

312 & 313 Agreements

What is the Value ??

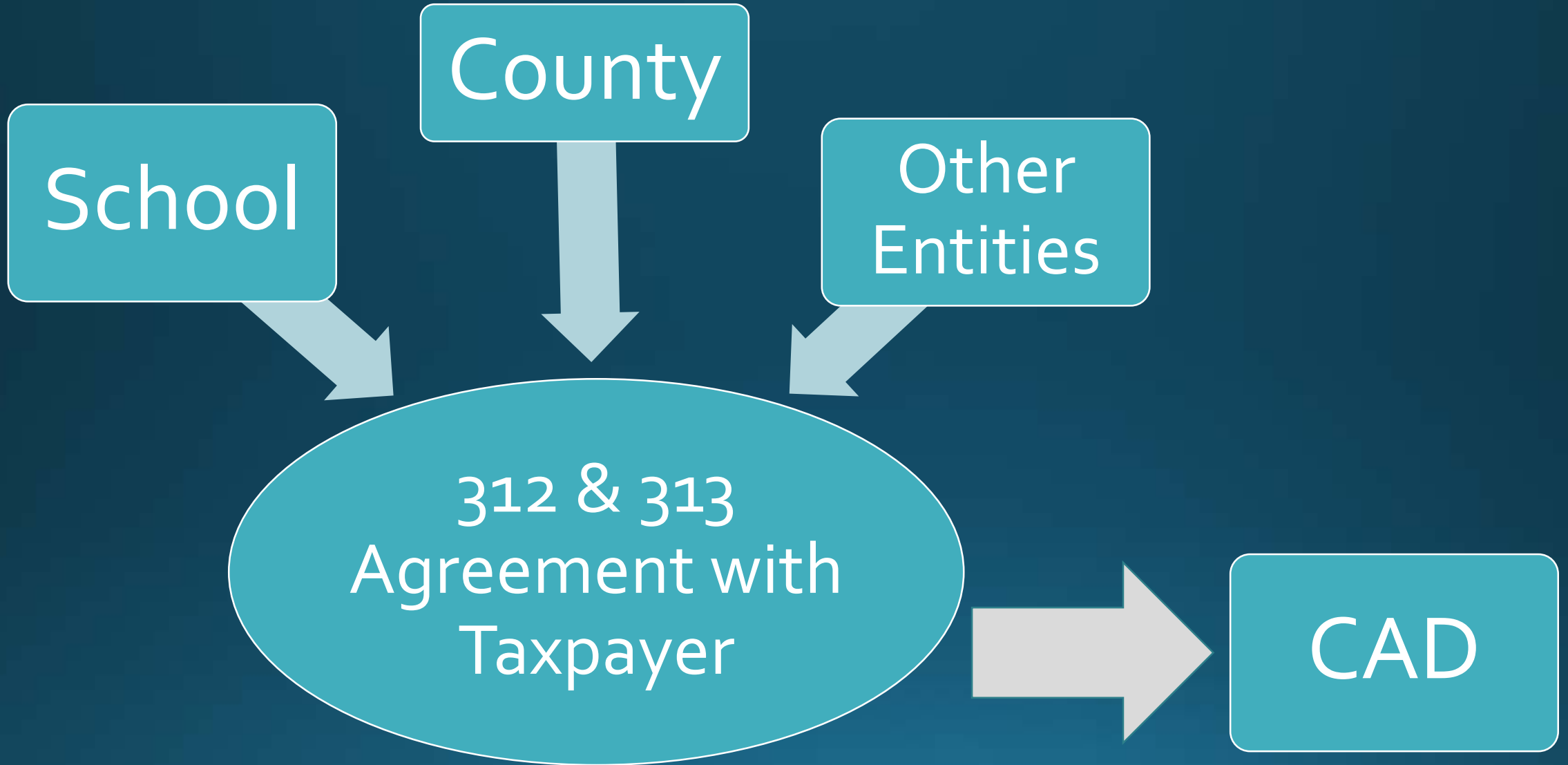
Montague County Commissioners Meeting

April 11, 2017



The Basics

- 312: Tax abatement for County or other entities
- 313: School Value Limitation Agreement (VLA)
- Purpose is incentive for large scale economic development



Texas Economic Development Act: Chapter 313 “Value Limitation Agreement”

- Limited to school districts—established in 2001 under HB 1200
- First projects approved in late 2002
- 150 active projects through 2012
- Approaching 100 projects under consideration for 2013
- \$60 billion in new investment covered by these agreements

Chapter 313 (cont.)

