

# PrairieWinds Projects:

PrairieWinds ND 1;  
A Wholly-Owned Subsidiary of

*Ron Rebenitsch*

*Mgr of Alternative Technologies*



**BASIN ELECTRIC  
POWER COOPERATIVE**

A Touchstone Energy® Cooperative



# Basin Electric's Green & Renewable Projects

## Existing:

230+ MW Wind

33 MW Solar

**643 MW Green  
& Renewable**

## New Wind:

120 MW in ND

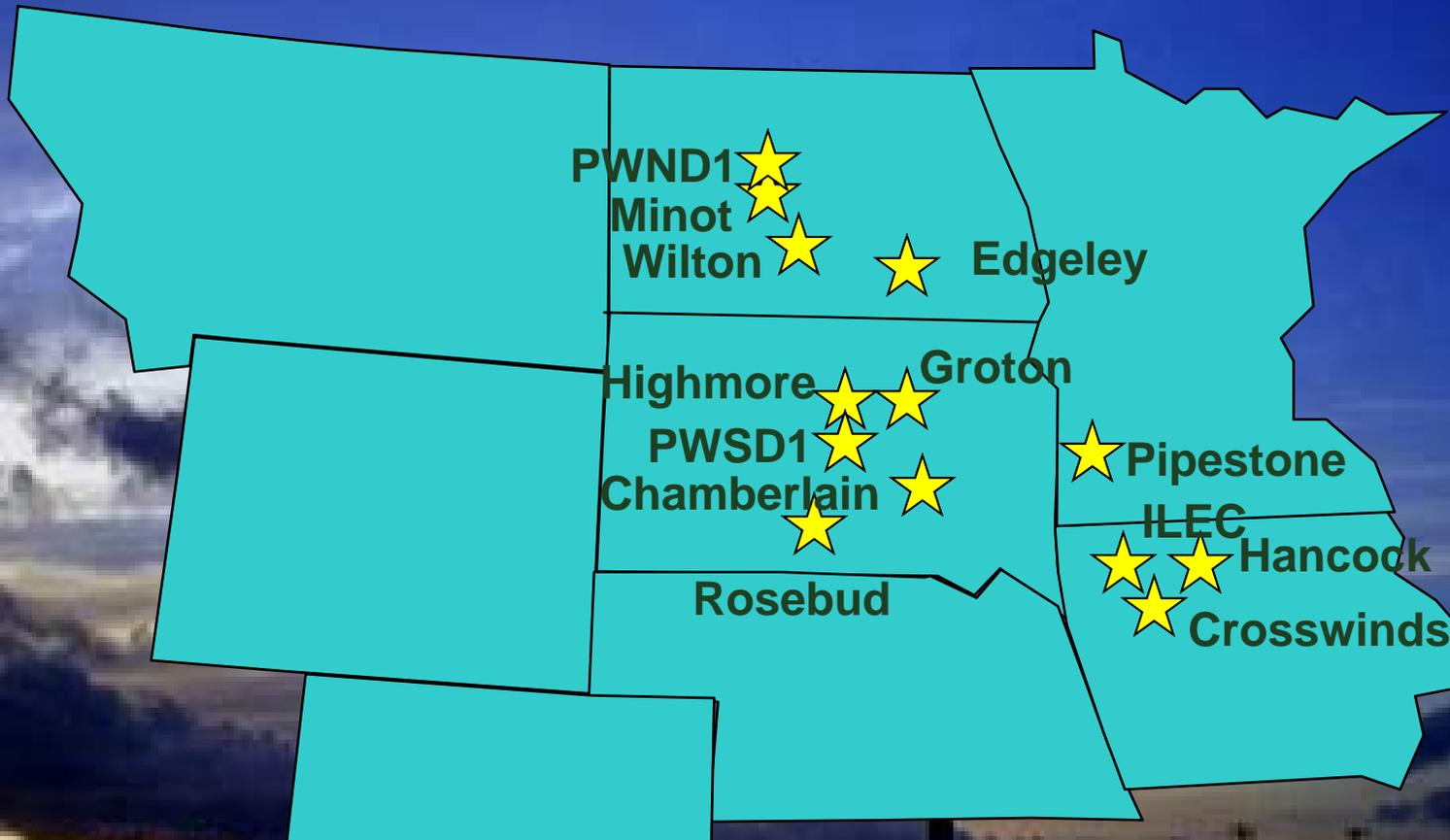
150 MW in SD

## New PPAs:

11 MW Waste Heat

99 MW Wind in SD

# Committed Wind Generation Sites Owned and PPAs



*Plus over 80 small consumer turbines under 100 kW size*

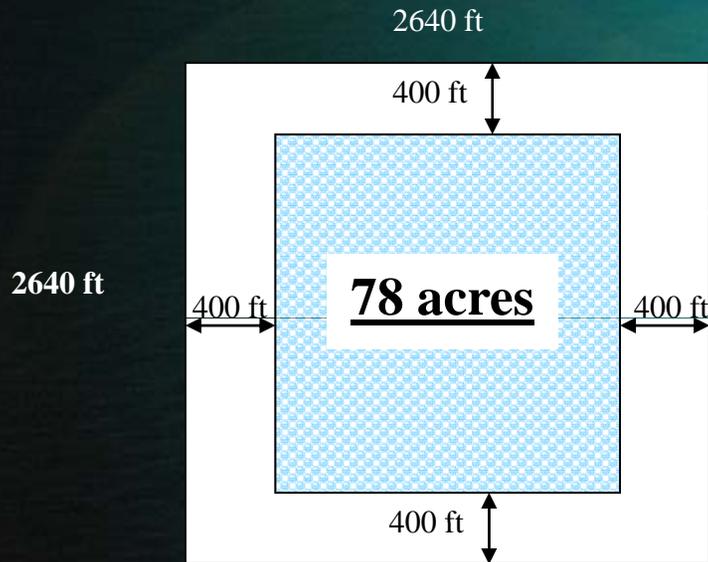
# Local Benefits From Wind

- Landowner Leases
  - 25 to 50 years
  - Annual Escalation
  - Improved road access
- Property Taxes
- Employment:
  - ND - 8 permanent jobs
  - SD – 12 permanent jobs (est)
  - Construction – 200 to 400 jobs
- Local “Ripple” Effect

# Challenges & Impacts

- Noise/Shadow Flicker
- Traffic during construction
- Viewscape
- Historical/Cultural Issues
- Setback Requirements

