

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO**

**DOCKET NO. 08A-532E
IN THE MATTER OF THE APPLICATION OF
PUBLIC SERVICE COMPANY OF COLORADO
FOR APPROVAL OF ITS
2009 RENEWABLE ENERGY STANDARD
COMPLIANCE PLAN**

**ANSWER TESTIMONY OF CRAIG COX
FEBRUARY 2009**

1. **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Craig Cox. My business address is P. O. Box 272, Conifer, Colorado, 80433.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am executive director of the Interwest Energy Alliance, a Colorado-based trade association representing the nation's leading wind and utility-scale solar energy companies doing business in the western United States. Interwest, founded in 2002, works with the region's non-governmental organizations, particularly renewable energy advocates, conservationists, and public lands and wildlife advocates, and leading companies in the renewable energy business, particularly wind and solar firms, to achieve broad-based, consensus approaches to project and transmission development and siting issues throughout the states in which we work. In addition to Colorado, these states include Arizona, Nevada, New Mexico, Utah and Wyoming.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of the Interwest Energy Alliance.

Q. HAVE YOU PREPARED A STATEMENT OF YOUR EXPERIENCE AND QUALIFICATIONS?

A. Yes. My statement is attached as Appendix A.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. **First**, I would like to first introduce Interwest's witness,

Rick Gilliam, Managing Director, Western States Policy, SunEdison. Mr. Gilliam, representing Sun Edison, Inc., discusses various issues related to PSCo's solar program in his testimony, including the company's distributed solar acquisition plan and the Company's proposed central solar acquisition.

Mr. Gilliam's testimony is filed separately on this same date.

B. **Second**, I would like to present testimony related to a) the retail rate impact costs, b) the wind integration costs; and c) the wind forecasting tool.

Q. DO YOU HAVE COMMENTS RELATED TO THE WIND PREDICTOR AND WIND INTEGRATION COSTS FOR THE COMMISSION TO CONSIDER?

Yes. Interwest's members are interested in the appropriate acquisition of resources and calculation of the costs of renewable energy as they are incorporated into the renewable energy portfolio and as they relate to the Company's 2009 Compliance Plan.

Keith A. Parks, Senior Trading Analyst for Public Service Company of Colorado in his Direct Testimony, introduced the Wind Predictor ("WiP"), the new wind-forecasting tool which the Company proposes to develop and use to more accurately project electricity production sourced from wind turbines.

Interwest agrees that wind forecasting tools are an important part of the arsenal required for cost-effective integration of naturally-variable energy resources into the Company's portfolio. We understand that forecasting errors cost the ratepayers unnecessarily. Therefore, we want to support the Company's efforts to acquire and use the most accurate forecasting tools and research available. However, we have concerns about how this research will be developed.

First, as stated in comments presented in the RES Rulemaking action (08R-424E) earlier this month, Interwest supports forecasting tools and integration studies which are placed for competitive bidding. Interwest supports the following addition to Rule 3655, related to Resource Acquisition:

The QRU shall use costs determined in peer-reviewed and published integration cost studies when determining renewable energy costs. The QRU shall use consistent cost projections for each type of energy considered in the resource plan, in calculating costs and benefits, and in determining costs of integration of eligible energy resources into resource portfolios.

These concepts and requirements should also be imposed upon the Company prior to approval of its 2009 Compliance Plan. The WiP has not been a project which has been subjected to the competitive bidding process. Therefore, the Company cannot provide this Commission and ratepayers with confirmation concerning its cost effectiveness as compared to the products available on the market.

In addition, there has not been sufficient scrutiny related to whether the WiP meets the highest industry standards which Company ratepayers and investors deserve. We have inquired whether WiP reports will be peer-reviewed and published. Publication will allow for comparison against other research available to the experts in the field, allowing the market to benefit from all of the state of the art technology available as it develops over time. In addition, publication and peer-review will allow the Commission to determine whether the benefits of the WiP forecasting information validate the costs to Company ratepayers over time. If not, the costs should not be attributed to the renewable energy resources incorporated into the Compliance Plan.

