Local sugar mill to produce electricity

The Jeanerette Sugar Co. will sell its excess production of electricity to the Central Louisiana Electric Co. (Cleco), J. Randolph Roane said last week.

Roane, president and general manager of the Jeanerette sugar mill, said his company has been certified by the Federal Energy Regulatory Commission as a qualifying small power production facility. He said the Jeanerette mill is the only such facility in the United States to be so certified by the federal agency.

During the last two years the company has been installing a 2,500 KW auto-extracting condensing turbo generator, the primary purpose of which was to become completely self-sufficient in meeting its own energy requirements, he explained.

"However," Roane said, "theoretical steam balances indicate that we would have surplus energy available above factory requirements; consequently, we are entering into a co-generation interconnecting contract with Cleco."

The sugar company executive said it is expected that operation of its own power-generating facility will result in considerable savings, noting that its electricity cost had risen from $16,022 in 1973 to $144,980 last year, with most of such costs concentrated in its annual three-month cane-grinding season.

"We won't know until we've been in operation for some time just how much excess electricity we'll generate over our needs," Roane said, "but our main objective is to keep the 'in' meter from Cleco in zero."

Bagasse, the waste pulp residue resulting from the cane-crushing process, will be used to fuel the plant's boilers, according to the mill executive, who noted that "efficiency in the use of bagasse is the key to successful operation of a sugar factory today."

His plant was ranked as the lowest consumer of natural gas among Louisiana mills last year, he said, pointing out that the company's use of gas had declined from 1.5 thousand cubic feet (Mcf) per ton of cane in 1972 to .046 Mcf per ton last year, "a negligible amount, practically speaking."

Natural gas is used primarily, Roane explained, to get the bagasse fuel burning under the mill's steam-generating boilers. The key to efficient use of bagasse is thorough cleansing of the stalks of sugarcane before they go into the factory's crushing rollers, he added.

"Bagasse is very valuable as fuel but machine-harvesting results in the stalks arriving at the factory covered with dirt, which must be removed; it will not burn efficiently if it is dirty or has a moisture content higher than 52 percent."

"In Mexico, for example, where the cane is cut and loaded by hand, there is no problem of dirt-covered bagasse used as boiler fuel."

Steam pressure, at 150 pounds per square inch, from the plant's boilers is used to drive the mill's power-generating equipment while the resulting exhaust heat is used to evaporate 85 percent of the water from cane juice to make molasses, he explained.

The Jeanerette Sugar Co., originally the Duhe & Bourgeois Co., was acquired in 1973 by a small group of major sugarcane growers of the area, who organized themselves as a cooperative and leased the property. Subsequently, the cooperative bought the factory and mill site.

Roane said the mill's grinding capacity in 1972 was an average 1,400 tons of cane per day but, at present, is 4,000 tons a day or better.

"Our current production target, to be achieved during the next two years, is to get its capacity up to 5,000 tons a day," he added.