# Impact of Setback from Property Lines



82 acres

**Example: A setback of “Fall Distance” can sterilize over 50% of the site.**

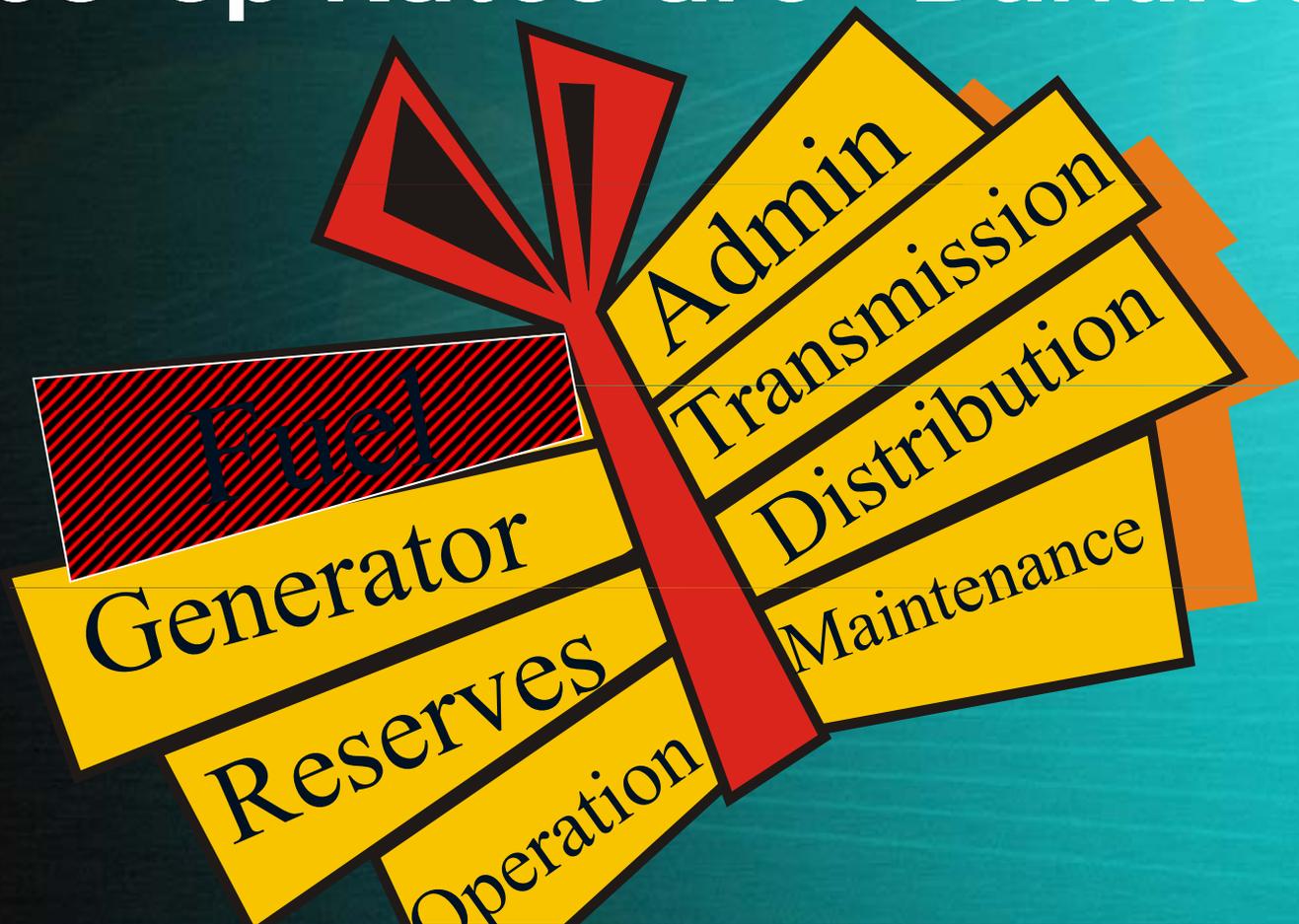
Typical Quarter Section: 160 ac

Then add real constraints, such as shadow flicker & noise...  
Leaves limited area for wind

# Our Wind Resource Goal: Competitive Cost

- Project Ownership (Control of Our Destiny)
- Avoid Subsidizing Affluent Investors at the Expense of Other Consumers
- PPA Pricing Benchmarks:
