progress through interconnection queues is slow.

Combined, these two issues kill near-term export opportunities.

Colorado has two control areas. One is run by Xcel out of its control center in Golden. Western runs the other one in Loveland. The commission should be asking why Colorado needs two of these functions. What caused the state to have two of them in the first place? Are they duplicating efforts? And most importantly, if costs of power in the two

areas are different, why is that? Why are costs higher in one control area than in the other one? We think the answers to these and similar and related questions might quickly lead to a tight case for combining these control areas.

There are also proposals for control area expansion that propose that most of the benefits of a single control area could be gained by agreements among and between the relevant parties and that the consolidation could be both “virtual” and less than entire. WestConnect drafted a work plan for an investigation of “virtual control area” concepts and practice which was absorbed, for the most part, into the NREL study “Western Wind and Solar Integration Study”(WW&SIS).

The one task that we understand remains with WestConnect is the very important issue of regional market access to real time regulation services. Both of these studies deserve close attention because it is not simply a matter of providing additional physical transmission facilities that is at stake here, but also providing market and operational reforms that allow those new regional transmission investments to serve emerging new markets, particularly for clean, renewable energy resources.

Compliance with 890 transmission planning responsibilities is another example of the current, leisurely pace of transmission work in Colorado.

Interwest participated in an April, 2008 meeting to kick off Xcel's 890 planning work in Colorado. Shortly after that meeting, and in response to an invitation to put our concerns and questions, we wrote a letter to Xcel summarizing them and asking for a response.<sup>3</sup> In July, we are still waiting for a reply. So much for responsive transmission planning.

**“Regional cooperation in cost allocation, as well as siting and permitting;”  
Page 5**

The Northern Tier Transmission Group has adopted a cost allocation and cost recovery process that bears scrutiny on this issue. It addresses the need for states to work together to provide cost recovery for interstate transmission projects. Generally, the NTTG process requires an applicant for a certificate of need for a transmission project that impacts more than one state to file with their application a process that they propose for cost recovery. The states involved then use the principles in the NTTG process to give the applicant a response that tells the applicant if the states think their cost recovery proposal meets the standards that NTTG has adopted. States retain their jurisdiction to approve or deny the particular transmission proposal, but the intention is that the preliminary review will help states work more constructively together on interstate transmission projects.

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<sup>3</sup> [http://www.interwest.org/documents/documents/2008-04-15\\_xcel\\_890\\_xmisplanrequest.pdf](http://www.interwest.org/documents/documents/2008-04-15_xcel_890_xmisplanrequest.pdf)

**“Compliance with mandated Colorado Renewable Energy Standards, Demand Side Management goals, Resource Planning requirements and Climate Action initiatives, and coordination of these efforts with similar requirements in other western states.” Page 5**

Interwest emphasizes that the renewable energy standards are minimums and that the legislature has encouraged both the commission and utilities to exceed these minimums. The pace and scale of change suggested by carbon goals indicates to us that Colorado really needs to pick up the pace on developing its transmission infrastructure.

**“The PUC has been monitoring these activities and will evaluate how active it should be in the future. The Commission recognizes the need to temper its involvement in seeing projects move forward with its statutory responsibilities to hear and decide cases involving certain generation resource and transmission projects.” Page 6**

The HB06-1325 infrastructure planning task force that reported its recommendations to the 2007 legislature (leading to passage of both HB07-91 and HB07-100) included a specific request that the legislature fund the PUC to provide active participation in transmission planning processes.<sup>4</sup> Interwest has attended most of the transmission planning meetings that have been noticed and opened to the public in Colorado. The staff of the commission has been missing in action more than present and accounted for.

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<sup>4</sup> The commission’s policy statement recites this request at the bottom of page 6.

From Interwest's perspective, the commission's staff has not been in the forefront of advocacy for more transmission to be provided sooner, even at times providing comments that justify transmission business as usual. Since the staff is divided into trial and advisory parts, there is no reason we can see that staff has not participated more forcefully and positively to date. The commission should remedy this situation, particularly in the present circumstances. Colorado utilities are not providing stable priced power to consumers, one of their most basic duties. Instead, Colorado utility consumers are buffeted by high and uncertain fossil fuel costs. Transmission is insufficient to bring non-fossil resources to bear on these high and uncertain fossil fuel costs going forward. These problems have been addressed in both legislation and in this commission's policy statement, as well as in Interwest's studies and testimony.<sup>5</sup> But the commission staff is not taking a leadership role in solving transmission problems that the statement addresses.

**“[P]artnerships with Colorado governmental agencies such as the Clean Energy Development Authority and interstate partnerships with other State Commissions and Authorities in the region.” Page 7**

Interwest believes that acting in partnership with others who share the commission's policy goals is the best way to address the limitations and budget issues that are unfortunate realities within which the commission's

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<sup>5</sup> Documents available on <http://www.interwest.org/documents/index.html>, as well as study, “Wind on the Public Service Company of Colorado System: Cost Comparison to Natural Gas,” by J. Pater and R. Binz, available at [www.interwest.org/backcast.htm](http://www.interwest.org/backcast.htm).

work must be accomplished. Interwest suggests that there are potential partners who should be added to the list:

- The National Renewable Energy Laboratory, whose Western Wind and Solar Integration Study is on point with many of the policies in the commission's transmission policy statement.
- WGA and WIEB—outreach on transmission issues project being defined now and the WREZ study process is underway.
- The interests of import market states must be addressed. Who are the customers for Colorado's exports? How will they benefit if Colorado resources can reach them?
- The Colorado Renewable Energy Collaboratory, which involves both NREL and Colorado's research universities, are interested in solving the problems addressed in the commission's statement.
- The Governor's Energy Office (GEO) is seeking funding to follow up their work on the SB07-91 study. The commission can help to shape this work and benefit from it.
- Independent transmission companies bring an alternative source of funding and endeavor to utilities trapped in their current business and regulatory incentive structures.
- Non Governmental Organizations (NGOs) can provide helpful information and points of view. We particularly recommend to the commission's attention a new study by the Western Resource Advocates, their new "Smart Lines" report.