Biomass/Raw Material Handling Projects

Summary
Evergreen has completed hundreds of biomass material handling projects, ranging from numerous custom retrofits in existing industrial facilities to complete greenfield projects. Of these projects, many have included biomass material handling systems and related processing equipment. In several instances, the systems had to have the flexibility to operate with alternative fuels, e.g., woody biomass, shells, recycled wood, etc. A few projects that illustrate our relevant experience in the biomass power industry are summarized below.

Snowflake White Mountain Power Company – Snowflake, Arizona
Evergreen provided all engineering for this 24 MW biomass-fired power plant greenfield project in 2008, which included the power plant and the woodyard. The woodyard system was designed to handle woody biomass and paper sludge. Evergreen assisted the owner in the selection of equipment and provided the complete plant design, including all of the conveying and storage systems.

Imperial Valley Resource Recovery – Imperial Valley, California
Evergreen assisted the owner in the redesign of the woodyard for this 18 MW power plant in 2008, and then assisted the general contractor with details for equipment design and conveying systems for a start-up in 2009.

El Nido – Merced, California
Evergreen provided assistance to the general contractor with the installation of a sizing system for biomass wood processing in the woodyard of the power plant.

Confidential Client
Evergreen provided assistance with woodyard modifications at several facilities across the United States for a confidential client. These projects ranged from consulting services to providing total engineering services for a complete woodyard.

Other Wood-Related Projects
Evergreen Engineering has completed many projects in wood handling for many different clients since its inception in 1985. Some of these projects included complete systems for chip handling and sizing at pulp and paper plants; wood infeed systems to particleboard manufacturing, medium-density fiberboard (MDF) manufacturing, plywood manufacturing, pellet manufacturing, charcoal manufacturing, and mill waste systems. Evergreen has also worked on many smaller projects in woodyards around the world.