

Wind Energy- The Rest of the Story

As follow-up to the very favorable “The Windup...” article that appeared in the August 2012 edition of Texas Co-op Power, it is essential that fellow co-op members understand some of the other key considerations for industrial wind energy production. Some of those considerations are as follows.

- (1) Wind energy is highly variable. The article highlighted a record wind energy production of 8,368 MW in the ERCOT region on June 19. On August 11, hourly wind energy production was as low as 230 MW during the early afternoon and averaged about 1,710 MW for the day. In addition, large wind energy generation penetration levels can introduce a variety of grid operational challenges.
- (2) ERCOT plans on having only 8.7% of wind energy capacity available to meet peak demand requirements. Wind energy produces the least in the late summer when air conditioning related demand peaks. That means that 91% of the wind capacity has to be backed up by other more reliable sources of generation such as natural gas.
- (3) Wind energy is highly dependent on subsidies. At the federal level, wind energy production qualifies for a 2.2 cents per kilowatt-hour tax credit for the first 10 years of operation. The pre-tax value of the credit to a wind development investor can exceed the 2012 year-to-date equivalent wholesale power price in the ERCOT region. The wind energy industry predicts dire consequences if the credit is not extended beyond the end of 2012. The credit has been in place for most of the past 20 years. Wind energy production also receives Renewable Energy Credits as the result of the state mandated renewable energy portfolio standard. At the local level, county and school district property tax abatements are common.
- (4) Wind energy installations are massive. One of the number of wind farms in the Abilene/Sweetwater area covers nearly 100,000 acres or more than 150 square miles. Some wind turbines are taller than the 425 foot main dome at the Enchanted Rock State Natural Area.
- (5) Ratepayers, not wind developers, pay grid transmission costs. The article referenced the state mandated Competitive Renewable Energy Zone (CREZ) grid transmission system additions that are being made to move wind energy from remote areas in West Texas and the Panhandle to the metropolitan areas in the state. The additions were originally expected to cost about \$4.9 billion or about \$4 per month per retail customer. The current cost outlook is \$6.9 billion.

It is important that everyone has a fair balance of considerations in which to form educated opinions and to take related actions. Hopefully, this additional information will help achieve those objectives.