Mr. Parks substantiates the importance of the Company's investment in the WiP forecasting tool in his Direct Testimony at Page 3, lines 8-9. He estimates savings equal to approximately \$1,379,000 per year. Therefore, a small error differential can mean significant savings or greater expense to Company ratepayers, depending on the accuracy of the reports on which the Company will rely. Therefore, the forecasting tool acquisition should be subjected to a competitive bidding process, and the costs only incorporated into the retail rate impact to the extent that they are subjected to peer-review and published.

On a separate but related note, Interwest and other stakeholders have questioned whether all wind integration costs can be attributed to the renewable energy resources by its recent *Motion Requesting the Commission to Review and Issue a Clear Ruling on the Issue of Requesting Clarification and Hearing Regarding Inclusion of Coal Plant Recycling Costs as it Impacts Wind Integration Costs* which was filed on February 13, 2009 in Phase II of Xcel's Application for Approval of its 2007 Resource Plan, Case No. 07A-447E (the "Integration Costs Motion"). Generally speaking, Interwest and the co-filing parties assert in the Integration Costs Motion that some of the costs of integration of wind should be attributed to the older technologies and often fossil-fuel based resources with which they are not integrated. While the Integration Costs Motion addresses coal recycling, the concept applies to other integration costs.

Mr. Ahrens explains the Estimated ECA Costs in his Response dated February 20, 2009 to Discovery Requests CPUC 6-11, CPUC 6-12, and CPUC 6-13 submitted by CPUC Staff - Bill Dalton ("Responses"):

Avoided energy costs and environmental impacts are projected by models and therefore are not specifically "tracked". The avoided energy costs are the costs that are not incurred because a

renewable resource was acquired. Because they were not incurred, they are not "tracked" per se. The Company projects the avoided costs through the RES/No RES in order to project the incremental costs affecting the retail rate impact limits. The projected avoided costs are set forth on Tables 6-3 and 6-4 in column I as the "estimated ECA costs."

Tables 6-3 and 6-4, sponsored by Dan Ahrens in his Responses, also set forth the "Estimated ECA Costs" which he describes as the avoided costs. These costs should be subject to the analysis described above.

Respectfully submitted this 23rd day of February, 2009.

INTERWEST ENERGY ALLIANCE

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Appendix A

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Craig Cox is executive director of the Interwest Energy Alliance, a non-profit trade association that represents the nation's leading companies in the renewable energy industry, bringing them together with regional non-governmental organizations in the West (Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming). Interwest performs outreach and representational activities and works to build collaborative, consensus-based approaches to new project development and transmission siting throughout the West.

Cox has been active in renewable energy public policy development since working for Congressman Dan Schaefer in Washington, D.C., where he formed the U.S. House Renewables and Energy Efficiency Caucus on Schaefer's behalf in 1996. The Caucus is an officially recognized bipartisan Congressional Member Organization that educates House Members on clean renewable energy technologies. This caucus currently has over 200 members—nearly half of the entire House membership—representing most states of the union.

Cox is has been a member of various Western Governors' Association's energy task forces, and is active in various other governmental and non-governmental renewable energy policy and advocacy organizations throughout the West. In 2005, Cox received a "Wind Advocacy Award" from the American Wind Energy Association and in 2007 the Colorado Environmental Coalition's "Conservation Award." In 2008, Cox received the first annual "Governor's Excellence in Renewable Energy" individual award from Colorado Governor Bill Ritter.

Cox received his Bachelor's degree from the University of Colorado at Boulder and his Master's degree from the George Washington University in Washington, D.C.

CERTIFICATE OF SERVICE

08A-532E

I hereby certify that on this, the 23rd day of February, 2009, an original was faxed to Doug Dean, Colorado Public Utilities Commission at 303-894-2065 and a copy of the foregoing "Answer Testimony of Craig Cox" was served electronically addressed to all Parties on this service list.

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