

South Dakota Public Utilities Commission

PrairieWinds SD-1, Inc.

**Public Input Hearing
March 1, 2010
Docket EL09-28**

Presenters

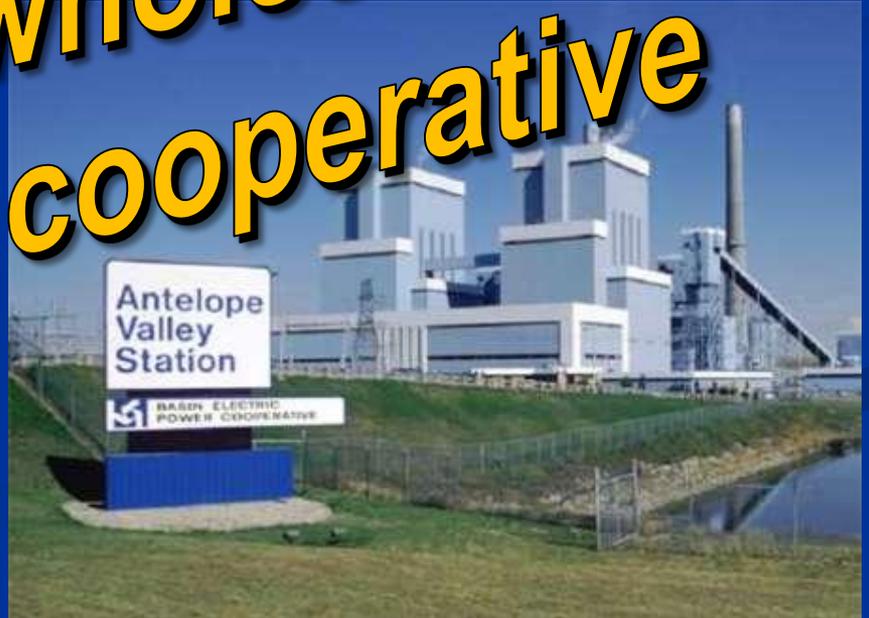
- **Russ Mather, Project Attorney**
- **Ron Rebenitsch, Project Manager**
- **Kevin Solie, Senior Environmental Analyst**

