SUBJECT: Expanding the state's renewable energy portfolio standard program

COMMITTEE: Regulated Industries — favorable, without amendment

VOTE: 5 ayes — P. King, Hunter, Baxter, R. Cook, Crabb

0 nays

2 absent — Hartnett, Turner

SENATE VOTE: On final passage, July 12 — 29-0

WITNESSES: No public hearing

BACKGROUND: The 76th Legislature in 1999 enacted SB 7 by Sibley. Among its provisions, the bill established a requirement known as the renewable portfolio standard (RPS). Under this standard, 2,000 megawatts (MW) of additional electric generating capacity from renewable energy technologies such as wind energy must be installed in the state by January 1, 2009. The cumulative installed renewable capacity is required to be 2,880 MW by January 1, 2009. The bill also established a renewable energy credits trading program administered by the Public Utility Commission (PUC) under which retail electric providers, municipally owned utilities, and electric cooperatives can purchase renewable energy credits in lieu of capacity from renewable energy.

The Electric Reliability Council of Texas (ERCOT) is one of 10 regional reliability councils in North America and the Independent System Operator for the ERCOT area. The organization serves 7 million electricity customers and oversees the operation of more than 78,000 MW of generation and 37,500 miles of transmission lines in the state. ERCOT serves about 85 percent of the state's demand for electricity and 75 percent of the geographic land area of the state. While most of Texas is in the ERCOT region, portions of the Panhandle, far West Texas, Northeast Texas, and Southeast Texas are in the other adjacent power regions.

ERCOT is responsible for facilitating wholesale electricity transactions among power generators and retailers, ensuring customer information is

provided to retailers, maintaining the reliability of the transmission network, and ensuring open access to the network.

DIGEST:

SB 20 would establish new requirements for generating capacity from renewable energy in Texas. The bill would require a total of:

- 2,280 MW of renewable capacity by January 1, 2007;
- 3,272 MW of renewable capacity by January 1, 2009;
- 4,264 MW of renewable capacity by January 1, 2011;
- 5,256 MW of renewable capacity by January 1, 2013; and
- 5,880 MW of renewable capacity by January 1, 2015.

The bill also would establish the target of 10,000 MW of additional installed renewable energy capacity by January 1, 2025. In addition, of the renewable energy capacity installed after September 1, 2005, SB 20 would establish a target of having at least 500 MW of capacity from a renewable energy source other than wind energy. All renewable energy capacity installed in the state and all renewable energy credits in the state would count toward the goal. The PUC could cap the price of renewable energy credits and suspend the renewable energy goal if necessary to protect the reliability of the grid.

After consulting with ERCOT and other appropriate regional transmission organizations, the PUC would have to designate "competitive renewable energy zones" in which resources and land areas were sufficient to develop renewable energy generating capacity and develop a plan to construct the transmission capacity required to deliver the output from renewable energy technologies to customers.

The PUC also would have to consider the level of financial commitment by generators for each zone in determining whether to designate an area as a competitive renewable energy zone and whether to grant a certificate of convenience and necessity. The commission would grant a certificate on a nondiscriminatory basis after considering the adequacy of existing service and the need for additional service.

If the PUC issued a certificate of convenience and necessity or ordered a utility to construct or expand transmission facilities for the purpose of meeting renewable energy goals, such construction and expansion could be used to determine the utility's rate base.

The PUC could require renewable power facilities to have technology designed to reduce the facilities' effects on system reliability.

The PUC would have to file a report with the Legislature by December 31 of each even-numbered year detailing:

- the commission's implementation of competitive energy zones;
- the estimated cost of transmission service improvements in each zone; and
- the effects that additional renewable generation had on system reliability, as well as the cost of alternatives to mitigate the effects.

The PUC and ERCOT would study the need for increased transmission and generation capacity and report findings and recommendations to the Legislature by December 31 of each even-numbered year.

The bill would take immediate effect if finally passed by a two-thirds record vote of the membership of each house. Otherwise, it would take effect on the 91st day after the end of the special session (October 19, 2005, if the first called session lasts a full 30 days).

