

**South Dakota Wind Energy Conference
Opportunities and Barriers
October 18-19, 2000**

Session 5: Wind Markets 'PrairieWinds'

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A Touchstone Energy Cooperative





- **Wind program offered by East River, its participating member systems, and Basin Electric**
- **Subscribing consumers pay for wind generated electricity at a premium of \$3.00 per 100 kWh block**
- **The higher cost of the wind generated electricity is recovered through the premium**
- **Participation is voluntary**



Location... *Chamberlain*

Size... *One - three 1.3 MW wind turbines*

Developer... *CrownButte Windpower*

Type of Turbines... *Nordex*

Commission Date... *Spring 2001*

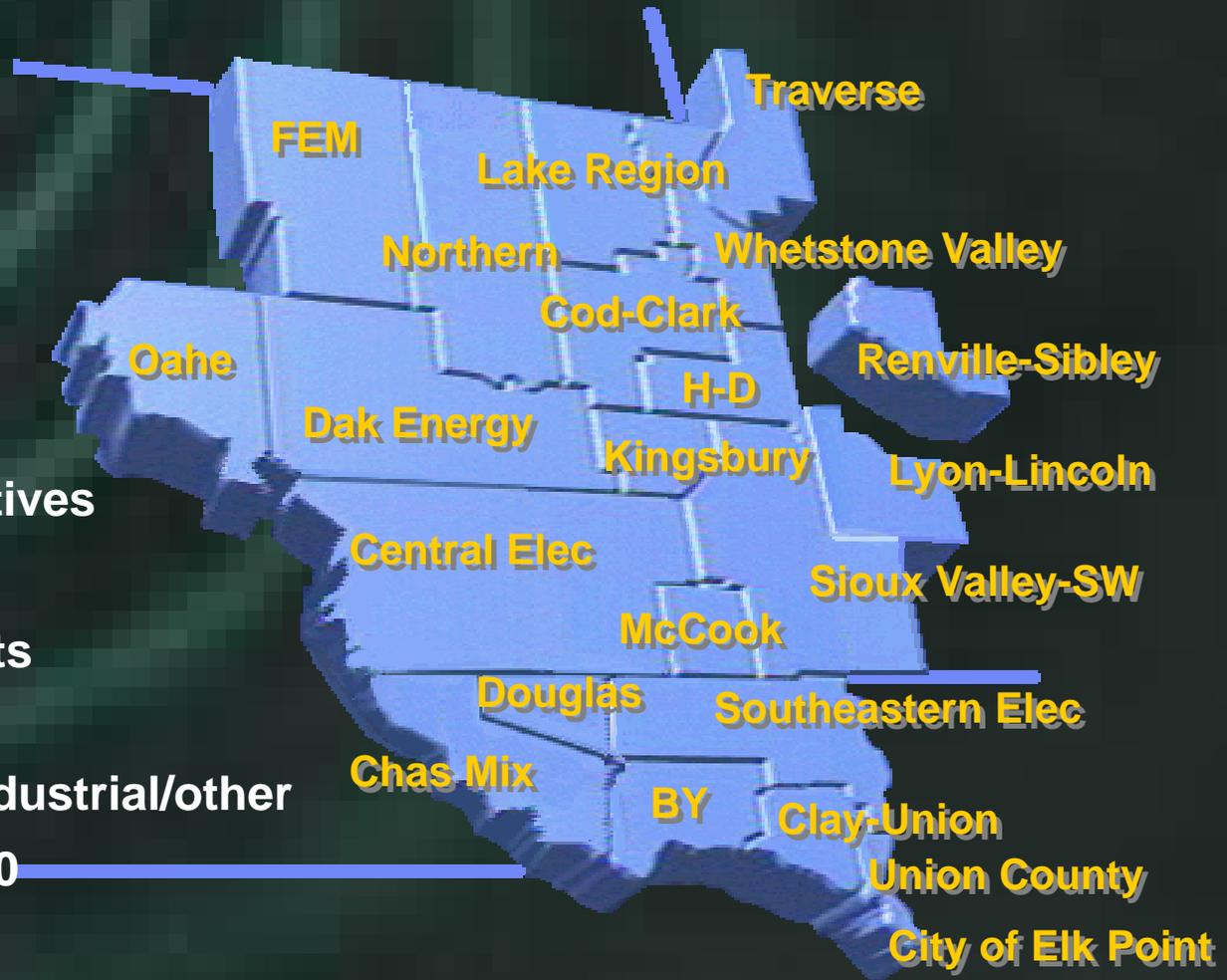
WHY WIND ENERGY?

