BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO
DOCKET NO. 08M-521E

Public Service Company of Colorado Senate Bill 07-100
Designation of Energy Resource Zones and
Transmission Planning Informational Report

Comments of the Interwest Energy Alliance

Interwest and the Governor's Energy Office (GEO) attended almost all of the stakeholder meetings that Xcel Energy held in pursuit of its responsibilities under SB07-100.[1] Having invested substantial time and effort in the stakeholder process that led to the report, Interwest comments on the Xcel Informational Report as follows:

1. Progress is apparent in the Xcel report. The process for transmission planning has been improved. SB07-100, together with the FERC's Order 890 transmission planning requirements, has opened transmission planning at Xcel to stakeholders, including Interwest, and Xcel has provided adequate notice of their extensive stakeholder meetings, has

[1] On May 17, 2007, Interwest made comments to Xcel on implementation of the newly passed SB07-100, which we repeated in most respects (and with added detail) in comments filed with this commission in December 2007 and which we repeat, in most respects here. This May 2007 letter to Xcel and December 2007 filing in Docket No. 07M-446E are included here as Appendix A. In our December 2007 filing, we asked for specific regulatory remedies, including a hearing, assignment of motivated commission staff to oversee transmission planning, and development of coordinated, long-term, statewide transmission plans, among many other things. In our fling in the Commission's DOCKET NO. 08A-08I-227E, "INVESTIGATION OF ELECTRIC TRANSMISSION ISSUES AND THE OPENING OF AN INVESTIGATORY DOCKET" (attached here and incorporated by this reference as Appendix B) we repeated our request for immediate commission action on most of the issues we again raise in this filing. To date, none of these requests has received a response from the Commission.

documented their progress in transmission planning with a useful and accessible web site, and has treated Interwest and other stakeholders with respect. In particular, Interwest appreciates the patience shown by Xcel planning staff in addressing the questions and comments from stakeholders. Substantively, the Xcel SB07-100 report also shows progress. It contains new transmission line proposals that do begin to address limitations of long standing in the Xcel "backbone" transmission system. There are productive examples of coordination with Tri State with regard to transmission in and from the San Luis Valley and to the Southeast Colorado wind resource area. The company has identified crucial questions that the Commission should address immediately, that Interwest understands to ask:

- How much transmission should be developed in advance of generation development, and what are the priorities?
- How can the Commission's approval process be streamlined?

Interwest joins with the company in requesting that these questions be answered as soon as possible.

2. Xcel got current cost recovery for its transmission investments in SB07-100. In exchange the company was required to plan transmission that would allow beneficial energy development that was contemplated in companion legislation, signed on the same day —HB07-1281— that

doubled the renewable energy standards to 20 percent by 2020. The company immediately applied for a rate rider and the Commission granted it.[2] Xcel is enjoying the current cost recovery that was contemplated as an incentive to get transmission planned and built at the expense of all its consumers. But the transmission plans that were the quid pro quo for consumers are still inadequate to bring lower-cost generation to the benefit of consumers in a timely way. The Commission must order a redress of this imbalance of cost and benefit between shareholders and consumers.

3. Xcel's consumers are paying more for electricity than they should because transmission is not available for low-cost wind plants that could offset higher cost generation currently on the system. See: www.interwest.org/backcast.htm. This transmission inadequacy was found by the Commission to support its decision to allow curtailment payments to wind producers in 2005. It is now 2009. Lack of transmission causes lack of generation diversity across geography, results in less than fully robust competition for power purchase agreements, and produces higher than necessary consumer and wind integration costs. For example, in the current round of RFP's, Xcel has apparently decided that wind development in Northern Colorado (or Wyoming) is preferred,

[2] Had Interwest been allowed to intervene in that docket, despite Xcel's protest, we would have provided record testimony that utility's transmission is currently inadequate, that it has been so since curtailment payments to wind providers were granted in 2005, that inadequate utility transmission service is by definition imprudent, and that no rate rider should have been implemented until transmission in Colorado was in all respects adequate.

because the only new transmission that will be available for wind development follows from the Pawnee to Smoky Hill transmission addition. This is neither a fair, nor an economically efficient result.

