



Applicants' Witness John Knofczynski

Manager of Engineering
Heartland Consumers Power District

Summary
Applicants' Exhibits 15 and 49



Overview

- Heartland Consumers Power District (HCPD)
 - Political subdivision and public corporation of the State of South Dakota
 - Formed under the Consumers Power District statutes
 - Purpose of the District is to encourage and extend the use of electricity within and outside South Dakota
 - Publicly-elected Board of Directors consisting of ten representatives; one from each of our District's political subdivisions in eastern South Dakota
 - Customers are 28 municipal utilities, cooperatives and public power customers in South Dakota, South Central Minnesota and Northwest Iowa
 - Forecast
 - 118 MW peak demand and 725 GWh of energy in 2006
 - Average energy requirements growth of 5.4%/year through 2015
 - Ten employees

Overview (continued)

- Heartland is primarily a supplemental power supplier
 - Fulfill customer systems' needs above and beyond their primary power supplier (WAPA)
 - Primary goal is to help small communities gain economies of scale they could not otherwise achieve
 - Relatively high (>75%) annual load factor
 - Due to our customers' load characteristics
 - Means Heartland needs a large % of baseload in our resource mix

Load Forecast

- Three components
 - Econometric forecast completed in 2002
 - Projections of new customer load
 - Load growth objectives of Heartland Board of Directors
- Updated Heartland's forecast in Applicants' Exhibit 49
 - Updated forecast is 39 MW to 45 MW, and 250 to 290 GWh higher in the 2008 to 2021 time frame, compared to original forecast in the Application

Board of Directors' Growth Objectives

- South Dakota Statute 49-37-3.1
 - “In order to provide electric power and energy to the people of this state at a more economical cost and with greater reliability, the board of directors of a consumers power district in providing for development of power plants, lines and systems or interests therein, for the generation, transmission, and transformation of electric power and energy, shall take into account, among other things, the reliability and availability of existing alternative supply sources and economies and exigencies to be achieved in developing large scale facilities for the generation and transmission of electric power and energy ***whether or not such facilities have a capacity or capability in excess of the present or foreseeable needs of such district.***”

Resource Overview

- Heartland's current resource portfolio
 - 50 MW ownership in Laramie River Station
 - Contracts for remainder of resources
 - Expiration of these contracts are a big driver of need for new baseload resources including Big Stone Unit II
 - 56 MW expires by 2013
 - DSM and renewables
- Heartland will be deficient in resources starting in 2008
 - Necessitating short-term purchases from a market short in resources with low energy costs

Resource Planning

- Demand-side management (DSM)
 - Historical DSM impacts
 - 7 MW and 90 MWh/year in 2005
 - Plans for additional DSM
 - Low-interest loans for customer purchase of load management systems

Resource Planning (continued)

- Renewables
 - Historical renewables impacts
 - Wind turbines at our customers' sites produced 1,616 MWh during 2005
 - Additional renewables efforts
 - Wind
 - Landfill gas
 - Bio-fuels project

Resource Planning (continued)

- Heartland's baseload resource planning
 - Used system-level production cost modeling to identify the lowest-cost resources
 - Big Stone Unit II selected
 - 25 MW share
 - With load growing at 4 to 5 MW per year, Heartland could actually use 30 MW of Big Stone Unit II
- Heartland's and its customers' plans include DSM and renewables and Big Stone Unit II