



“No Waste” Facility

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Challenge

Customer's energy and environmental initiatives are to be a “No-waste” facility, thus lower the mill's waste water discharge BOD, which will allow the mill to increase production. Needed to install new UEM Group anaerobic hybrid digesters to convert all lumber mill effluent and paper mill sludge to bio-gas.

Solution

Designed, programmed, and manufactured an Allen Bradley Controllogix based control system to control a 6MWh Co-Generation plant in Island mode. The plant consists of (2) GE Jenbacher 3mWh mixed biogas/natural gas genset's, (2) Cain Heat Recovery Steam Generators, and auxiliary equipment.

Results

The new Co-generation plant utilizes the bio-gas to provide electrical power and steam to the lumber mill thus reducing power consumption by 7%. And reduces organic discharge to the environment by 65% (38k tons), and carbon emissions by 17% (10.5k tons).

References/Contact

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