4. Xcel's Energy Resource Zones are too large. They include vast areas where no generation development is realistic and no development interest has been shown. By making its zones so large, Xcel has made providing transmission to their zones relatively easy; by defining large zones, thus making the claim to have provided transmission to development zones easy to support. But Xcel's large zones do not serve the Generation Development Areas (GDAs) that were defined by the GEO report to the legislature in response to SB07-91, "Connecting Colorado's Resources to the Markets." Providing transmission to Xcel's over-generous areas does not get the transmission out to the resources where it is needed. In this sense, the transmission plans are inadequate.

   In the SB 100 stakeholder process, Interwest advocated that the correct planning assumption should be that transmission should serve the GDAs where actual "beneficial generation resources" are located. We believe that this was the result intended by the legislature in SB07-100. Xcel instead showed the GDAs on its maps, but for at least half of the GDAs, transmission has not been planned. This reflects a disconnect between generation planning and transmission planning that is hamstringing

effective planning. This outcome discriminates against those areas not served. This discrimination appears to be based on transmission planner preferences or reasons of convenience and timing, not on sufficient economic or other reasons that we can discern. Transmission plans ought to respond to identification of the best generation resource areas, diversity, and ultimately to consumer benefits. These considerations are largely missing today. We understand that Xcel transmission planners prefer to develop Xcel's "backbone" transmission, but we believe that the new law requires them to plan transmission to the GDAs.

This issue is compounded by the proposed Xcel RFP evaluation process. As we understand it, Xcel has proposed granting "on-system" status to projects on Xcel-owned transmission lines that exist or have been already granted a CPCN, leaving other projects that are on the planned transmission upgrade routes (as shown in the most recent SB-100 plan) that could well be completed in the timeframe of this RFP, out in the cold.[3] Xcel representatives at a December, 2008 stakeholder meeting acknowledged this issue but had no response. Since the proposed RFP obtains all-source resources through 2015, and the transmission plans post-2015 are not available, Xcel transmission planners may have effectively blocked new development in GDAs 4, 5, and 6 for the foreseeable future by providing a transmission plan but then failing to

[3] The latest draft RfP, Appendix B, Section 210 explicitly states that Xcel will use this flawed evaluation process.

consider it when evaluating resources, and burdening those resources with wheeling costs. Again, there is an apparent lack of coordination between generation planning and transmission planning that must be remedied.

5. Because of inadequate transmission, Xcel's transmission planners are in charge of the pace, size, and location of development of Colorado's New Energy Economy, rather than the Governor, the Legislature, or the Commission determining these factors. Even given adequate deference to their high degree of professional skill, transmission planners are not the right experts to determine how much renewable energy gets developed in Colorado, how soon, and where. **The Commission must insist on adequate comprehensive, long term, statewide, coordinated transmission plans from Xcel.** It is way past time that adequate transmission plans should be in place in Colorado. For inspiration, the Commission can take administrative notice of the dockets now pending in Minnesota which start implementation of a 2020 comprehensive transmission plan, "CAPX 2020" including a long term build out, coordination among many utilities, and imports and exports to and from Minnesota to adjacent states. What is presented to the Commission and stakeholders in the SB07-100 report does not match the levels of coordination, the length of the planning term, the interstate lines and their attention to imports and exports, or the phasing and system considerations that are found in the Minnesota CAPX2020 plans. If Xcel

can accomplish successful, long term, comprehensive planning in Minnesota, they can do it in Colorado. The Colorado Commission must insist on it.

6. Lack of transmission leads to queue congestion, a source of increasing frustration for wind developers.

7. The question of incentives must be raised. We believe that there is a serious question about whether a fortress utility whose business model is earning on equity investment in generation assets, protected from competition by transmission constraints, has any effective incentive to speed timing and pace of transmission investments, despite recent state legislation or potential changes to Commission transmission rules. Evidence that this incentive question is serious includes Xcel's refusal to consider transmission for exports from Colorado to other markets in their SB 100 planning. In addition Xcel claimed for almost all of 2008 that ten-year planning was all that was required by NERC and WECC--the required ten-year floor became their ten-year ceiling. In mid-December, 2008 they dropped this absurd position and admitted that they would, in future, consider a twenty-year planning horizon. But the current plans are for "just in time" transmission that only serves their approved 2007 resource plan through 2015. Xcel told Interwest in their stakeholder meetings that they had no idea what generation to plan for after 2015,

despite their own generation plans that the Commission approved in mid 2008 that show increasing renewable energy penetration out to 2020 and beyond.

