

Oral Testimony

**US Senate Committee on Energy and Natural Resources
Senator Jeff Bingaman, Chairman**

June 17, 2008

**Challenges and Regional Solutions to Developing Transmission
for Renewable Electricity Resources**

Testimony by Gary Hanson

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Good morning Chairman Bingaman, Senator Domenici, Members of the Committee, and I especially wish to say thank you to my good and old friend Senator Tim Johnson for introducing me here today that was very special, thank you.

My name is Gary Hanson. I am Chairman of the South Dakota Public Utilities Commission and I am testifying today on behalf of that agency. I very much appreciate the opportunity to appear before you this morning.

I ask that my testimony be made a part of the record as if fully read and I will summarize my written testimony.

The SDPUC regulates the retail rates and services of investor owned electric, gas, and telephone utilities. We are obligated under the laws of our State to ensure the establishment and maintenance of such utility services as may be required by the public convenience and necessity and to ensure that such services are provided under rates and subject to terms and conditions of service that are just, reasonable, and non-discriminatory.

It is in our nation's best interest to resolve the challenges which have retarded the healthy growth of electric transmission facilities. Otherwise, our efforts to assemble a viable **renewable energy** regime will fall far short of expectations. Additionally, unless a more expeditious process is implemented to facilitate transmission expansion serving **interstate** needs, we will be at risk for serious **reliability** problems. Chief among the solutions are resolving **siting** and **cost allocation** challenges.

A disparity of policies across the states compels load serving entities to locate

wind capacity and associated transmission based upon political boundaries instead of physics, economics, and other best practices. Local politics and parochialism in one state should not be allowed to prohibit the economic and environmentally friendly construction of renewable energy facilities in another state. And our nation's energy future is far too important to allow this practice to continue.

To have the greatest economic and environmental benefits, practical considerations require transmission facilities be regionalized. States need to have an active role in transmission decisions. However, an effective **regional** transmission system requires a **regional** transmission authority with **regional siting** authority.

The present system used for **pricing transmission** and which compensates providers of that service is essentially based on a regulatory method that is almost 100 years old. The current regulatory system does not recognize that power flows based on physical laws. Rather it assumes that power will flow based on who contracts for the purchase of power.

A robust regional electric transmission system is an essential prerequisite to support **the reliability function** and **the market function**; allowing more generators to reach loads and compete directly for sales to such loads and meet national goals for renewable generation and energy independence. A new rate design is needed that will facilitate the construction of the strong transmission backbone required to support the nation's electric market and reliability missions.

Any prospective transmission rate design should; (1) cover **new** as well as **existing** transmission facilities, (2) **facilitate**, not impede, the construction of needed new transmission facilities, (3) reflect the **regional use of the grid** and that power flows

according to the laws of physics, (4) provide simplicity and certainty through a **standard tariff** that defines in advance who will pay for new transmission facilities and how such costs will be recovered, rather than relying on potentially contentious, costly, and time-consuming case-by-case, facility-by-facility analyses of "beneficiaries" to determine who will pay for the cost of a specific facility; and (5) **provide certainty** that the parties owning transmission facilities can obtain cost recovery and are not faced with the risk of "trapped costs."

I recommend a highway/byway rate design for the Midwest ISO. Under the proposal, a **license plate** component of the transmission rate would recover the cost of **local - low-voltage facilities**. The cost of these **byway** facilities would be paid solely by the load in the local license plate rate zone, as is currently the case.

The cost of defined **high-voltage highway facilities** would be included in a rate charged to all loads in the footprint on a **postage stamp basis**. For administrative ease and to avoid case-by-case disputes, the tariff definition of highway facilities would be determined in advance by voltage level. Given the rate of return currently allowed by the FERC on transmission facilities and with these suggested changes, there should be no shortage of capital to invest in needed transmission infrastructure.

I believe there are benefits for the WAPA to join MISO. However, in order to be fair and equitable for all participants, significant challenges need to be overcome first, including; reducing the costs of MISO's charges and resolving challenges with regard to the queue.

Thank you again for the opportunity to testify.