Ron Rebenitsch

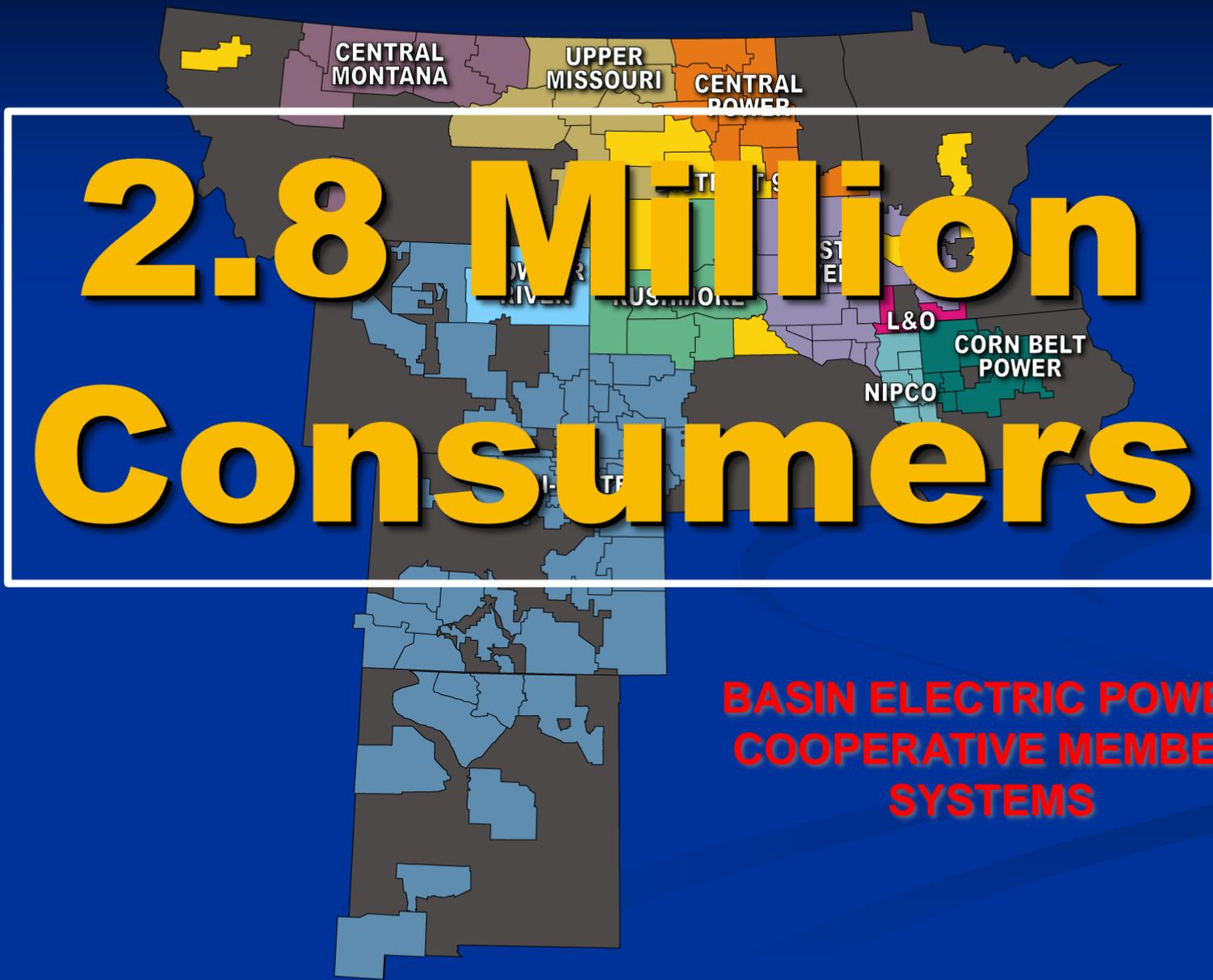
Project Manager



Basin Electric is a member-owned and controlled wholesale power supply cooperative



135 Member Cooperatives





A- Antelope Valley Station



B – Leland Olds Station



C – Laramie River Station



D – Spirit Mound Station



F – Dakota Gasification



E – WY Distributive Generation



Committed Wind Generation Sites Owned and PPAs



Plus over 80 small consumer turbines under 100 kW size

Green & Renewable Projects

Existing:

350+ MW Wind

44 MW Solar

**645 MW Green
& Renewable**

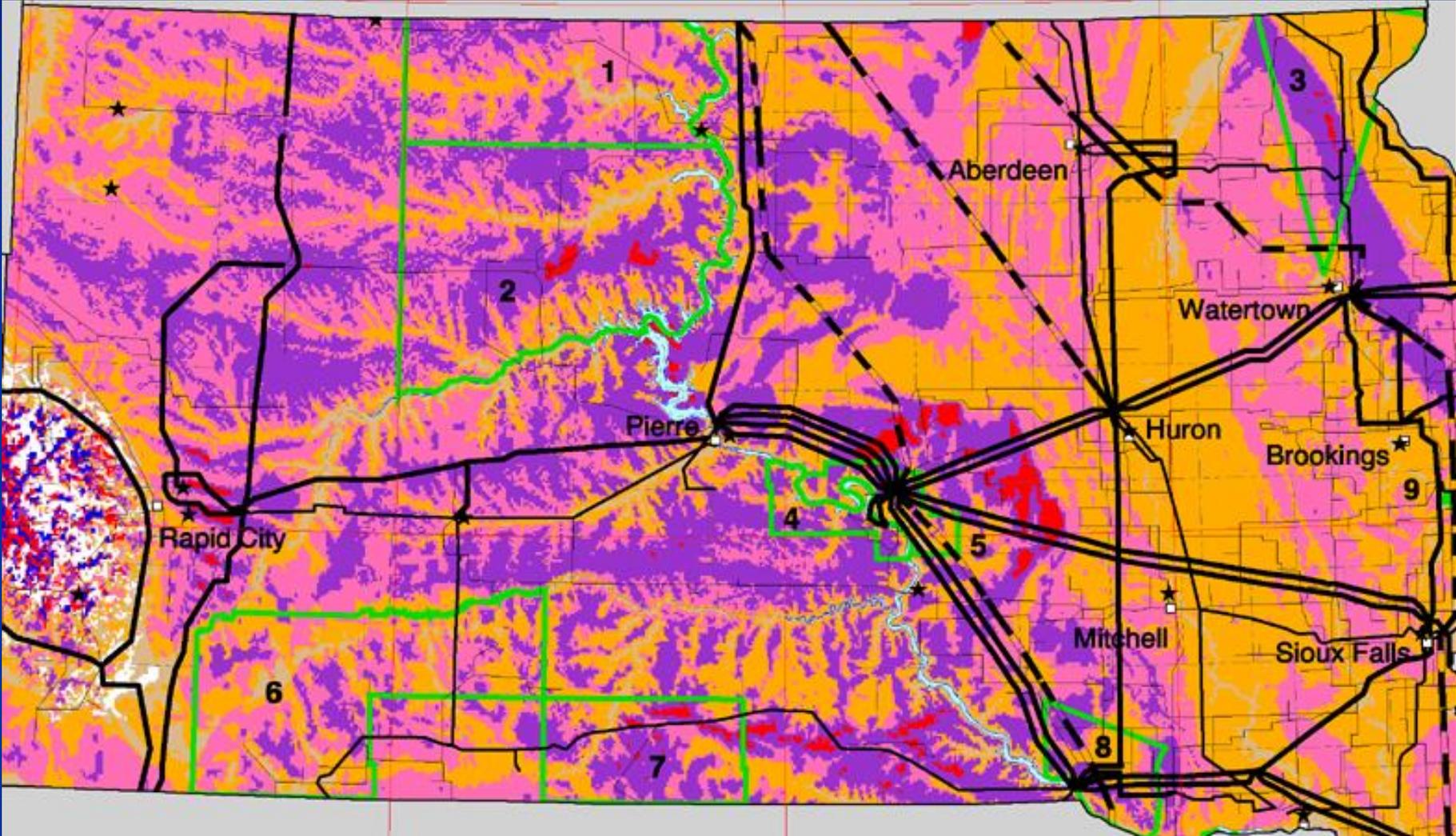
New Owned Wind:

151.5 MW in SD

New PPAs:

99 MW Wind in SD

South Dakota Wind Potential



Project Description

- Project components
 - Up to 111 turbines, underground feeder cables, access roads, O&M building, and a collector substation
 - Approximately 10-12 miles of 230 kV transmission line
- Turbines to be delivered mid-2010
- Requires Federal Environmental Impact Statement
 - Must consider site alternatives
 - Western and RUS – co-lead agencies

South Dakota Wind Partners

- New development for the South Dakota PrairieWinds Project
 - South Dakota WindPartners, LLC
- Discussions are ongoing to develop local participation in wind energy projects

Proposed Schedule/Cost

- Obtain Permits/Approvals - Ongoing
- Summer 2010 – Begin Construction
- Fall 2010/Winter 2011 – Commercial Operation
- Project Cost Estimate = \$350 Million

Project Area



Wind Speed Economics

A 1 MPH change in annual
avg. speed can change
production by 15%



Completed Foundation



Tower Section Delivery



Setting Base



Nacelle



Blade Installation



Completed Turbines



Collector Substation



Typical Transmission Structure



Kevin Solie
Senior Environmental
Analyst

Environmental Permitting

- **South Dakota Public Utilities Commission**
 - **Wind Energy and Transmission Facility Siting**
- **Western Area Power Administration & Rural Utilities Service**
 - **RUS Financing**
 - **Western Interconnection**
 - **Environmental Impact Statement (NEPA)**
- **County and Local Permits**
 - **Conditional Use, Building, Road Crossings, etc**

ENVIRONMENTAL IMPACT STATEMENT PROCESS

*Public Scoping
and Interagency
Communication
Begin*

Issue Notice of Intent

*April
2009*

Public Scoping Meetings

*April
2009*

Identify Issues and Develop /
Screen Alternatives

Conduct Analysis on Feasible
Alternatives

Determine Impacts /
Evaluate Alternatives

Issue Draft EIS for Review

*Public Comment
Period*

Prepare and Publish Final EIS
(opportunity for public review)