8. There are a finite number of potential interconnection points to serve Colorado's identified Generation Development Areas, and a finite number of new transmission lines that would accomplish a future-oriented transmission SYSTEM for the state that would include serving those each one of the GDAs. What is the optimal transmission system that will serve many goals for the long term in Colorado? The goals for transmission planning must include reliability, least cost, diversity, and opening options for an uncertain future. The question that follows is how to plan that system to include service to as many of the desirable renewable and low carbon resources as possible, because serving multiple goals is more efficient than serving only the goal of access for new renewable energy development. A systematic transmission plan would be more resilient and less risky than a plan that serves only one or two of many transmission planning goals. Where beneficial generation resources cannot be included in the systematic transmission plan, then the question is how to extend transmission to pick up those stranded generation areas in the most efficient way possible.

There are a finite number of economic generation resource areas that are likely to be developed in Colorado. The logical points of interconnection are also finite in number. There are only a few new lines that are needed to improve reliability, allow for future growth, connect these resources and loads, and preserve and open options for the future. Based on evidence that we observed in the stakeholder meetings, Xcel (and Tri-State) transmission planners know what needs to be done, (it amounts to a grid of north-south and east-west lines in the eastern Colorado Plains) because their "white board" group sketched out the needed lines, although this work was never formally shared with stakeholders. Planning the needed transmission does not appear to be that hard.

Can the Commission provide the incentives required for the planning job to get done, get done right, and get done soon?

9. Coordination among Colorado transmission planners improved in 2008. But it is diagnostic of the current minimal state of coordination among Colorado utility transmission planners that there are separate SB 100 and CCPG CLRTPG plans, one done by Xcel, one by Tri-State. Separate meetings were held for stakeholders to attend for the two plans even though we pleaded for one, coordinated plan (the separate meetings were held in the morning and afternoon of the same day—so much for coordination). One plan goes out to 2015 (Xcel), one to 2018 (Tri-State),

so neither plan has any answers for what happens in 2019 or after. Neither plan addressed all of Colorado's constrained transmission pathways. Neither plan looks seriously at how to export Colorado's renewable energy resources to other markets.

10. As a state, as public officials, and as stakeholders in the transmission planning process, we lack sufficient focus on market reforms that will be needed to achieve a regional, long term, least cost transition to clean energy resources in the Western Grid region.[4]

11. The HB 06-1325 infrastructure report to the legislature recommended that transmission planners reach out early in the planning process to involve local and county governments in planning, so siting and routing concerns

[4] Interwest has suggested a legislatively mandated study and report on the following issues:

A. Creating RTO Functionalities

1. Queue reform
2. Eliminate pancaked transmission rates
3. Access to regional real time regulation market
4. Consolidate balancing areas
5. Develop transparent trading hubs
6. Establish intra-hour regional generation scheduling
7. Share ACE ("area control error") to meet reliability criteria
8. Implement "conditional firm" transmission service

B. Encouraging new firms that can provide transmission

1. Allow any non-incumbent to participate and obtain eminent domain if they are proposing to build according to the state plan
2. Add non-incumbent transmission companies in statute
3. Require (or allow) transmission be divested to independent companies

C. Modernizing utility operations

1. Require state of the art utility weather forecasting

D. Clarifying and setting new state policies

1. Identify, segment, and estimate timing for Colorado renewable energy export markets

could be addressed up front. Neither the Xcel SB 100 nor the CCPG CLRTPG transmission planning efforts or reports did anything about this.

12. The Commission's transmission planning rules do not provide adequate guidance about the goals for transmission planning, given the change that SB07-100 made in the basic concept toward providing transmission in advance of generation development for location constrained resources that are developed incrementally by many providers. Nor do they provide adequate requirements that address the detail and process for developing and filing transmission applications. We urge the Commission to propose emergency transmission rules that can be in place in time to set new requirements the applications that Xcel will make at the end of March, 2009.

The emergency rules should include requirements for long-term planning for 20 to 30 years ahead. They should require all providers that are required to get the Commission's approval for transmission additions to file one, coordinated, long-range, statewide plan on the two-year planning schedule in SB07-100. The plan should address each of the constraints that exist both within Colorado and at each point where transmission enters or exits the state. The plans should be coordinated with long-range conceptual plans like High Plains Express, and with planning within the CCPG, Westconnect, and WECC, so the connections, timing, and

progress on conceptual regional plans are tied into, are consistent with, and supported by the SB07-100 implementation plans. The plans should meet the requirements of FERC Order 890.