- District may offer minimum property value limitation from \$1 million to \$100 million
- Depends on size of tax base, rural status
- Look at Comptroller's website
http://www.texasahead.org/tax_programs/chapter313/
- Property is fully taxed first two years
- VLA limitation eight years for M & O taxes
- Full project value available for debt service on bonds

Chapter 313 Basics- Eligible Projects

- Manufacturing
- Research and development
- Renewable electric generation
- Clean coal
- Nuclear energy
- Computer data centers

Project Types

- 57 percent of the investments are in manufacturing
- 26 percent are in renewable energy
- 17 percent of the investments are in research and development, clean coal, advanced clean energy, electric power generation, and nuclear electric power generation

Subsidies

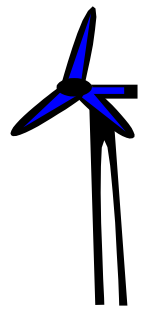
Federal Government Policies – two benefits that encourage renewable and are vital in making them financially feasible:

1. MACRS Tax Depreciation

- Accelerated depreciation that allows for rapid recovery of the investment over a 5 year period - TAX PURPOSES ONLY

2. Production Tax Credit (PTC) - Sec 45b Federal Tax Code

- Inflation adjusted per kilowatt hour tax credit generated by qualified energy resource-enacted in 1992
- 10 year benefit from the commission date of wind turbine
- Calculation = MWh x \$23 (Current Federal Rate)

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PTC & ITC (Investment Tax Credit)

American Recovery & Reinvestment Act 2009-ARRA

Created ITC (Investment Tax Credit)

Renewable energy facilities placed in service after 2008 and commencing construction prior to 2015 (2020-Wind) may ELECT to make an irrevocable election to claim ITC in lieu of the PTC.

Can be equal to 30% of the qualified installed cost of the project.

Consolidated Appropriations Act 2016

Extended PTC & eligible facilities to claim ITC in lieu of PTC to 2019 (Wind)

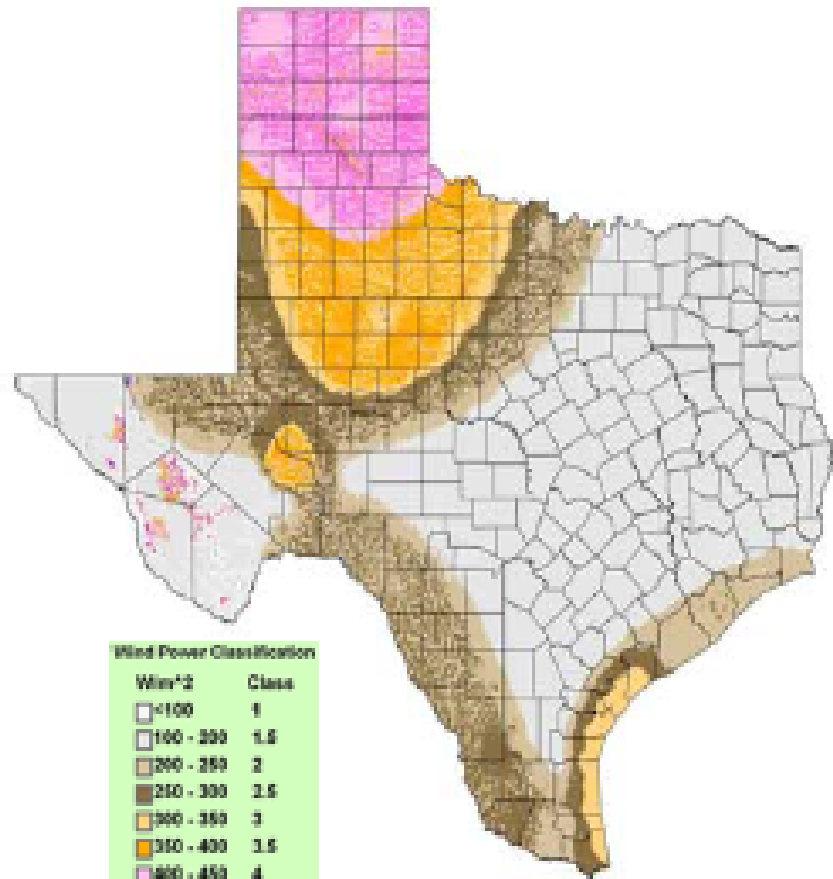
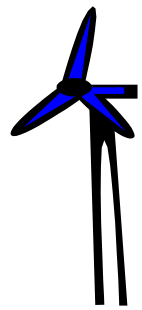
Phase down of PTC-Year of construction start date

2017-PTC reduced by 20%

2018-PTC reduced by 40%

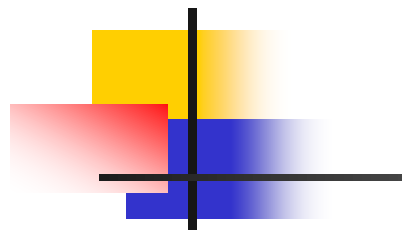
2019-PTC reduced by 60%











Why So Much Wind Built in Texas?