  - Large Projects w/Economy of Scale
  - Tax Benefits Utilized
  - Sharing of Tax Value with Co-op
- Interconnection Costs
- Transmission Risk Allocation

# Net Metering Concern: Co-op Rates are *"Bundled"*



Over ½ the cost of power supply is "wires" ...

Not electricity

# Taxes Drive the Economics of Wind Projects



# Real Value of 2.1¢/kWh Production Tax Credit

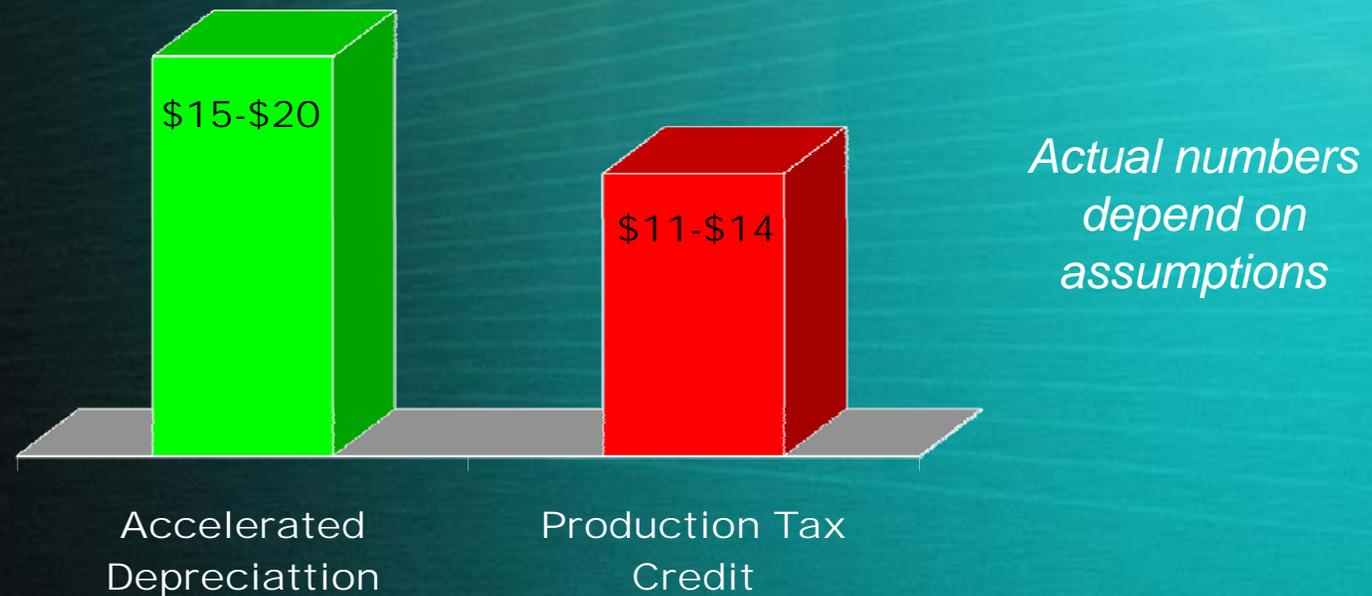
Pre-Tax Income:	3.2¢
Income Taxes @35% Tax Rate:	(1.1¢)
<hr/>	
Net Income after Tax	2.1¢

