La.'s new wood pellet plants meet European needs

24th November 2014

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This article originally published in the November 24, 2014 print edition of The Louisiana Weekly newspaper.

Louisiana, an oil-and-gas state, is half covered by timber, making forest products a big business. Several companies plan to churn out wood pellets from new plants here to meet European demand for electricity and heat sourced from renewable fuels. These producers include Drax Biomass, Biomass Source Power and German Pellets GmbH. With its trees, waterways and ports, Louisiana can cater to growing pellet demand, without deforesting the state, industry members said last week.

U.S. pellet exports nearly doubled last year to 3.2 million short tons and headed mostly to Europe, according to the U.S. Energy Information Administration. Made from wood shavings, sawdust and chips, these cylindrical nuggets are shipped from the Southern, Southeastern and lower Mid-Atlantic states.

"Some people don't like the idea of power plants in the UK burning American wood," Buck Vandersteen, executive director of the Louisiana Forestry Association, said last week. "But our industry didn't ask for this. Demand is driven by policy decisions in Europe." Those decisions will spur the need for at least one million tons of Louisiana pellets annually after similar business was lost when two of the state's paper mills closed in the last decade, he said.

"These plants will use wood that will be mostly thinnings and residues, following the harvest of higher-valued saw timber from sustainably managed forests," Vandersteen also said.

European nations, particularly the United Kingdom, are using wood pellets to replace coal for electricity generation and heating. Under 2009 legislation, the European Union by 2020 plans to reduce its greenhouse gas emissions by 20 percent from 1990 levels and to expand renewable fuels in its energy usage by 20 percent.

Companies building pellet plants in Louisiana are sourcing wood and hiring now. Drax Biomass, a U.S. subsidiary of UK electricity generator Drax Group Plc, expects to start up its Morehouse Parish, La., plant in the second quarter of next year. Before that, Drax early next year will begin operating a new Amite, Miss. pellet facility. After they open, both plants should reach full capacity six months later, Drax spokeswoman Sarah Grazier in New Hampshire said last week. "These two plants are designed to produce 450,000 metric tons of wood pellets per year each, using fiber from actively and sustainably
managed forests,” she said. Job fairs to attract local applicants were held at both locations. “We have fully hired our operations staff of about 50 employees at each facility,” she said.

Kelsey Short, Louisiana Economic Development’s executive director of business expansion, said the state was able to attract Drax Biomass to Morehouse Parish, which suffered when International Paper shut its Bastrop mill in 2009. Hundreds of jobs were lost then. “The new wood pellet project increases capital investment, employment and business spending locally, without jeopardizing the area’s raw material supplies,” he said. Other states had hoped to land the plant, and LED gave the company competitive incentives. “Drax chose a site in a rural area that required state support for infrastructure,” Short said.

Drax and other pellet producers have been offered incentives under the state’s Industrial Tax Exemption and Quality Jobs programs. “Drax, which has a big logistics component with storage and shipping facilities at the Port of Greater Baton Rouge, was the first major prospect in this sector to fully commit to capital investment and job creation in the state,” Short said. “We assisted them in a substantial way, reflecting their desire to create development in Morehouse Parish.”

Jim Carroll, president of Biomass Secure Power Inc. in British Columbia, said his company plans to start building its Natchitoches Parish Port plant on the Red River in the first quarter of next year, with operations to begin a year later. A 30-year lease for the 75-acre site was signed by the company’s Biomass Power Louisiana subsidiary. “Our annual production goal is one million metric tons but it may take us one to two years to hit that target because of a shortage of local forest-industry workers,” Carroll said. The plant will need 92 full-time employees. “We’ll also require up to 500 people in indirect jobs, including loggers, foresters and truck drivers.”

Carroll said his company will keep records showing that all the fiber it uses for pellet production is from sustainable sources. “Our end-users have contractual rights that will allow them to audit and verify the sustainability of our fiber supply,” he said.

Pellets produced by Biomass Power Louisiana will be transported from the plant by a more than mile-long conveyor and will head in covered barges to the Port of New Orleans, where they’ll be transferred to ocean-going freighters for shipment to Europe. “Initially, all our production will go to Europe, and we also have several active inquiries from Asia that we’re considering,” Carroll said. As for the expanded Panama Canal, “we’ve discussed the canal, and if we complete an agreement with a company in Asia, we’ll use it,” he said.

Meanwhile, German Pellets GmbH, a top pellet maker based in Mecklenburg, Germany, is building a 1.1 million-ton capacity plant in Urania in La Salle Parish. Infrastructure is already in place from a Georgia Pacific plywood and particleboard facility that shut there over a decade ago. Under the firm’s first phase in Urania, operations were scheduled to begin late this year, with a second phase to be completed by
third-quarter 2015. Last week, however, the company didn’t respond to inquiries about its start-up date. The new site is slated to create 500 direct and indirect jobs.

In 2013, German Pellets opened a 551,000-ton capacity plant in Woodville, Texas, shipping from Port Arthur. In addition to power plants, the company supplies heating needs for pellets from Europe’s private customers, industrial and commercial sites, hospitals and schools.

Richard Vlosky, director of forest sector business development at LSU AgCenter in Baton Rouge, is optimistic about Louisiana’s pellet exports. “As long as European Union mandates increase usage of renewable fuels, pellet production in the United States and elsewhere will continue growing,” he said last week. “The latest EU mandates have renewable sources supplying 27 percent of the region’s energy use by 2030.”

“Only about 5 percent of U.S. pellet production is for domestic use, with the rest exported,” Vlosky said. “The U.S. South is the nation’s wood basket, and it’s where further, large-scale pellet manufacturing will continue.” About two-fifths of the nation’s timberland is in the South.

Wood pellet output in North America, including Canada, swelled from less than a million tons in 2003 to 9.3 million last year, according to combined government data. Production capacity in the United States and Canada could exceed 15 million tons next year, industry members predict.

Vandersteen said Louisiana won’t be deforested by pellet producers. The state’s annual tree growth exceeds harvesting, according to the U.S. Forest Service, he noted. New pellet plants provide markets for forest landowners, who have watched other plants using wood close in the last decade or so. “Market incentives are critical for landowners so that they continue to earn income and invest in and care for their timberland,” Vandersteen said. Without forests, rural areas could be turned into shopping centers and other developments. Moreover, “the jobs created by these pellet operations will be substantial from the logging standpoint and for people handling wood at plants and ports,” he said.

When growth in trees surpasses removals, timberland is considered sustainable, though that measure must be viewed along with the quality of stands and with biodiversity, according to the U.S. Forest Service.

“Most of the Southern wood fiber required for pellets will be supplied by low-grade materials, including forest cull, pulpwood, thinnings, dead stock, fire-damaged stock and insect-infected materials,” Andy Burns, vice president at Biomass Power Louisiana, said last week. “A reduction in small, stunted, diseased and deformed wood materials promotes the health of the remaining stand,” he said. “As the market for wood pellets grows, the quality of Southern U.S. stands is expected to gradually improve.”

This article originally published in the November 24, 2014 print edition of The Louisiana Weekly newspaper.
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