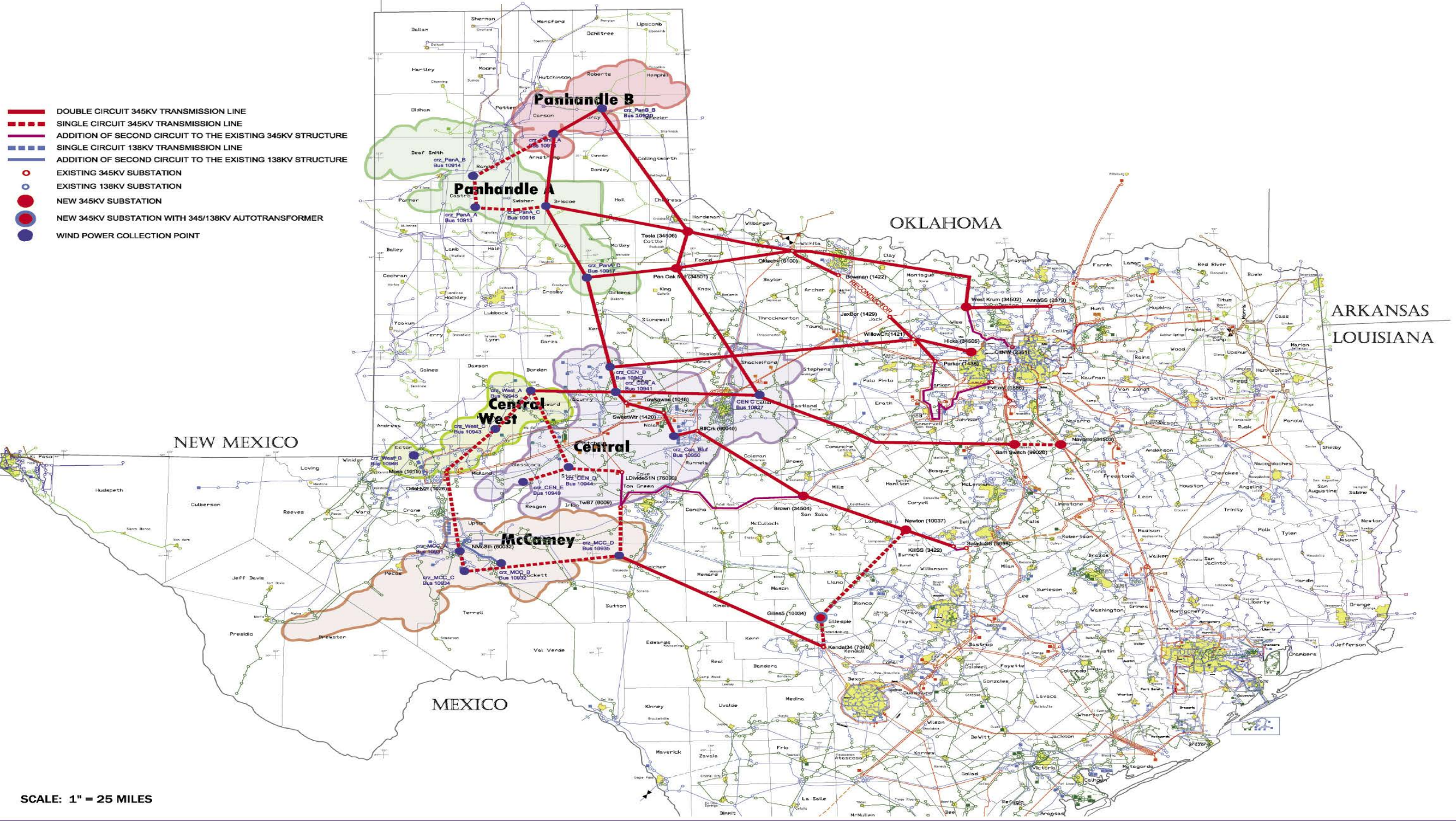


Wind*2	Class
<100	1
100 - 200	1.5
200 - 250	2
250 - 300	2.5
300 - 350	3
350 - 400	3.5
400 - 450	4
450 - 500	4.5
500 - 550	5
550 - 600	5.5
600 - 650	6
650 - 700	6.3
700 - 750	6.6
750 - 800	7+