Respectfully submitted, January 8, 2009.

Ronald L. Lehr
Attorney #6051
4950 Sanford Circle West
Englewood, CO 80113
303-504-0940
rllehr@msn.com

– and –

Craig Cox
Executive Director
Interwest Energy Alliance
P.O. Box 272
Conifer, CO 80433
303-679-9331
cox@interwest.org

APPENDIX A

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

DOCKET NO. 07M-446E
PUBLIC SERVICE COMPANY OF COLORADO'S SENATE BILL 07-100
DESIGNATION OF ENERGY RESOURCE ZONES
AND TRANSMISSION PLANNING REPORT.

1. **Public Service Company of Colorado's (PSCo's) Designated Energy Resource Zones are Insufficient**. Public Service Company of Colorado's (Xcel Energy's) designated resource zones are too general to meet the legislative intent of SB07-100, which requires zones of sufficient specificity to allow transmission to be planned to resource areas appropriate for "development of new electric generation facilities." By designating one-third portions of Colorado's Eastern Plains and the San Luis Valley as resource zones, PSCo has not identified zones that can lead to "ensuring…reliability," "continued availability of clean, affordable, reliable electricity," and evaluation of transmission facilities that "promptly and efficiently improve…infrastructure…to meet the state's existing and future energy needs" (CRS 40-2-126).

2. The statute requires zones to be designated so that plans for construction or expansion of transmission facilities "necessary to deliver electric power consistent with the timing of development of resources" (CRS 40-2-126 (2)(b)). Since wind and many solar resources can be developed within one or two years, and transmission has not been provided in the PSCo transmission system or in the plan filed here consistent with these time frames, PSCo's designated resource zones are insufficient on their face to allow transmission to be planned and built in time frames consistent with resource development.

3. PSCo's filed application for the Pawnee-Smoky Hill upgrade (Docket No. 07A-421E) does not provide transmission to serve all resources within the zones designated, or even within PSCo's identified zone one. There is no provision in SB07-100 that allows for transmission that is "…necessary to deliver electric power consistent with the timing of the development of beneficial energy resources…" to be delayed, planned later, or subjected to protracted negotiations with third parties. The statute requires these plans to be made and submitted with applications for certificates to the PUC. The exigency of the situation the legislature addressed is emphasized in statute by the requirement that the Commission approve certificates within one hundred eighty days, or "…the application shall be deemed approved."

4. **SB07-91 Generation Development Areas should be substituted for PSCo's resource zones**. The draft task force report in response to SB07-91 has developed Generation Development Areas ("GDAs") that are

more specific and that do identify areas where transmission is insufficient and generation could be developed to the benefit of Colorado consumers at sufficient scale —1000 MW or more— to justify transmission planning and investment. The SB07-91 GDAs would also allow transmission to be planned and developed to service resource zones in which there are sufficient resources to allow competition among developers, an additional requirement of that statute and one that has potential to provide lower-cost, lower-risk, competitive results for Colorado consumers. The Commission should find PSCo's resource zones insufficient and substitute SB07-91 GDAs for PSCo's filed zones.

5. **The Pawnee to Smoky Hill CPCN represents insufficient transmission planning progress and insufficient transmission investment.** The proposed Pawnee – Smoky Hill 345 kV transmission line will allow an additional 500 MW of generation injection and transfer at the Pawnee substation when this proposed line becomes energized on or around May 31, 2013. We support it, if it can be shown at hearing to be consistent with the broader and longer term issues we raise in these comments, including the need for statewide, coordinated, long term transmission planning. However, PSCo's recent 2007 Colorado Resource Plan, filed November 15, 2007, indicates that the company would like to have a minimum 800 MW of wind power by 2015 and 1,800 MW by 2020. Note that these amounts do not include the renewable energy requirements of any other utilities in the state. It appears that PSCo's Pawnee to Smoky Hill CPCN application is inadequate to allow PSCo to acquire its proposed generation resources, not to mention providing a transmission link that is relevant to long-term, coordinated transmission requirements for total state utility resource requirements. Furthermore, given the timeframe for new transmission projects to be approved and constructed (5 years or more), the rate of transmission improvements PSCo proposes appears to be insufficient to meet PSCo consumer demand for lower-cost, stable-priced renewable energy to offset high, uncertain, and variable priced fossil fuel power generation.