- **A great increase in wind energy activity and interest nationally, regionally, and locally**
- **Part of the cooperatives continued interest in wind energy and other renewables**
- **The cooperatives serve an area with a tremendous wind resource**
- **Wind projects were being planned and/or developed throughout East River's area**
- **East River and its members were being approached about wind energy**

What are our wind markets?

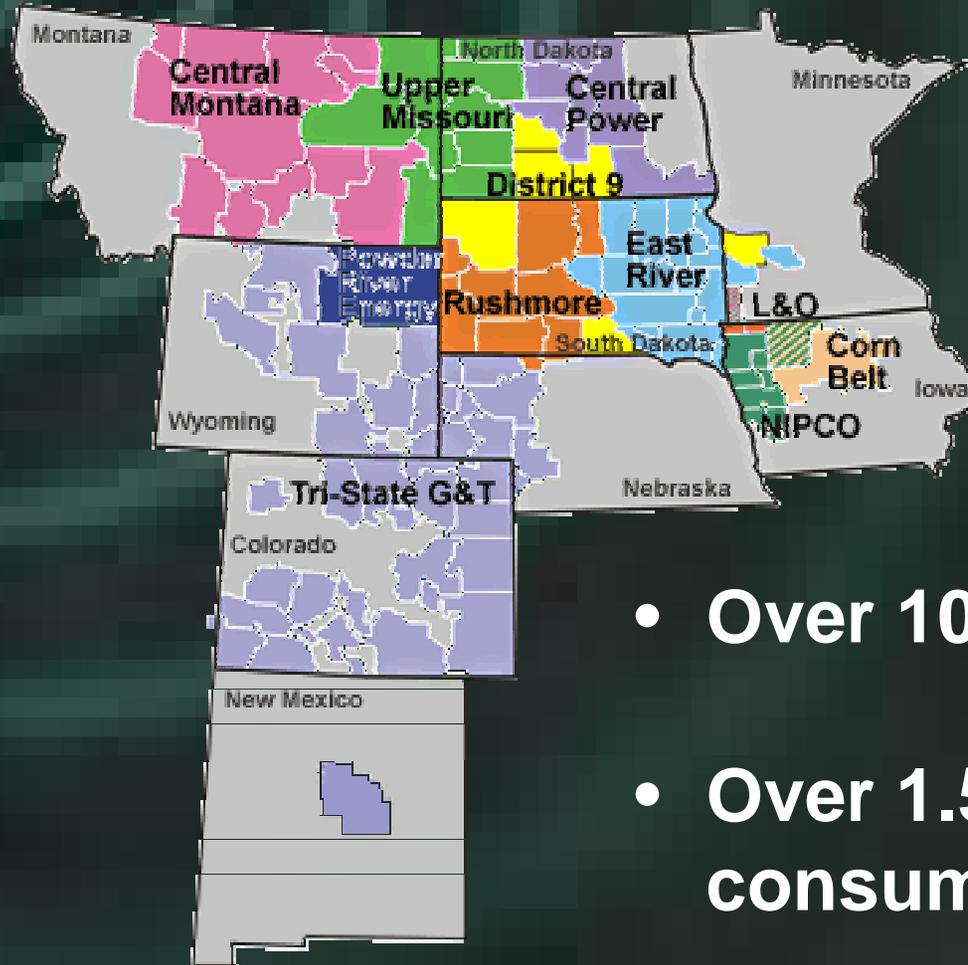


East River Electric Power Cooperative, Inc.



