

# MDU/OTP Joint Witness Mark Rolfes

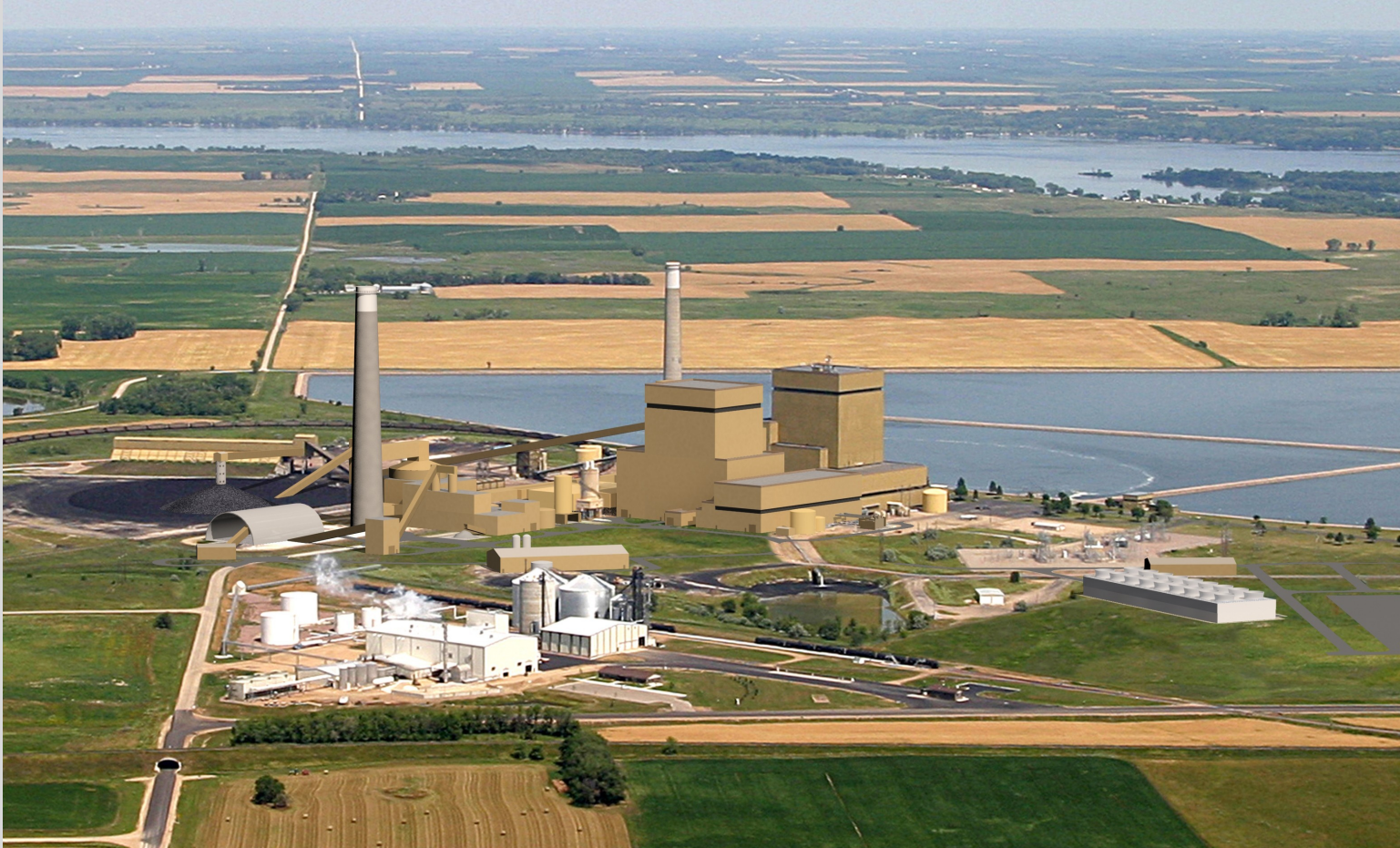
Project Manager  
Otter Tail Power Company

## Summary MDU/OTP Exhibits 301 & 302

# Big Stone Unit II

- 630 MW Nominal Capacity
- Supercritical Pulverized Coal
- Powder River Basin Coal
- 88% Capacity Factor Expected
- Baseload Facility Located in South Dakota
- Two New High Voltage Transmission Lines

# Project Site (artist's rendering)



# Alternative Sites

- Big Stone, Grant County, South Dakota
- Coyote, Mercer County, North Dakota
- Fargo, Cass County, North Dakota
- Dickinson, Wright County, Minnesota
- Glenham, Walworth County, South Dakota
- Utica Junction, Yankton County, South Dakota

# Evaluation Criteria

- Water Supply – 20%
- Fuel Lines – 20%
- Transmission – 20%
- Environmental – 15%
- Air Quality – 15%
- Other – 10%

# Alternative Technologies

- Supercritical Pulverized Coal
- Wind/Natural Gas Combination
- Integrated Gasification Combined Cycle
- Other

Burns & McDonnell – Analysis of Baseload  
Generation Alternatives

# Big Stone Unit II

- Estimated Capital Cost – \$1.442 Billion-excluding transmission
- Commercial Operation Date: Mid 2012

# Fuel Supply and Deliverability

- Powder River Basin sub-bituminous coal
- Delivery by Burlington Northern Santa Fe Railway