6. By focusing mainly on improvements at the Pawnee substation, PSCo has essentially picked the next 500 MW of wind projects that will get built without a formal RFP process, since the projects that can interconnect at Pawnee will have a bidding advantage from a clear transmission pathway to Denver along with no system upgrade costs associated with this benefit. Colorado consumers would be better served by an open and equitable process that considered all of the generation alternatives, provided transmission plans that open multiple options for bidding cost-effective projects, and provide a diversity of options with goal of achieving the least cost resources for consumers. The Commission should consider ordering additional transmission study, plans, and applications to be filed to diversify resource choices for the benefit of PSCo's consumers. For example, in PSCo's analysis of alternatives provided by Gerry Stellern's testimony in Docket No. 07A-447E, there was no discussion of any

improvements to the Ault or Keenesburg substations, where there have been numerous wind projects proposed with active applications for interconnection. It appears that PSCo has determined that wind generation interconnected at Pawnee is better for its Colorado consumers than wind generation interconnected at the Ault or Keenesburg substations, or from its Zones 2 or 3. On what basis does the company make this determination? Does the company's filed plan explain why this is the best choice? Should we be concerned that PSCo doesn't intend to improve the transmission system at Ault and Keenesburg as well as Pawnee? Why is this zone preferred over others?

7. Most wind resources that can tie into the Pawnee substation are located north, east, or west of the substation. Arguably, the Pawnee to Smoky Hill line proposed by PSCo does not pass through the best wind resource areas, so even with this proposed new transmission, only a few projects will benefit. PSCo's filed plan and resource area analysis does not allow an in-depth analysis of where resources should or could be developed. Developers will still have to build lengthy transmission tie lines to reach Pawnee. Given that the improvement in the system represents a specific point within a huge region, projects that are located further away, even with better resources, are penalized since they will have to build longer transmission lines to tie into the Pawnee substation. This diminishes any advantage that these projects would have from their superior wind resources. Therefore, it does not appear that the proposed improvement at Pawnee has been optimized in the best interest of the consumers in Colorado.

8. **Failure to file CPCNs for new transmission to serve GDAs requires regulatory remedies.** PSCo failed to file any CPCN applications for its Zones 2 and 3. PSCo has indicated that in future filings, it will evaluate the Eastern Plains Transmission Project as a possible project to facilitate projects in Zones 2 and 3. There is no basis in the statute for PSCo's filing a plan for "later." In addition, the filed plan contains no commitment from PSCo to any evaluation process or timelines, no end point to its evaluation, and no outcome indicated that satisfies the company's obligation to provide adequate transmission services for these areas. Waiting for two years for the next planning and CPCN filing simply wastes valuable time. Given the length of time for transmission improvements to be made, PSCo should have included major transmission improvements in all of the SB07-91 identified GDAs in the current filing. Since the company did not, the Commission should require PSCo to file work plans, including timelines and interim reports, and identify the workforce or consultants it will apply to these pressing tasks, with attestation by PSCo officers that they have reviewed and are have committed PSCo to rapid and complete fulfillment of these tasks.

9. **PSCo's stakeholder comments and suggestions are largely absent from its report or plans.** PSCo states that it held meetings with

stakeholders. It held meetings at which stakeholders asked for more specific zones to be designated, based on NREL's work on resources, and provided contacts and introductions to NREL personnel who were willing to help with these tasks. PSCo's report shows no evidence that PSCo responded to this stakeholder input. Stakeholders indicated to PSCo that it should consider use of ten-year, hourly and three-year, ten-minute 80-meter wind data supplied to PSCo by WindLogics that was used for PSCo's Effective Load Carrying Capability (ELCC) and wind integration cost studies to construct wind resource areas based on data about wind resources. Stakeholders indicated that PSCo's report "Wind Integration Report for Public Service Company of Colorado," dated May 22, 2006, responding to settlement and PUC orders in Docket 04A-325E, could be found on PSCo's web page at: http://www.PSCoenergy.com/docs/PSCoWindIntegStudy.pdf and that representations of study areas that should be considered for finer resolution of resources that need transmission could be found on pages 10 to 13 of PSCo's study. (Stakeholders noted that assumed gas prices on page 38 of the study averaged $6.04 over the study year, 2007).