- 21 member cooperatives
- 1 municipality
- 77,000 retail accounts
- 70,000 residential
- 7,000 commercial/industrial/other
- South Dakota: 70,000
- Minnesota: 7,000

Basin Electric Power Cooperative, Inc.



- Over 100 cooperatives
- Over 1.5 million consumers

Survey #1

Who...

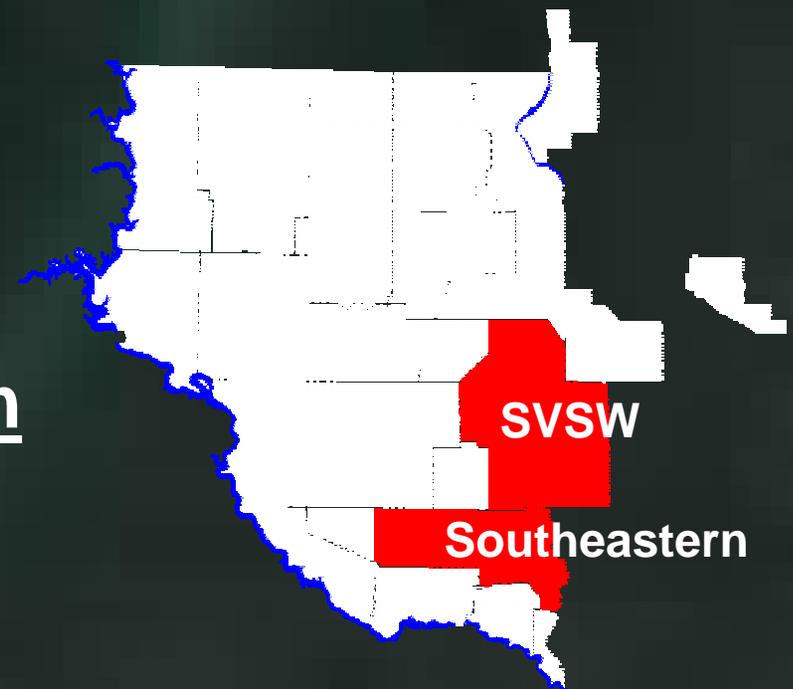
2 suburban member cooperatives
(Sioux Valley-Southwestern Electric
and Southeastern Electric)

How...

Scientific
telephone survey
conducted by
Inside Information

When...

September 1999



Survey #2

Who...

1 VERY rural member cooperative
(Douglas Electric)

How...