*April /
May 2010*

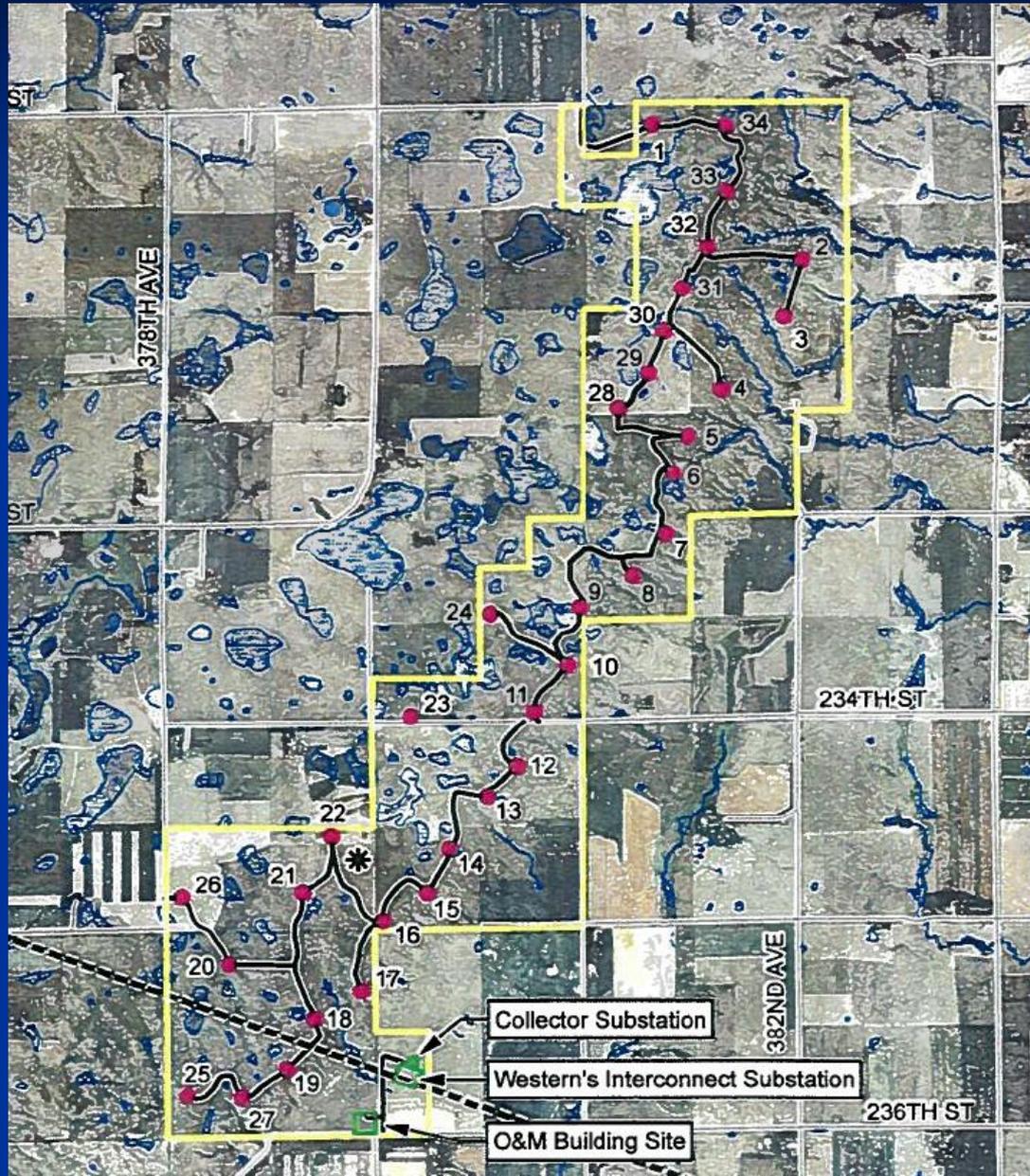
Prepare Records of Decision

*June /
July 2010*



Example Facility Layout

Example
only



Environmental Impacts

- **Physical Environment**
- **Hydrology**
- **Terrestrial Ecosystems**
 - **Threatened and Endangered Species**
- **Aquatic Ecosystems**
- **Water Quality**
- **Cultural Resources**
 - **Historic**
 - **Tribal Consultation**
- **Land Use and Land Use Controls**
 - **Noise**

Financial Impacts

- Construction
 - Lodging and meals
 - Local construction materials
- Operation
 - 10-12 permanent jobs
 - Estimated payroll of \$550,000 per year, plus an additional 40% for benefits
- Taxes
 - Approximately \$500,000 per year

Public Meetings

- EIS Scoping Meetings
 - April 2009
- Draft EIS Hearing
 - February 11, 2010
- PUC Public Input Hearing
 - March 1, 2010

Thank You