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Woody Biomass Project Checklist

The Idaho Office of Energy Resources, Department of Commerce, Department of Environmental Quality, and Department of Lands have compiled the following checklist for potential woody biomass projects in Idaho. Perspective woody biomass project developers are encouraged to address the questions on the checklist prior to expending large amounts of resources on a project.

Electricity Transmission

- If your project is going to generate electricity for sale, have you checked with the local utility transmission group to determine if there is sufficient electrical transmission capacity to accommodate your proposal?
- Have you discussed a power purchase agreement (PPA) with the local utility or the intended purchaser?

Woody Biomass Supply – Small Scale Woody Biomass Boilers

- If your project is a small-scale (1-5 mmbtu) woody biomass boiler, then identifying a dependable, local supply of woody biomass is critical to the operational success of the project.
- Have you contacted 1-2 fuel suppliers to confirm quality, cost and delivery obligations?
- Does your system have a reliable source of backup heat, in case there is a disruption of fuel supply?
- Does your project have proper financing?
- Have you selected or contacted with a qualified project provider, contractor, ESCO (Energy Service Company) or Consultant?
- Is there a way to verify and predict fuel cost escalation over time?



Woody Biomass Supply – Electric Generation

A sustainable investment-grade supply of wood/biomass is critical to obtaining project financing. This supply must be financially guaranteed for the term of the project financing. The suppliers of the woody biomass must be bondable and able to financially underwrite the supply of fuel. At this time the main source of sustainable supply in Idaho is private forest lands, with some possible supplementation from State forest lands.

- Have you obtained contracts or do you know how you will obtain supply contracts?
- Is your project appropriately sized for the available long term woody biomass supply?

- Transportation costs are also a very important factor in determining whether the project is economically viable. In general, projects with greater than a 50-75 mile supply radius will not be economically viable, and even shorter distances could be problematical depending on the location. Does your proposed project take these criteria into consideration?
- If your supply is originating from public lands, have stewardship programs of sufficient size and length been awarded?



Woody Biomass Electric Generation - Financing

In today's economic climate, financing can be difficult to obtain. Lenders are typically requiring all new equipment and substantial down payments. Term of debt beyond 15 years is rare and these may require 20-year power purchase agreements. The fuel supply, sources, contracts and financial viability of the suppliers will be substantially scrutinized and verified. There are number of federal tax credits and financing subsidies that can assist in the financial worthiness of the project.

- Have you identified several qualified lenders?
- Have you determined the type of financing – equity, investor-based, debt, bonds, etc.?
- Have you identified and secured the appropriate down payment – of at least 20%?
- Have you developed an investment-grade pro-forma and business plan with which to apply for financing?
- Have you identified the potential federal subsidy programs?

Environmental Considerations

Any new woody biomass facility (large or small – thermal or electric generation) will emit certain air pollutants and will require an air quality Permit to Construct (PTC) or exemption from DEQ. If a PTC is required, the permitting process can take 3-4 months for small projects and up to 1 year for larger projects. DEQ has developed a streamlined permit application process and recommends any woody biomass developer to follow these initial steps:

- Read “Air Quality Permits – Applicant and DEQ Responsibilities” document located at DEQ’s website: http://www.deq.idaho.gov/air/permits_forms.cfm
- Call the Air Quality Permitting Hotline at 1-877-5PERMIT (1.877.573.7648) to ask questions and schedule a pre-application meeting.
- Need to contract with a qualified environmental engineer for the permitting requirements of your project? http://www.deq.idaho.gov/multimedia_assistance/Clean_Up/contractors.cfm

Additional Resources

- Idaho Strategic Energy Alliance - Forestry/Biomass Report
http://energy.idaho.gov/idahostrategicenergyalliance/d/forest_packet_2.pdf
- Idaho Woody Biomass Utilization Partnership
www.idahobiomasspartners.com.