SUPPORTERS SAY:

SB 20 would implement recommendations from the governor's Texas Energy Planning Council to continue and expand the state's successful RPS program. Since this visionary program was initiated under SB 7 in 1999, Texas has become a worldwide leader in renewable energy production, especially wind energy, and SB 20 would ensure that Texas remained in the vanguard of renewable energy innovation.

The benefits of renewable energy are significant. Unlike depleting and polluting fossil fuels, renewable energy represents a real, unlimited, clean source of energy. The current RPS has been successful because it has required electricity providers to get a specific amount of energy from renewable sources. By expanding this program, SB 20 would require this amount to increase every two years so that 5,880 MW of electricity would come from renewable sources by 2015.

Beyond its environmental benefits, renewable energy offers many ancillary economic benefits for landowners and local governments in areas of the state where the wind energy facilities are located. For example, some have estimated that wind energy production in the state generated close to $15 million in local school property taxes in tax year 2004, and an

expansion of generating capacity to attain the 5,880 MW requirement could mean more than $60 million in annual school property tax revenue. In addition by setting a goal that a portion of generating capacity come from sources other than wind, the bill would spur growth in emerging solar, bio-fuel, and other new technologies. The expansion of bio-fuel in particular would provide a new market for farmers and ranchers to use or sell their crop waste and animal waste to generate electricity.

A requirement of 5,880 MW would be realistic and would balance support for renewable technologies with concerns for system reliability. Like the current standard, the target established in SB 20 would represent a floor above which supplies of renewable energy sources could expand in order to meet growing demand. The bill incorporates important safeguards to ensure that necessary investments in the transmission grid would be made and that the electric grid's integrity would be maintained.

OPPONENTS SAY:

All electricity generation should be determined by the market. Wind and solar plants cannot produce the same amount of energy as more traditional types of generating plants. Renewable energy is more expensive and therefore is not a cost-effective way to produce energy. Requiring utilities to use this more expensive energy increases electric rates for customers. In fact, some have estimated that an increase in the RPS to 5,880 MW could cost more than half a billion dollars by 2015, with electric consumers shouldering those new costs.

Building wind farms or solar energy generating facilities requires a source of backup energy from a traditional source. This duplicates generation and further increases costs. In addition, because most zones for renewable energy production exist in West Texas and other areas isolated from urban markets, expansion of wind energy requires substantial investment in transmission capacity to get that energy to consumers. Further, because the generation of wind energy depends on unpredictable weather patterns, renewable energy is not a reliable or consistent source of energy. All of these factors contribute to the economic inefficiency of renewable energy, and this bill would lead to higher electric costs for Texas consumers.

OTHER OPPONENTS SAY:

Although SB 20 rightly would expand the current successful yet inadequate RPS, the requirement set by the bill should be increased in order to more effectively develop renewable energy resources in the state. Some estimates are that the likely output of renewable energy by 2015 will be 8,000 MW under the current rate of development, a level well above

the one envisioned under SB 20. A better proposal would be to increase the renewable energy standard to 10,880 MW by 2015, a level that truly would set Texas on the way toward meaningful expansion of important renewable technologies.

By counting all renewable capacity and credits in the state toward the 5,880 MW requirement, SB 20 could serve to impede the expansion of renewable energy. The RPS was envisioned as a benchmark for providers to develop a minimum level of renewable capacity, and the standard has been very successful. On top of the RPS, however, a separate, voluntary renewable energy market has developed through which customers may choose to purchase renewable energy in lieu of energy produced from traditional sources. In addition, cities in the Dallas-Fort Worth area receive clean air credits from the federal Environmental Protection Agency for buying renewable energy in excess of the RPS. Language in SB 20 could be interpreted to include such voluntary transactions in the RPS, thus undermining what should be a hard and fast requirement of 5,880 MW to which all providers would have to contribute.

NOTES:

A similar bill considered during the regular session, SB 533 by Fraser, which would have increased the RPS to 5,880 MW of renewable capacity by January 1, 2015, passed the Senate but died in the House Calendars Committee.

SB 743 by Fraser, revising ERCOT, which as amended by the House included provisions similar to SB 20 and would have increased the RPS to 7,880 MW of renewable capacity by January 1, 2017, died in conference committee during the regular session.