



Applicants' Witness Larry Anderson

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Southern Minnesota Municipal Power Agency (SMMMPA)

Summary
Applicants' Exhibits 13 and 45



Overview

- Southern Minnesota Municipal Power Agency (SMMPA)
 - An organization of 18 municipal utilities
 - Board of Directors consisting of representatives from our member systems
 - 543 MW peak demand and 3,033 GWh of total energy requirement forecasted for 2006
 - 40 employees
- SMMPA forecasts our customers needs will grow over the next decade:
 - Peak demand: 1.2%/year
 - Energy: 2.4%/year

Resource Planning

- **SMMPA will experience capacity deficits without Big Stone Unit II**
 - Beginning in 2008, when a major power purchase agreement expires.
 - Deficit grows from 49 MW in 2008, to 106 MW in 2014.
- **SMMPA uses system-level capacity expansion planning optimization models**
 - Electric Generation Expansion Analysis System (EGEAS) modeling software.
 - Uses a peak and energy forecast, viable demand-side and power supply resources, and integrates them to develop a least-cost capacity plan or plans to meet customers' future requirements.

Resource Planning (continued)

- We considered combinations of alternatives including DSM, renewables, gas-fired capacity, Big Stone Unit II and others
- SMMPA's least-cost plan:
 - Additional DSM
 - Additional renewables
 - 100 MW share of a pulverized coal unit in 2011,
 - followed by 50 MW share of a pulverized coal unit,
 - followed by 50 MW gas alternatives.
- SMMPA share of Big Stone Unit II: 47 MW
 - Although our studies show 100 MW could be justified

Demand-Side Management (DSM)

- DSM program budget for SMMPPA and its members is typically between \$3 million and \$3.5 million annually
 - This represents 2% of our members' aggregate gross operating revenue.

Renewables and Summary

- SMMPA's renewables plans include 130 MW of wind energy by 2015
- SMMPA's proposed plan includes DSM and renewables and Big Stone Unit II.