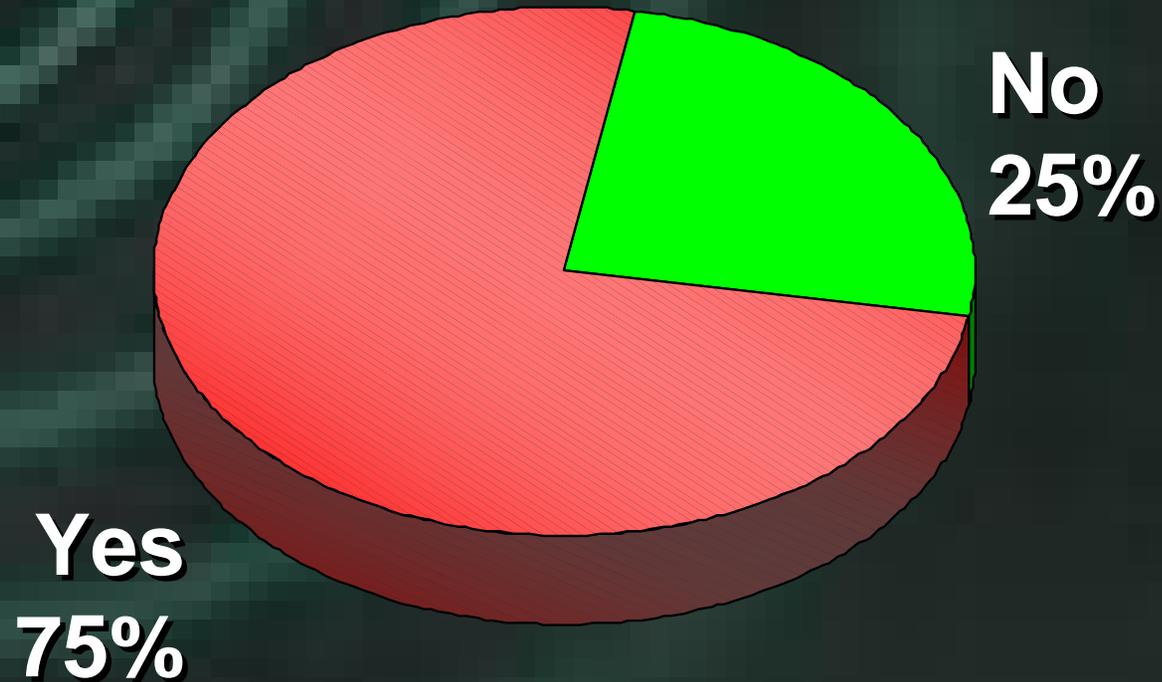
Survey handed
out at annual
meeting

When...