- Texas has seen more wind generation built than other state. Why? Four primary reasons: 1) resource availability; 2) business environment; 3) existing generation portfolio; and 4) renewable portfolio standards.
- *Resource availability:* Texas edges out N. Dakota as the state with the most wind resource, with an estimated 223 GW of potential.
- *Business environment:* Plain and simple - Texas is a pro-business state.
- *Existing generation portfolio:* Since natural gas accounts for 65% of generating capacity in Texas, natural gas-fired generation almost always sets the marginal price for electricity. That means power prices are higher in Texas (lower variable-cost coal generation more often sets price in other markets) - last year they averaged 21% higher than the national average.*
- *Renewable Portfolio standards (RPS):* Texas' 1999 RPS and related Renewable Energy Credit program was the first in the nation. The original target of 2,880 mw by 2009 was raised in 2005 to 5,880 mw by 2015. The new target has already been achieved, but dispatch is transmission constrained.



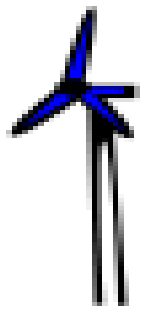
-  DOUBLE CIRCUIT 345KV TRANSMISSION LINE
-  SINGLE CIRCUIT 345KV TRANSMISSION LINE
-  ADDITION OF SECOND CIRCUIT TO THE EXISTING 345KV STRUCTURE
-  SINGLE CIRCUIT 138KV TRANSMISSION LINE
-  ADDITION OF SECOND CIRCUIT TO THE EXISTING 138KV STRUCTURE
-  EXISTING 345KV SUBSTATION
-  EXISTING 138KV SUBSTATION
-  NEW 345KV SUBSTATION
-  NEW 345KV SUBSTATION WITH 345/138KV AUTOTRANSFORMER
-  WIND POWER COLLECTION POINT



SCALE: 1" = 25 MILES

APPRAISAL TECHNIQUES

- Cost Approach
RCNLD
- Income Approach
Discounted Cash Flow or Direct Cap
- Market Approach
Sales Comparison

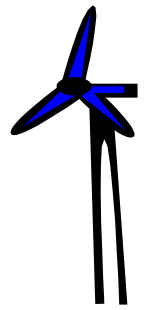
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Cost Approach to Value

RCNLD- Replacement Cost New Less Depreciation

- **Depreciation**

- Physical- 20 year economic life
- Functional- operations & maintenance (new vs. old)
- Economical- Capacity factors and inutility
PTC and MACRS



Capacity Factor

- **Capacity Factor** = potential gross amount of electricity generated at 100% continuous operation

Calculation for a 100 MW project:

