



Applicants' Witness Thomas A Hewson Jr.

Principal
Energy Ventures Analysis

Summary
Applicants' Exhibit 30 and 52



Thomas A Hewson Jr.

- 30 years in energy and environmental consulting
- Principal at Energy Ventures Analysis Inc since 1981
 - Directs environmental practice
 - Responsible for environmental emission forecasts and industry compliance studies
 - Performs integrated electricity modeling
- Project Manager at Energy and Environmental Analysis (1976-1981)

Scope of Work

- Evaluate testimony of Schlissel and Sommer regarding carbon regulation risk
- Evaluate use of monetary externalities as proposed by Dr. Denney
- Evaluate Schlissel and Sommer conclusion that it is reasonable to assume wind energy production tax credit will be extended before it expires at the end of 2007

Carbon Regulation Risk

- Carbon compliance costs would be highly dependent upon type, severity and timing of carbon regulation adopted
- Schlissel and Sommer suggest that project carbon regulation risk is very significant and should be valued at a long-term levelized cost of \$19.10/ton CO₂ (range \$7.80 - \$30.50/ton)
- However, carbon compliance costs would likely be far less (<\$7/ton CO₂)
 - Minnesota requires externality planning values of \$0.35 - \$3.64/ton for in-state plants – no value for out-of-state plants
 - RGGI estimated compliance costs \$1 - \$3/ton
 - Last year's Bingaman bill: Congressional concern over impact on US economy resulted in proposal to cap carbon compliance costs using a maximum "safety valve" price for carbon allowances

Environmental Externalities

- Dr Denney suggests that monetary environmental externality values should be applied to quantify environmental impact
- Most states do not use monetary environmental externalities in resource decisions
 - ND legislation prohibits their use
- Environmental externality damages calculations are controversial and site-specific, but would likely not apply to South Dakota

Wind Production Tax Credit

- Important element in wind resource cost
- Schlissel and Sommer state that it is reasonable to assume tax credit will be extended before it expires at the end of 2007
- Tax credit history – short extensions, several expirations
- Will Congress see need to continue?
 - AWEA suggests that wind has become cost competitive
 - 23 states have adopted renewable portfolio standards that set aside 250 TWh of demand for qualifying sources
 - PTC cost to US taxpayer increases as wind becomes more competitive
- May be extended, but may not – Even if extended, may not be available long-term