Rockingham County Complex
Biomass Facility Tour
November 8, 2013

Participating Groups:
The Lee Energy Committee, the Oyster River Cooperative School District and ORCSD Sustainability Committee
About four years ago, Rockingham County made a capital investment to install a biomass heating plant at its County Complex.
In a state like New Hampshire, which is 85% forest, the conversion to biomass has both saved money and fostered energy.
They utilize three bays for off-loading chips. Each bay holds one truck load (18-wheeler) of chips.
From the bays the chips are transferred inside via this auger, which slowly travels across all three bays, while turning.
The ‘bole chips’ are from the main body of the tree...no limbs or branches. They are partially dried before delivery.
• Inside the facility with Paul Allen, the plant manager, formerly a resident of Durham.
Chips pass from the bins through a wall onto a conveyor belt. They are then fed to a transfer point in the middle.
• A closer shot of chips being conveyed.
• The chips then travel up a second conveyor belt and into the furnaces/fireboxes.
A photo of one of two boilers. The boilers are operated one at a time in an alternating fashion.
The whole plant is operated by computerized control panels that are governed an array of sensors.
A close-up of the control panel....one person can operate the facility.
And, it can be done from a desktop computer.
A schematic representation guides the operator.
A relatively small quantity of ash is the physical by-product. The unit burns very efficiently.
And there is virtually no smoke or air particulate. The plant far exceeds current emission standards. Pretty impressive stuff!!