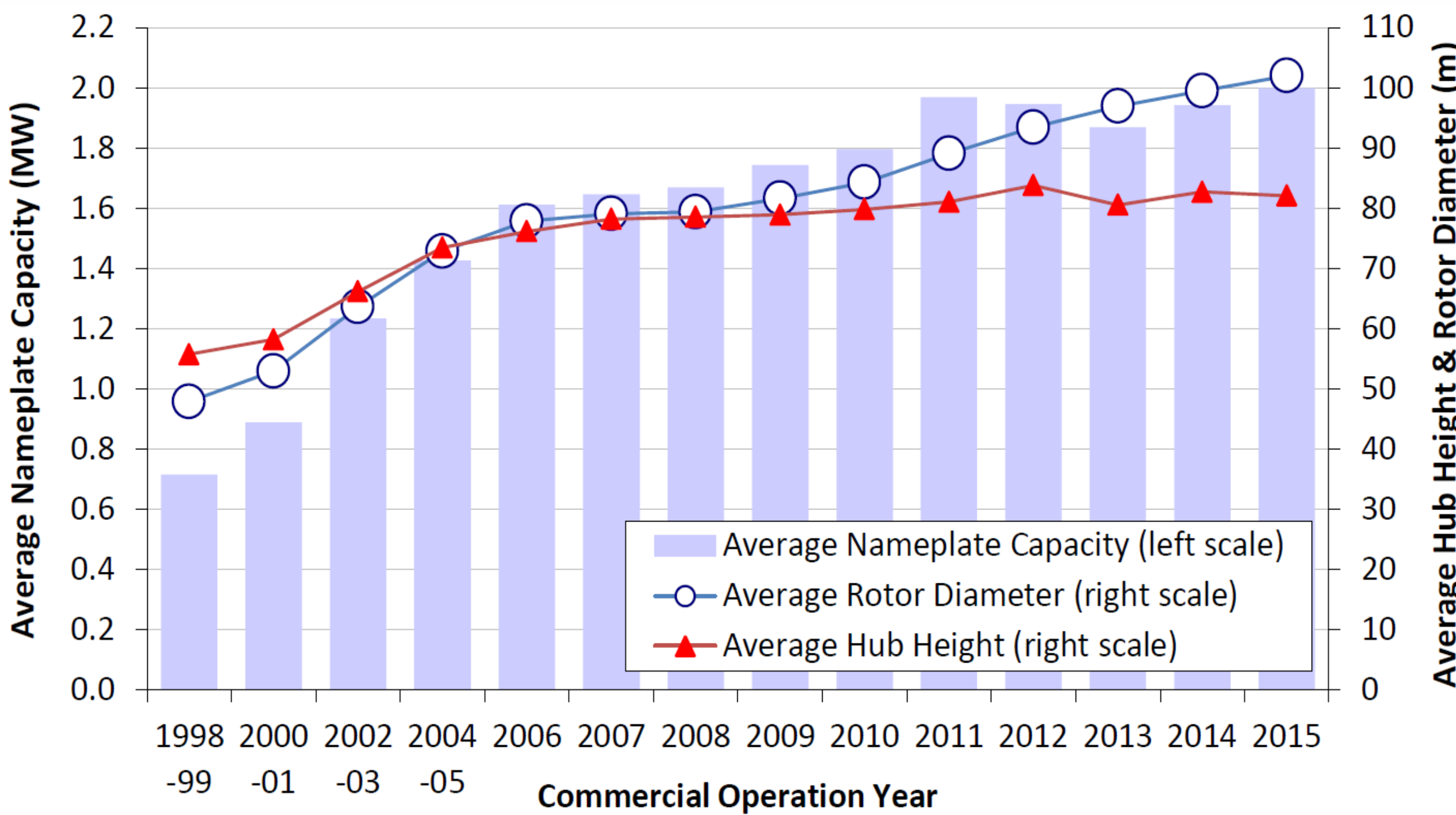
$100 \text{ MW} \times 24 \text{ hrs} \times 7 \text{ days} \times 52 \text{ wks} = 873,600 \text{ MW/Yr}$