PSCo's SB07-100 filed report shows no evidence that it responded to this stakeholder input. Stakeholders asked that transmission be planned for each resource zone. PSCo's report shows no evidence that responds sufficiently to this stakeholder request. Stakeholders asked that PSCo's SB07-100 filing be the result of statewide coordinated planning with other Colorado utilities. PSCo's report shows no evidence that its plan is based on statewide coordinated planning as suggested by stakeholders. PSCo states that it considered information regarding the location of potential new renewable resources from stakeholders. During the stakeholder process, PSCo indicated that it did not want stakeholders to provide any confidential information. Since locations of partially developed projects are considered extremely confidential by wind developers, no wind stakeholder was able to provide specific information on specific project locations due to confidentiality considerations. Most information provided by stakeholders to PSCo was not site-specific but simply expressed interest in one of the zones, each approximately one-third of the eastern half of the state. Although PSCo held numerous stakeholder meetings, it seemed to have decided to submit its already-planned Pawnee to Smoky Hill project improvement before holding any stakeholder meetings. PSCo appeared to use stakeholder meetings to defend this decision rather than to fully consider stakeholder input that might have changed that decision. Stakeholders made a number of other proposals, suggestions and requests. PSCo's report contains no evidence that PSCo considered these suggestions and requests. See: http://www.interwest.org/documents/documents/2007-05-15_sb_100.pdf . We also attach a copy of these comments to this filing as "Attachment 1"

10. **The Commission must regulate PSCo's transmission planning process to achieve results.** Going forward, PSCo should have

additional stakeholder meetings, adequately supervised by motivated Commission regulatory staff, in which the company fashions methods to obtain stakeholder input with respect to location of development of renewable resources and provision of transmission to them within the SB07-91 GDAs. Based on work to better understand resources, development interest, and transmission options, PSCo should plan the transmission "…necessary to deliver electric power consistent with the timing of the development of beneficial energy resources located in or near such zones" (CRS 40-2-126 (2)(b). While we understand PSCo's need to keep certain information confidential, any such process should consider all viable locations for potential new renewable resources.

11. **PSCo must integrate its transmission and generation planning under adequate regulatory supervision**. PSCo states that "transmission has become less integrated with generation planning," implying that independent power producers are responsible for this breakdown of coordination between the utility's generation and transmission planning. PSCo is responsible for this lack of coordination, both within its company and among Colorado utilities. Not having achieved the necessary integration of these functions, the Commission must supply the proper regulatory motivation for the repair of the breakdown between generation and transmission planning.

12. **The Commission must regulate PSCo to achieve a single, statewide, coordinated transmission plan.** PSCo states that it continually identifies and promotes new investment through its planning function in a "coordinated, open, transparent, and participatory manner." While we commend PSCo staff for their efforts to include stakeholder opinions in the process, there remains the problem of taking stakeholder participation seriously. (See comments on CCPG "coordinated" planning at: http://www.interwest.org/documents/documents/2007-02-09_ccpg_ltr_9feb07.pdf and the CCPG letter response agreeing with these comments at http://www.interwest.org/documents/documents/2007-04-19_ccpg_reply.pdf.

13. PSCo has apparently entered into a recent memorandum of understanding with Tri-State Generation and Transmission Association to partner development of the Eastern Plains Transmission Project ("ETPT"). It states that it has not had time to complete studies required for zones two and three. It states that it hopes to "pursue opportunities for joint projects" and not to duplicate efforts. The Colorado Coordinated Planning Group's (CCPG) 2006 long-range plan contained a similar unmet need to coordinate plans between PSCo and Tri-State, but nothing has happened since then to produce a single, statewide, coordinated transmission plan. The Commission must order PSCo to undertake transmission planning on a specific time frame for each GDA, motivate and require its staff supervise the process to ensure progress, and require monthly reporting by PSCo and Commission staff to closely monitor progress.

14. PSCo states that delays in transmission planning and investment are due to others and to long lead times for critical equipment orders (page 28). PSCo has previously admitted that its transmission planning fails to provide adequate service. PSCo itself documented the inadequacy of transmission service for the benefit of its consumers in its December, 2005 "Bid Evaluation Report" (pages 15 and 16) as documented in the Answer Testimony of Craig Cox in Docket No. 06S-234EG, pages 2-3, (see: http://www.interwest.org/documents/documents/2006-08-18.pdf). PSCo has known that its transmission service has been inadequate since 2004-5, when the Commission recognized that transmission for wind projects would likely be inadequate and authorized PSCo to pay curtailment payments to wind projects.

