SUBJECT:	Requiring renewable energy portfolio standard for non-wind technologies
COMMITTEE:	Regulated Industries — favorable, without amendment
VOTE:	5 ayes — P. King, Christian, Crabb, Oliveira, Swinford
	0 nays
	4 absent — Turner, Hartnett, Smithee, Straus
WITNESSES:	For — Anthony Callendrello, Nacogdoches Power, LLC.; Rodrigo Carreon; Nacogdoches County Judge Joe English; Chris Hendrix, Wal- Mart Stores, Inc.; Judy McDonald, Nacogdoches Economic Development Corporation; Luke Metzger, Environment Texas; Steve Munson, Vulcan Power Company; Cyrus Reed, Lone Star Chapter of Sierra Club; Stan Sisco, Nacogdoches Economic Development Corporation; Tom "Smitty" Smith, Public Citizen; Jason Tournillon, GT Environmental Finance; <i>(Registered, but did not testify:</i> Karen Hadden, Sustainable Energy and Economic Development Coalition (SEED); John R. Pitts, Texas Renewable Energy Industries Association; David Pore, City of Lufkin Economic Development Corporation; Robert A. Webb, Biofuels Power Corporation)
	Against — Phillip Oldham, Texas Association of Manufacturers; ( <i>Registered, but did not testify</i> : Mary Miksa, Texas Association of Business)
	On — Paul Hudson, Julie Parsley, Public Utility Commission; ( <i>Registered, but did not testify</i> : Travis Brown, Office of Rural Community Affairs)
BACKGROUND:	The 76th Legislature in 1999 enacted SB 7 by Sibley, which restructured electric utilities in the state. Among its provisions, the bill established the renewable portfolio standard (RPS), which requires installation of additional electric generating capacity from renewable energy technologies such as wind energy.
	During its first called session in 2005, the 79th Legislature enacted SB 20 by Fraser, which increased the RPS from the original requirement of 2,000

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megawatts (MW). Utilities Code, sec. 39.904(a) establishes a cumulative target of additional electric generating capacity from renewable energy technologies at:

- 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.

In addition, Utilities Code, sec. 39.904(a) establishes a target of 10,000 MW of additional installed renewable energy capacity by January 1, 2025. At least 500 MW of capacity must come from a renewable energy source other than wind energy. Other sources of renewable energy sources include hydro, geothermal, biomass, and solar power.

According to the PUC's 2007 *Scope of Competition in Electric Markets in Texas*, the state achieved two renewable energy milestones in 2006 as Texas surpassed California as the state with the greatest amount of installed wind power and exceeded SB 7's original goal of 2,880 MW for 2009.

The mechanism adopted by the Legislature to meet renewable energy goals is a system for earning and trading Renewable Energy Credits (RECs). Retail electricity providers must obtain RECs for a portion of their energy sales. As of 2004, 15 states had enacted some form of renewable portfolio standards. However, only a limited number of these states permit REC trading and can be considered to have formal "compliance REC markets." Texas and the Northeast Power Pool have tracking systems to monitor prices and liquidity of the RECs. According to the PUC, the market price in Texas was \$12.30 per REC in July 2005 and \$4 per REC in July 2006.

DIGEST: HB 1214 would amend Utilities Code, sec. 39.904(a) to require that at least 500 MW of renewable energy technologies, other than wind technologies, be installed by January 1, 2015. It also would amend Utilities Code, sec. 39.904(c) to require that the PUC establish an annual minimum requirement for installation of generation capacity from nonrenewable technologies other than wind technologies.

The bill would take effect September 1, 2007.

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SUPPORTERS SAY:	HB 1214 would clarify the PUC's authority to create renewable energy credit markets for technologies other than wind generation and bolster commitment to affordable and environmentally friendly processes to meet future energy needs. Uncertainty about the original statute has stymied the PUC from developing rules to reach the 500 MW goal on non-wind renewable sources. HB 1214 would clear the roadblock and allow the PUC to establish meaningful incentives for these other technologies.
	The bill would help the development of a 100 MW power plant in Nacogdoches County, as well as a facility being considered for Lufkin and Angelina counties. These facilities would provide much-needed jobs and economic development in a region hurt by the declining timber industry. Besides jobs for construction workers and permanent employees at the power plant, the project would create opportunities for those who would collect and haul the scrap wood and fallen timber to be used at the plant. Unlike other states, Texas does not qualify for various federal programs to pay for thinning of forests. The power plant project offers private sector incentives to clear wood waste that otherwise would remain on the land.
	A potential biomass fuel source is the chicken litter that covers the floors of poultry coops. Generation plants could provide a market for material that currently must be disposed at the expense of farmers. Waste from cattle feed lots in West Texas also could be used as fuel for other generation plants.
	HB 1214 also could help spur the development of geothermal generation in Texas. The University of Texas Bureau of Economic Geology already has identified potential geothermal resources in the state, particularly in the Gulf region, that could provide as much energy as generated by volcano formations along the West Coast. Underground heated salt aquifers also could yield both thermal energy and methane, which can be separated from the brine. Texas has expertise and equipment to exploit these resources, and the proper incentives could lure five or six geothermal firms to the state. Up to 150 MW of geothermal generation could be on line within five years and as much as 10,000 MW of geothermal generation capacity eventually could be developed in Texas, which would meet the entire 500 MW goal for non-wind generation.

Free markets have never prevailed for energy policy in Texas. Beginning in the 1930s, the Texas Railroad Commission limited oil production in the

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state, and natural gas prices were heavily regulated until very recently. Development of wind resources in Texas have depended on governmental policies ranging from the state's RPS to federal tax credits for wind generators. If renewable technologies such as biomass and geothermal receive the same protection during their infancy as did other energy sources, they could flourish along the lines of wind generation in Texas.

Market mechanisms have worked well for renewal energy credits. Customers want to purchase green power, and the abundance of wind generation has lowered the cost of these credits in the Texas renewable market. Credits for biomass and geothermal are bought and sold at much higher prices than wind generation credits. Given the baseload characteristics of these sources, the price comparison should be made with more expensive natural gas that will be displaced, rather than with cheaper wind generation credits. HB 1214 appropriately would create a separate portion of the RPS for these technologies.

Biomass and geothermal technologies would provide reliable baseload generation closer to more populous regions in the state. Wind can provide needed peaking capacity, but this source could not provide the same continuous generation as biomass and geothermal.

OPPONENTS Government should not interfere in the market process and set arbitrary requirements for energy generation sources. Markets already exist in energy, and higher prices for energy sources such as natural gas provide needed signals to encourage suppliers to find more natural gas or other commodities to replace it. Once renewables become a viable source, the market will demand them. Government should not favor one sector at the expense of competitors or consumers.

The potential for biomass and geothermal is very limited in the short run. All electric customers, particularly large industrial customers, have needs that would exceed those met by start-up plants and unproven technologies.