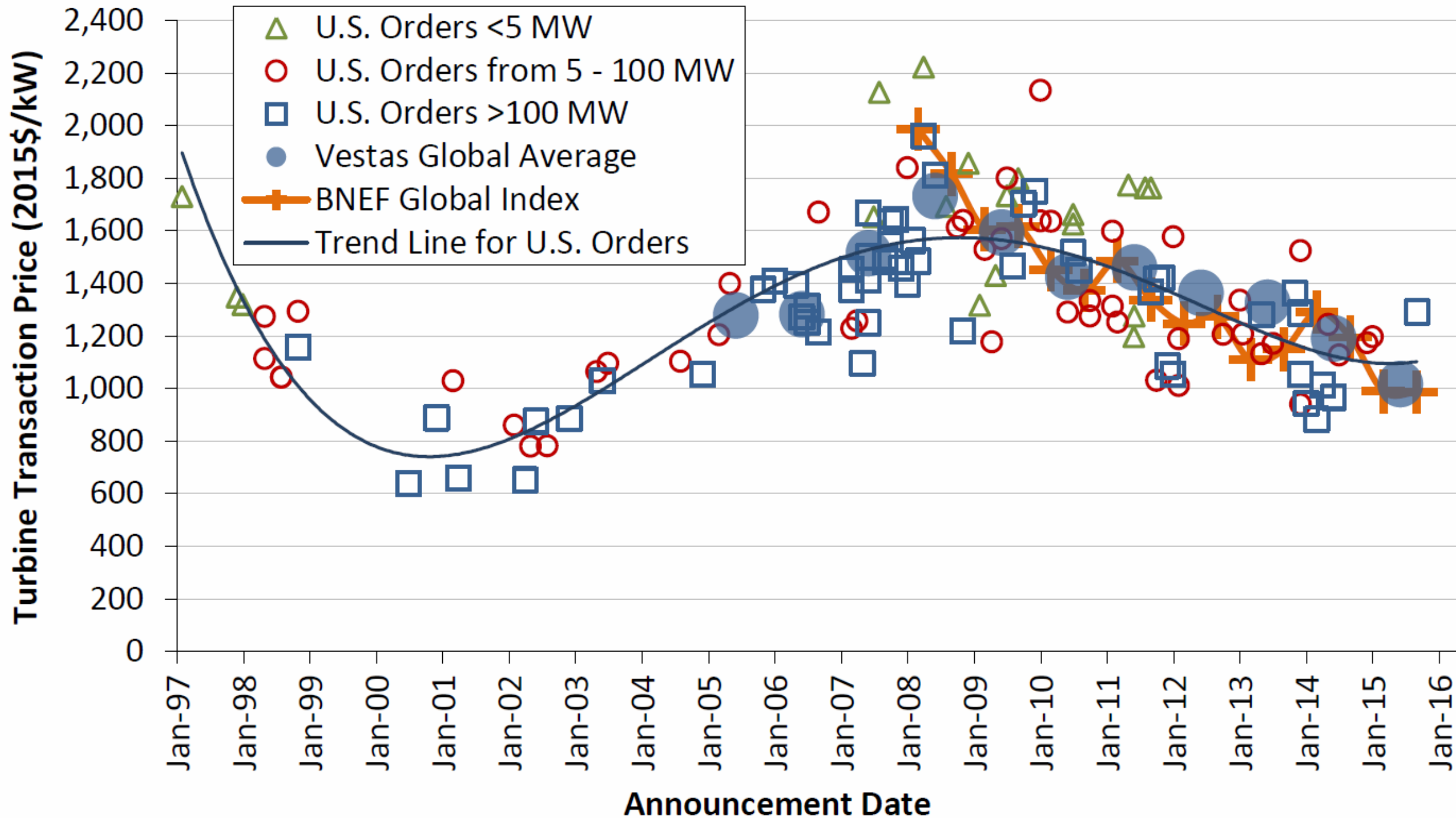
- **Net Capacity Factor** = the percent of the net amount of electricity generated to the potential gross amount