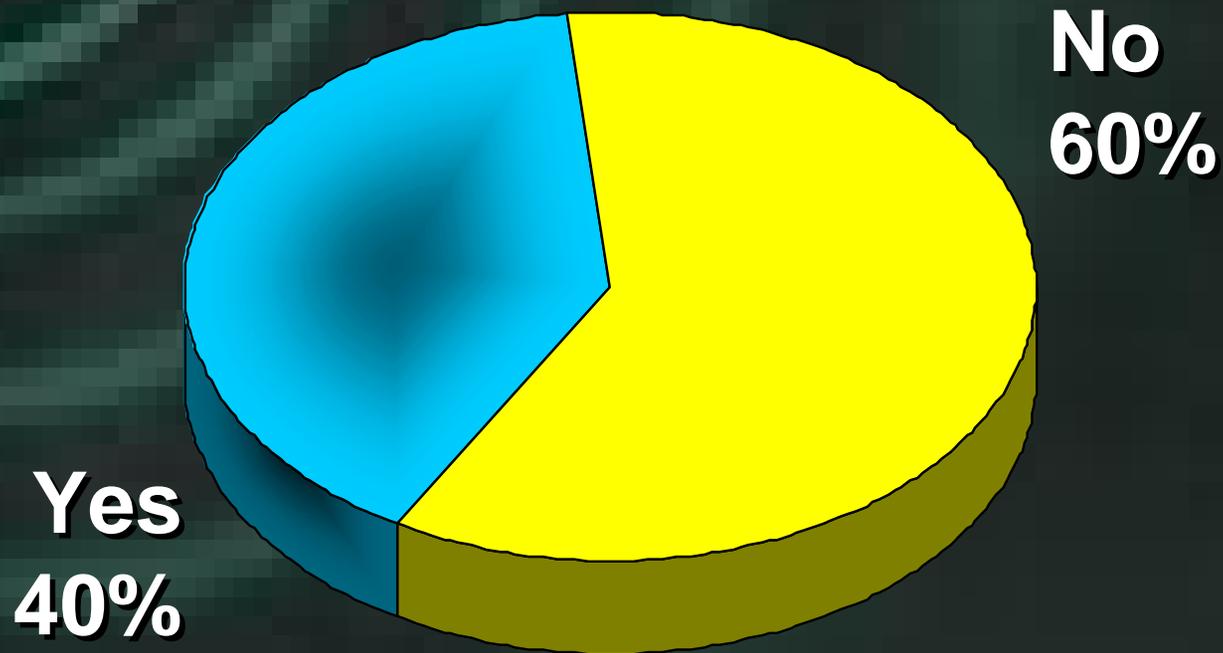
October 1999



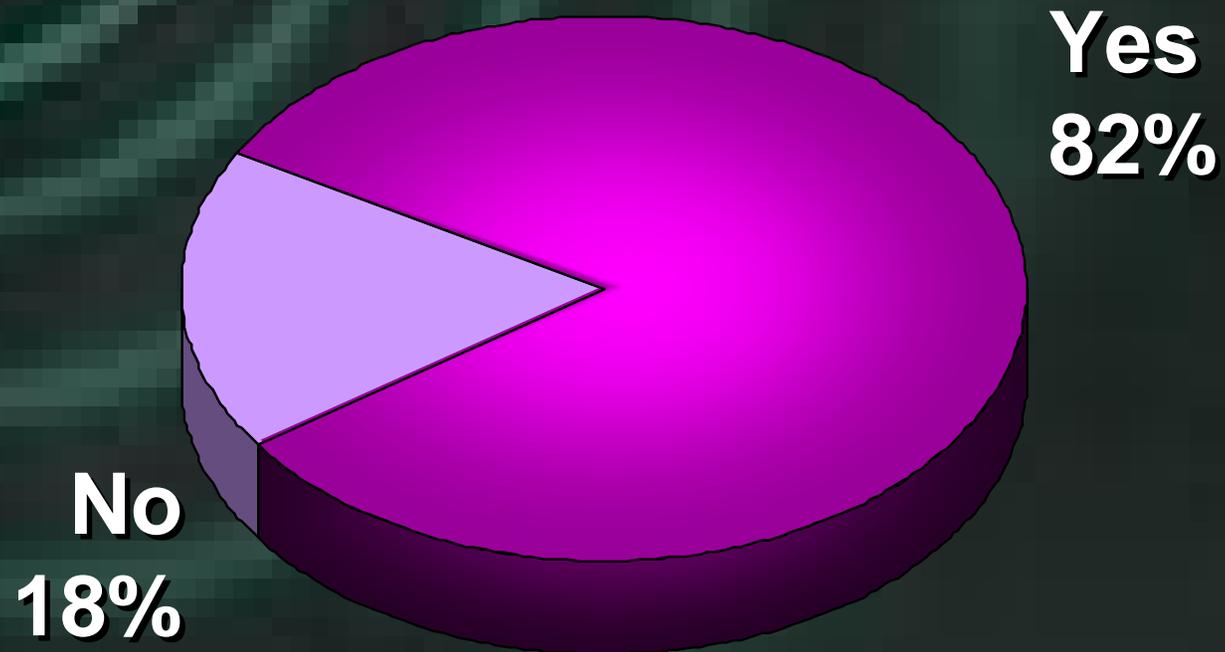
Interested in Receiving Electricity Generated by Wind



Of those who wanted wind power ... willing to pay more?



Should coops develop wind power?





- **PrairieWinds Marketing Started April 2000**
 - 75,000 brochures have been mailed out
 - Presently marketing within East River service area
 - Expanding the marketing and program
 - Trademarked PrairieWinds name
- **PrairieWinds Signups to Date**
 - 650 subscribers
 - 1,300 - 100 kWh blocks committed
 - Annually 1,500,000 kWh

ISSUES

- **Cost**

- **Wind energy cost**

6.0¢/kWh

- **Tax credits**

-1.7¢/kWh

- **Avoided cost**

-1.3¢/kWh

- **Premium cost**

3.0¢/kWh

- **Availability**

- **Wind does not always blow**

- **30% capacity factors**

ISSUES

- **Transmission Access**
- **Markets and Marketing**
- **Type of Project**
 - **Developer owned vs. cooperative owned**
 - **Developer and type of turbine**
 - **Size and number of turbines**
- **Location**
 - **South Dakota vs. Minnesota**

