## ENTERGY GULF STATES CUSTOMERS CAN BUY GREEN POWER APRIL 1ST

by David McGee, P.E.

In a bold step for Louisiana, the Public Service Commission (PSC) accepted the PSC staff position paper of November 21, 2006, which describes a "Green Pricing" pilot program for the Entergy Gulf States territory in Louisiana (EGSI-LA). On January 11, 2007, the General Order was released.<sup>1</sup>

The PSC hopes to answer a number of questions through this trial. Are customers interested in green power? What is Louisiana's renewable energy potential? What is the cost of realizing Louisiana's renewable energy potential?

The PSC was required to investigate renewable energy by ACT 653 of the 2003 Regular Session of the Louisiana Legislature, also known as the Renewable Energy Development Act.<sup>2</sup>

The PSC commissioned an investigation of a voluntary "Green Pricing Tariff" (GPT) program, hiring J. Kennedy & Associates of Roswell, GA to advise them. Entergy Gulf States, Inc. (EGSI-LA) offered to host a trial program in its territory beginning April 1, 2007.

In a Green Pricing program, customers may contract for electricity generated from a renewable source. The contract is for one year or through March 2008. The green power is usually sold in blocks of 100-200 kilowatthours (kWh)<sup>3</sup>.

In most states, the green power is sold for a premium, that is, at an added cost to regular power prices. The premium covers the added cost of the renewable power and marketing, and administrative costs above normal. In seven states, the price for renewable power is in place of the fuel adjustment charge. In other states, it is on top of all charges. There are 120 programs located in parts of 35 states.

To keep it simple, the PSC staff recommended that the pilot program premium be on top of the regular rates including the fuel clause adjustment. The PSC staff thinks that most green power customers want only "new" renewable power. However, they recommended that all renewables be allowed during the pilot, regardless of age. Only one renewable plant has been built in the last 10 years that fit their definition of "new." At least one is under construction at this time in St. Francisville, but will not be online during the trial. Other states do not require that all green power be from "new" sources. Three states require 50% and 13 states require 25% or less this year.<sup>4</sup>

The report recommended that "new" sources, built after January 1, 1997, be paid more than those built prior to that date. The older generators are not eligible for the current federal tax credit as are "new renewables," but their investments have been paid down. The only "new" development in Louisiana that can occur will be after a long term program is established.

<sup>&</sup>lt;sup>1</sup> The full text of General Order Number 01-11-07 (R-28271) can be found on the Louisiana Public Service Commission website (URL: http://www.lpsc.org) using the document access feature.

<sup>&</sup>lt;sup>2</sup> ACT 653 of 2003 Regular Session accessed 12/4/2006, CHAPTER 49. LOUISIANA RENEWABLE ENERGY DEVELOPMENT ACT §3025. Legislative findings "(1) ...Increasing the consumption of renewable energy resources promotes the wise use of Louisiana's natural energy resources to meet a growing energy demand, increases Louisiana's use of indigenous energy fuels and fosters investment in emerging renewable technologies to stimulate economic development and job creation in the state. (2) Louisiana should actively encourage the manufacture of new technologies through promotion of emerging energy technologies."

<sup>&</sup>lt;sup>3</sup> A watthour (Wh) is an electrical energy unit of measure equal to 1 watt of power supplied to, or taken from, an electric circuit steadily for 1 hour. A kilowatthour (kWh) is one thousand watthours.

<sup>&</sup>lt;sup>4</sup> From URL: http://www.green-e.org/pdf/Green-e\_National\_Standard.v1.pdf, accessed 12/1/2006. See Table 1.

The program is capped at 40,000 megawatthours (MWh)<sup>5</sup> for the one year trial. EGSI-LA is permitted \$500,000 for a targeted marketing campaign and administrative costs which is to be prorated over the maximum amount of power to be sold. This works out to 1.309¢ per kWh. The staff can raise the cap if demand exceeds it and there is more renewable power available. Kennedy & Associates investigated renewable energy prices in other comparable areas to determine typical prices paid to generators and settled on  $6.5\phi$  per kWh for new (post-'97) facilities and  $5.9\phi$  per kWh for older facilities. This is in the typical cost range for biomass renewable power.

The program proposes that Entergy solicit bids on post 1996 renewable power at 6.5¢ per kWh and, if they do not get sufficient electricity to cover the subscriptions, then they would solicit for "any" renewables at the 5.9¢ per kWh price. These prices were averaged 50/50 giving 6.2¢ per kWh for the tariff calculation purposes. Including system transmission losses at a factor of 1.04755 brings the average price up to 6.4948¢ per kWh for green power. The PSC staff rounded this to 6.5¢ per kWh for the pilot program.

Any renewable generator can offer power for the program, but the price paid is delivered into EGSI-LA's system. All transmission charges will have to be paid by the seller. The PSC staff computed EGSI-LA's average "avoided cost," which is mainly fuel cost, to be 5.552¢ per kWh and average fuel adjustment charge for the preceding year to be  $6.00\phi$  per kWh. The net price for green power then would be  $6.5\phi - 5.552\phi = 0.943\phi$  per kWh.

The service rate for residential electricity is 4.092¢ per kWh. This includes all admin costs, distribution costs and profit, but no fuel cost. Other service rates are Small General Service = 5.587¢ per kWh and General Service = 4.12¢ per kWh. Large Power Service at 1.034¢ per kWh would not be likely to participate.

Regular charges billed are the service charge + the service rate X kWh + the fuel adjustment charge X kWh with each shown separately.

The green power premium was computed in the following manner:

Green power cost – avoided cost + marketing and administrative charge = Green Power Tariff (GPT). With the above numbers, this is 6.5 - 5.552 + \$500,000/40,000,000 kWh = 2.252 ¢ per kWh. This was rounded to 2.25¢ per kWh or \$2.25 per 100 kWh block premium.

The final typical price for residential =  $4.092\phi$  base +  $6.00\phi$  fuel adjustment charge +  $2.25\phi$  GPT =  $12.342\phi$ per kWh average. The bill format will be unchanged except that a line will be added for the GPT at \$2.25 per 100 kWh block.

Atypical home in Louisiana uses about 1100 kWh per month. If you ordered five "100 kWh blocks", your bill will be \$11.25 per month more than it would have been. Any costs of this pilot program not paid by the subscribers will be included in the fuel adjustment charge.

The Green Pricing pilot program will extend the state's natural resources and make good use of some that currently go unused. A comprehensive green energy program has the potential to improve air quality, not just in Louisiana, but across the rest of the south. The PSC and EGSLI-LA have taken a step into the future, but they must find solid ground to continue.

<sup>&</sup>lt;sup>5</sup> A megawatthour (MWh) is one million watthours