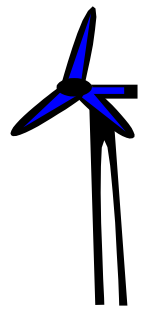
Calculation for a 100 MW project with a 30% Capacity Factor:

$873,600 \text{ MW/Yr} \times 30\% = 262,080 \text{ MW}$

Capacity Factor is an important operational indicator of wind resource, generation and performance







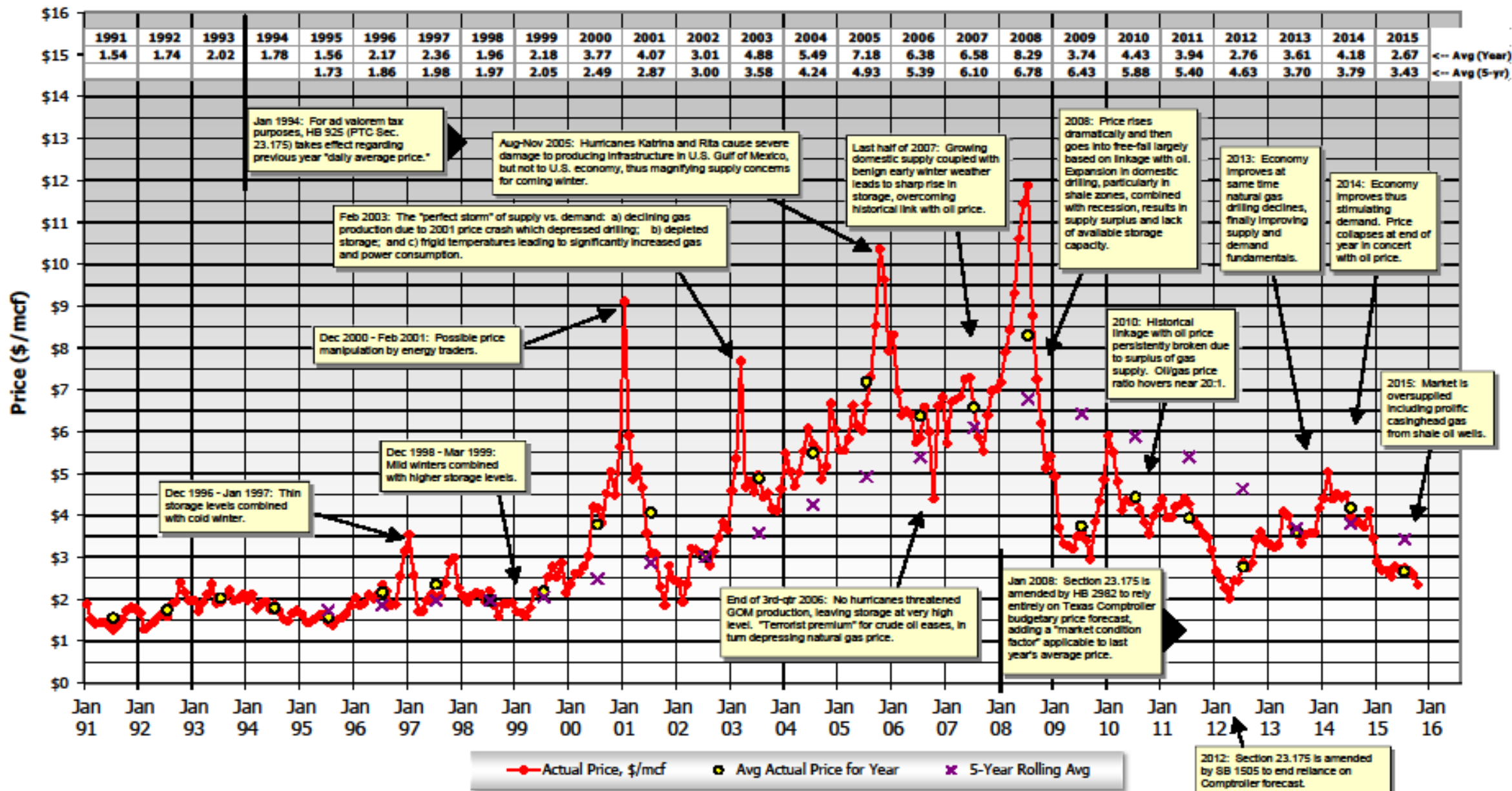
Income

Revenue Considerations – Energy Rates

- **Contracted** = Power Purchase Agreement (PPA)
 - Contractual energy prices with specified off-taker
 - Length of PPA based on period of time to earn a required rate of return and economic life of asset
- **Merchant** = No Contract or Specified Off-Taker (Open Market)
 - Based on current clearing prices and bilateral contracts to sell power
 - Short and intermediate hedges create stable revenue stream
 - Additional expense of purchased power

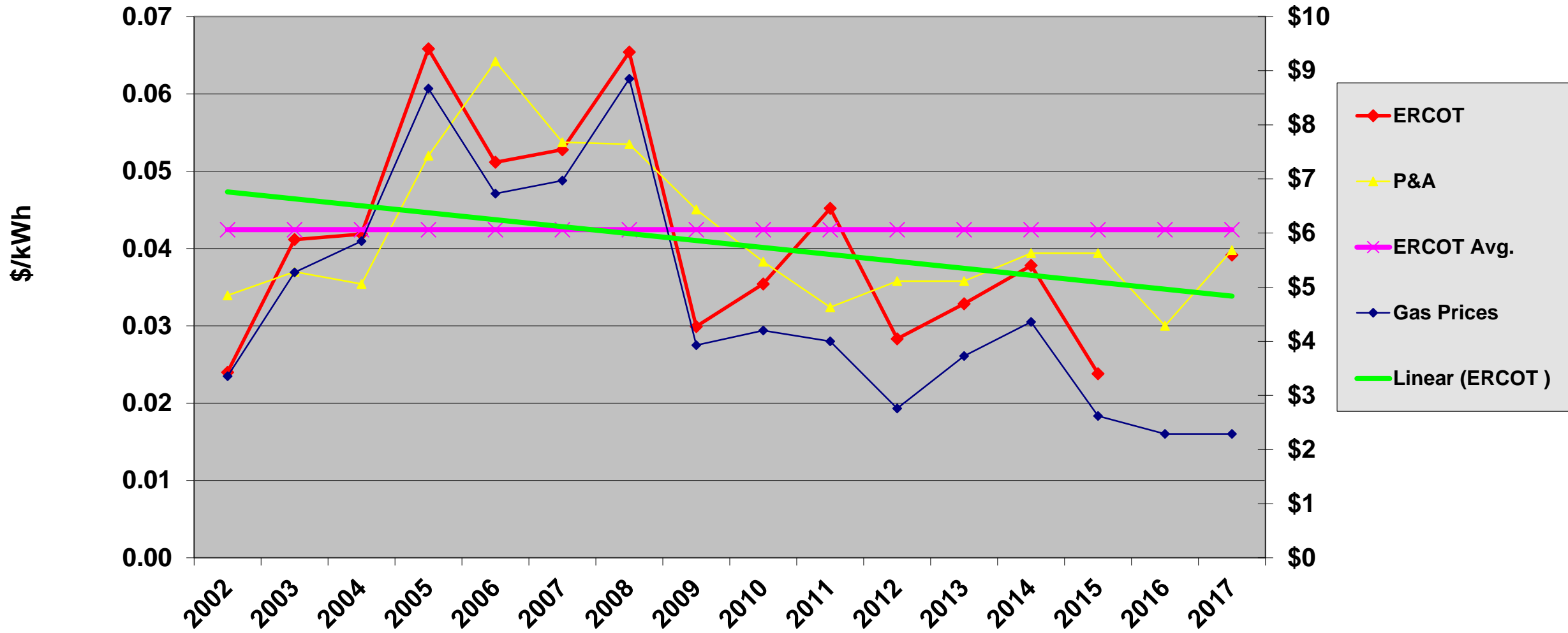
Historical Texas Natural Gas Price (\$/mcf)