15. **We request that the Commission make the following determinations, approvals and orders:**
    i) The Commission should fashion its order in response to these comments so Colorado consumers are better served by an open and equitable process that considers all generation alternatives, provides transmission plans that open multiple options for bidding cost effective projects, and provides a diversity of options with goal of achieving the least-cost resources to consumers consistent with diversity that manages risks.
    ii) The Commission should find PSCo's resource zones insufficient and substitute SB07-91 GDAs for PSCo's filed zones.
    iii) The Commission should approve the Pawnee to Smoky Hill CPCN application if it can be shown at hearing and on the Commission's record to be consistent with issues we raise in these comments, including the need for statewide, coordinated, long-term transmission planning.
    iv) The Commission should consider ordering additional transmission study, plans, and applications to be filed to diversify resource choices for the benefit of PSCo's consumers.
    v) The Commission should require PSCo to file work plans, including timelines and interim reports, and identify the workforce or consultants it will apply to tasks, with attestation by PSCo officers that they have reviewed and are have committed PSCo to rapid and complete fulfillment of these tasks.
    vi) The Commission should require PSCo to hold additional stakeholder meetings and assign motivated regulatory staff to determine transmission needs for the seven SB07-91 GDAs. Based on better understanding of the resources in these GDAs, and more information about development interest, transmission options, and the state's long term interests in exporting renewable energy resources to other states, PSCo should be required to plan the transmission "…necessary to deliver electric power consistent with the timing of the development of beneficial energy resources located in or near such zones."

vii) The Commission should supply proper regulatory motivation for repair of the breakdown within PSCo between generation and transmission planning.

viii) The Commission should order PSCo to undertake transmission planning on specific timeframes for each GDA, motivate and require its staff supervise the process to ensure progress, and require monthly reporting by PSCo and Commission staff to closely monitor progress.

16. **SB07-100 was not passed by the legislature to ratify the current Colorado transmission planning and development "business as usual." It was passed in recognition that transmission "business as usual" was not working and needed to be changed. Now it is the Commission's responsibility to make the needed changes.**

17. **The Commission should order a hearing on PSCo's SB07-100 report, and after a hearing and review of on-the-record comments submitted, order PSCo to plan and provide transmission necessary for Colorado's New Energy Economy.**

Respectfully submitted,

Ronald L. Lehr
Attorney #6051
4950 Sanford Circle West
Englewood, CO 80113
303-504-0940
rllehr@msn.com

– and –

Craig Cox
Executive Director
Interwest Energy Alliance
P.O. Box 272
Conifer, CO 80433
303-679-9331
cox@interwest.org

Interwest Attachment 1

May 15, 2007

To Xcel Energy
Attn: Shane Gutierrez, shane.gutierrez@xcelenergy.com

Comments of the Interwest Energy Alliance on SB 100 Implementation

We agree with the comments filed by Invenergy, LLC. Invenergy makes the following comments:

1. Zone 1 should be subdivided to permit focus on potential wind development in the northeast and northwest sectors. Each sector will require a different mix of transmission additions.
2. By October 31, transmission projects should be identified to support potential wind generation in Zones 1, 2, and 3. The Xcel Energy plan to focus on Zone 1 will not meet the requirements of SB 100, and will not permit the development of wind resources in Zones 2 and 3 in the upcoming RFP in 2008.
3. The transmission projects developed for Zones 1, 2, and 3 should be related to the potential development within these zones. The Xcel plan to base these plans on projects in the transmission interconnection queue, believing that this is a proxy for the development potential, is fatally flawed. Xcel should drop its requirement that competitors submit confidential data.

We make the following additional comments:

1. The plans made to implement SB 100 should be coordinated with the Colorado Coordinated Planning Group. It is the purpose of the CCPG to coordinate transmission planning among Colorado utilities. The applications filed on October 31 should represent statewide coordinated transmission plans that are supported by all the state's utilities.
2. Planning and coordination that supports the October 31, 2007 filing should be consistent with plans for long-term resource development and export markets.