Value of PTC After Tax = **2.1¢**

Assumption: *Other Taxable  
Income to be Sheltered*

*The high cost of projects makes the 5 yr accelerated depreciation more valuable than the PTC*

*\$/MWH levelized over the life of the Project*



**Developers need a large “tax appetite”**

# SOME FINANCING OPTIONS

- *Sale/Leaseback*
- *Tax Equity Flip*
- *30% Treasury Grant*

# Passive Tax Equity Flip Model

Co-op as Developer  
( $<50\%$  Equity)

Tax Investor  
( $>50\%$  Equity)

**Project Partnership**

Production Tax Credits  
& Accelerated Depr.  
\$\$\$

Power Purchase  
Agreement w/Utility  
\$\$\$

**Not Tax Advice – For general information only**

# Possible Allocations: 1<sup>st</sup> 10 Yrs (or upon reaching IRR target)

## Co-op

- 1% of the Production Tax Credits
- 1% of Tax Losses (Accelerated Depr)
- Residual after Tax Investor

## Tax Investor

- **99% of Production Tax Credits**
- **99% of the Tax Losses (Accelerated Depr)**
- **As needed to reach rate of return**

**Not Tax Advice – For general information only**

# Possible Allocations after 10 Yrs (Or reaching IRR Target)

## Co-op

- PTCs/Accel Depr. Exhausted
- 95% of Distributable Cash

## Tax Investor

- PTCs/Accel Depr. Exhausted
- 5% of Distributable Cash

Tax Investor has small residual interests – Co-op is primary

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# Investor's Tax Appetite Hit by Recession....

PTC Extended to Dec. 31, 2013

## Alternative to PTC

The ARRA (Stimulus Bill):  
*The 30% Treasury Grant*

# 30% Treasury Grant

- Pays 30% of project cost (excl. transmission)
- Must begin construction in 2010  
(Possible option – incur at least 5% of cost)
- Construction complete by 12-31-2012
- Depreciation allowance reduced by ½ of grant
- Co-ops not eligible without a “Blocker C” corp.

Possible model for co-ops???

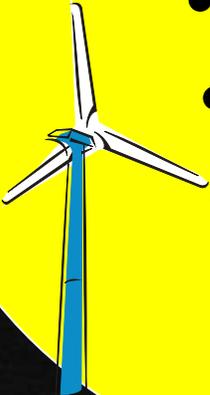
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# To be Real, A Project Needs...

- *Financing*
- *Transmission*
- *A market for the power*
- *Wind turbines*
- *Environmental permits*

# Investment & Risk Comparison

## Project Developer

- 
- **Transmission Risk**
  - **2-3 years wind studies**
  - **Engineering \$\$\$**
  - **Permitting Risk**
  - **Operating Risk**
  - **Market Risk**
  - **Tax Risk**

Cost: \$3-5 Million/turbine

## Landowner

1/4 to 1/2 acre of  
land per turbine

Revenue:  
\$4-\$6000/turbine/yr

# Questions for Developers...

- Experience: *Have they ever completed a wind project?*
- Financing: *Who is being asked to “fund the dream”?*
- Transmission: *Interconnection requests? Timing?*
- Market: *Is there a customer for the power?*
- Environment: *Can the project be permitted?*
- Cost: *Are the cost estimates realistic?*