Data through October 2015*



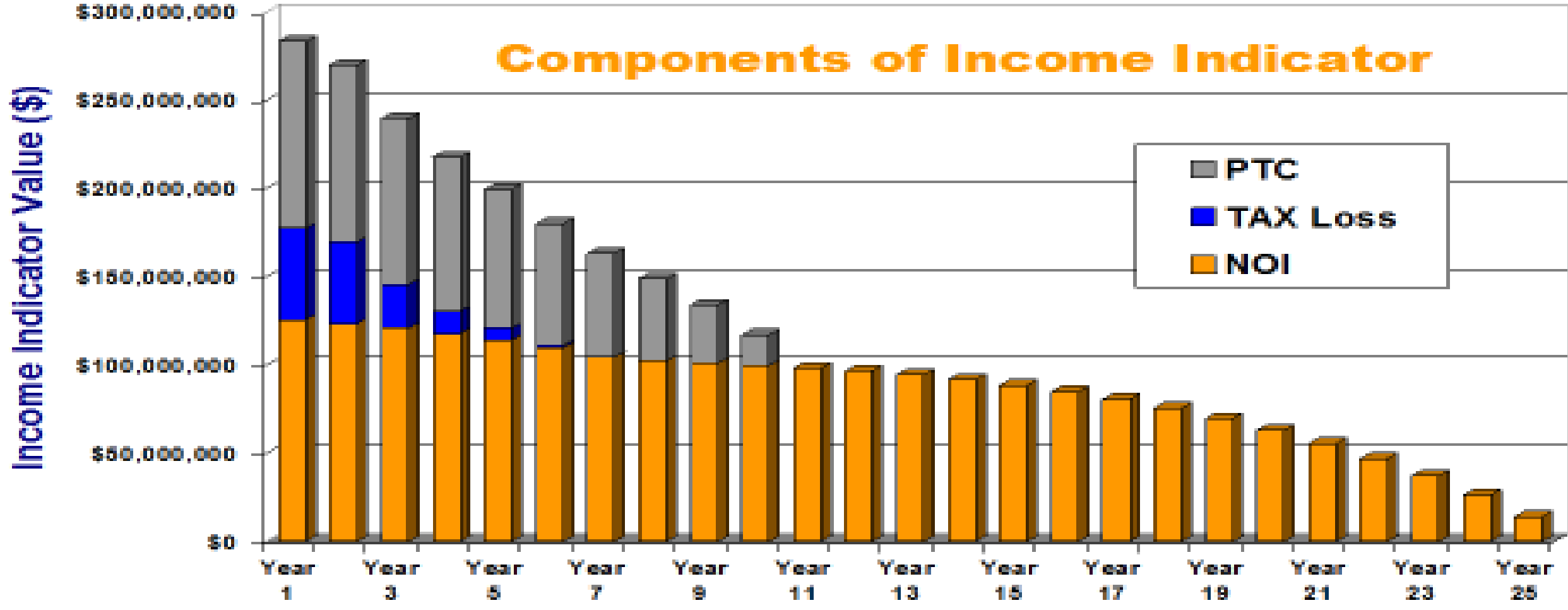
* Data represents composite average of all Texas purchasers from all sources. Due to lag in data availability from Comptroller, some recent prices may be estimates based on historical difference with NYMEX.

Gas & Electric Wholesale Prices





Income Approach to Value



Impacts on Wind Farm Taxable Value

- Cost Approach
 - RCN-New Turbine Prices-Efficiencies (bigger & better)
- Income Approach
 - Future wholesale electric rates
 - Subsidies (PTC & ITC)
- Market Approach

Commercial Solar Projects

Section 23.26(c)

Cost Approach

Cost data must be obtained from generally accepted sources.

Adjustments for physical, functional or economical obsolescence

10 year service life with a 20% floor

Conclusions

- 312 & 313 are agreements between taxpayers and the entities that the CAD administrates.

- Determine market value, then apply 312 and 313

Complex issues in value and tax roll preparation.

Correct abatement % (312)

Values for M&O-I&S (313)