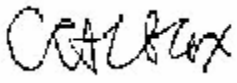
3. Xcel Energy's northern transmission intentions deserve support. Xcel's intentions are good as far as they go, but they need to go farther.
4. Xcel should analyze the resources in adjacent states and the needs for transmission to develop these resources.
5. Data about resources should support choices of resource development areas. By looking more carefully within the big Xcel areas for finer resolution on resources that have transmission needs, more focused, rational, and supportable transmission solutions might become apparent. The need to base resource areas on resource data applies to all Xcel resource regions identified to date. Specifically, Xcel should consider use of ten-year, hourly and three-year, ten-minute 80 meter wind data supplied by Windlogics that was used for Effective Load Carrying Capability (ELCC) and wind integration cost studies to construct wind resource areas based on data about wind resources. This report "Wind Integration Report for Public Service Company of Colorado," dated May 22, 2006, responding to settlement and PUC orders in Docket 04A-325E, is found at: http://www.xcelenergy.com/docs/PSCoWindIntegStudy.pdf and representations of study areas that should be considered for finer resolution of resources that need transmission are found on pages 10 to 13 of this study. Note the assumed gas prices on page 38 of the study averaged $6.04 over the study year, 2007.
6. Data about exclusion areas should be gathered and reported, as we commented in a separate joint letter with The Nature Conservancy and Western Resource Advocates. There are some areas that are not appropriate for development because of ownership, land use, wildlife or habitat, or other reasons. Including this data in selecting resource areas for transmission planning could help define rational development areas.
7. Sole focus on transmission for a single area violates both the letter and the intention of SB 100. There is no provision in SB 100 that supports the notion of a single generation area as the sole focus for resource development or transmission investment. Generation resource diversity is the policy that SB 100 is intended to foster. Sole focus on a single area does not lead to generation resource diversity, but rather to its opposite: concentration. Concentration of resources in a single area will not lead to competitive results when bids are solicited.
8. There is record evidence in the previous "least cost" generation acquisition process that Xcel's lack of timely transmission investment led to bids for cost-effective wind resources being reduced or rejected. A detailed characterization of these transmission deficiencies, from the public version of Xcel's December 2005 All-Source RFP Bid Evaluation Report, is posted to our website at http://www.interwest.org/documents/reports/2006-01-05.pdf. SB 100 was designed to remedy this failure to make timely transmission investments. The evidence showed that wind resources in Northeast and Southeast Colorado were prevented from serving Colorado Xcel customers. SB 100 filings must remedy these failures.

9. Curtailment payments to wind generators were allowed by the PUC in the last bid round. Xcel should again request curtailment payment approvals from the Commission to guard against untimely provision of transmission in the upcoming bid round for the period 2012-2016.
10. There is no provision in SB 100 that allows utilities to defer needed transmission investments by waiting for the speculative transmission investments of other utilities to take place. Therefore, deferring planning of, and investment in, transmission in renewable resource areas because Tri-State is studying its resource and transmission plans in southeastern Colorado is unwarranted.
11. The 2006 CCPG Long Range Transmission Plan failed, by its own terms, to coordinate mutually exclusive "northern" and "southern" transmission scenarios. Continuing this division of the state between Xcel transmission plans and Tri-State transmission plans appears to be the present course of action for implementing SB 100. Instead, there should be one, coordinated, statewide transmission plan rather than two, mutually exclusive, uncoordinated plans.
12. Sizing transmission to meet needs of projects in transmission interconnection queues is inadequate. This was a major failure of the 2006 CCPG plan and should not be repeated in implementing SB 100.

The Interwest Energy Alliance looks forward to working constructively with Xcel Energy, the Public Utilities Commission, the Colorado state government, other utilities and all stakeholder parties in implementing SB 100 in the spirit intended by the legislature. The intent of this bill, which passed by large legislative majorities and which Governor Ritter signed into law in March, is to promote Colorado's clean energy development through a more robust transmission infrastructure, to advance rural economies through new renewable energy development, and to lay the groundwork for exporting this clean, renewable power to other states in the region.

Thank you very much.

Sincerely,



Craig Cox
Executive Director

APPENDIX B

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

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

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.[1] 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

[1] See comments letter at 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.[2]

"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

[2] 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.[3] 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.

[3] 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.[4] 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.

[4] 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.[5] 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

[5] 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.

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.