

Economic Sustainability for Biomass to Energy Plants – How?

Presentation at Running Y Ranch,
April 6-7, 2006

Basic Premise

- Operate in a responsible manner planning to make a profit.
 - Arrange for power sales
 - Arrange for fuel supplies
 - Arrange for operating personnel
 - Arrange for necessary business needs

Fuel the Primary Cost

- Buying direct from woods producers
- Providing a Service
 - Ranches
 - Fixed location woody waste producers
- Small sawmill
- Fitting into the reality of today's forest management

Types of Biomass to Energy Conversion

- Gasification
- Direct Fire
 - BVP Operation 7.5 MW

Operations

- Operators
 - Safety
 - Training
 - Benefits – Don't try to operate without them.
- Small plants higher unit cost

Maintenance

- “Normal”
 - In House vs. Contract
 - Our approach – staff person or In House
- Electrical
 - Contract for work with competent professionals

Supplies

- This is a dangerous catchall
 - \$1.50 per roll for toilet paper vs. shopping at Costco
 - \$6.00 per pair for cloth gloves
- Chemicals
 - Shop for best company
 - Try to avoid usage
- Diesel
 - Have you noticed the “modest” price increase?
Doubling in two years.

G&A

- Insurance – our experience
- Vehicles –
 - Our consulting background gave us a different perspective.
- Licenses and Permits
- Telephones
- Utilities – How to pay \$10,000 per month?

G&A continued --

- Dues for memberships
 - Be selective and try to get the most impact from what is really pro bono consulting.
- *Drug testing – this is for everybody and our policy from day one has been - **No Tolerance!!!***
- Outside Services – the “best buy”
- Property Taxes – study them don’t ignore them they won’t get less important.