

ENERGY CONSERVATION

CLIENT: PP&L/Murphy
LOCATION: Sutherlin, Oregon

The scope of this project was to determine the existing and desired veneer drying capacity, analyze refurbishing methods of existing dryers, consider natural gas and biomass heat generation, examine radio frequency redrying, and summarize findings to make recommendations for reducing the dryer energy consumption. The steps followed in this study were as follows:

- ▶ Held meetings with Murphy Company to determine near and long term required drying capacities
- ▶ Determined existing boiler capacity , efficiency, and examined the condensate system
- ▶ Examined biomass resources and burners
- ▶ Provide conceptual redesign, biomass heating design, forecast of increased drying capacity, and capital cost report
- ▶ Provided operating cost projections for natural gas, biomass heating, and determined biomass requirements and availability
- ▶ Examined latest developments in RF drying
- ▶ Assembled a report containing recommendations for each of the four existing veneer dryer upgrades including benefits, capital costs, and operating costs

Evergreen provided the services field collection of data, engineering calculations and planning, equipment and resource research, and the report compilation in completing this project.



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