Canadian company ready to build at county Eco-Complex

By Larry Clark | Hickory Daily Record

NEWTON

A Canadian company is ready to start construction at Catawba County's Eco-Complex.

Nexterra Systems Corp. of Vancouver, British Columbia, will construct a biomass-fueled power system at the Blackburn Landfill complex.

The $20-million system will produce electrical and thermal energy from wood waste.

Although county commissioners authorized moving ahead with the system last month, Nexterra made its announcement Wednesday.

"For Catawba, green energy is an economic development priority," said Jonathan Rhone, president and CEO of Nexterra.

"We look forward to working with Catawba to demonstrate this new standard of small scale distributed biomass power generation."

The Combined Heat and Power system has been in the planning stages for several months. The Eco-Complex already produces some electrical energy by tapping landfill gas.

The Nexterra components will turn wood waste into fuel for a General Electric engine to generate electricity.

According to Nexterra, the CHP system will generate "2 megawatts (per day) of clean, cost-effective green electricity for sale to a local utility.

"Waste heat from the engines will be used to dry biosolids produced at a new wastewater treatment facility.

"This unique bioenergy system will be the first of its kind in the United States," Nexterra officials said of the propriety gasification technology that makes clean synthetic fuel, or "syngas."

"This new CHP System represents a paradigm shift away from large, centralized biomass plants to a network of decentralized, smaller and more efficient biomass plants ideally suited for counties and municipalities," said Barry Edwards, director of Utilities and Engineering for Catawba County.

"We are delighted to move forward on this project with Nexterra and GE. Not only will the system generate additional revenue for the county, but it will also reduce our reliance on fossil fuels, stimulate local economic development and extend the life of our landfill," Edwards said in a news release.

Catawba County already produces 2.5 megawatts of electricity an hour from landfill gas using GE

Jenbacher gas engines.

"Catawba County is a great example of how the Nexterra/GE CHP solution can help local governments achieve their energy and sustainability goals," Rhone said.

Nexterra has supplied commercial gasification systems for projects at the US Department of Energy, University of South Carolina, Dockside Green, Kruger Products, the University of Northern British Columbia and Tolko Industries.

The Catawba County Eco-Complex is an industrial park where companies use each other's production wastes and by-products to fuel their operations.

The CHP system will provide university research and education opportunities. UNC-Charlotte plans to have two doctoral students at the Eco-Complex.

Appalachian State University and the University of British Columbia also are partners in the Eco-Complex.

The system is expected to be operational in 2012.

On the Net:
www.nexterra.ca
www.catawbacountync.gov/depts/u&e/ecocomplex.asp

WHAT'S THE COST?

$20.7 million â□□ estimated cost for all CHP system components
20-year loan with projected 3.6 percent interest rate will fund the project
$1.5 million â□□ estimated annual loan payments
$944,000 â□□ estimated expenses the first year
3 percent â□□ projected annual operating expense increase
$43,000 â□□ First year net profit estimate
$4.4 million â□□ anticipated net profit over the life of the loan
$5.75 million â□□ profit from existing electricity generation at Eco-Complex since it began
$3.2 million â□□ initial investment in Eco-Complex