Salem Biomass Electricity Plant is not a Good Idea for Ozark Forests

Pioneer Forest has been practicing uneven-aged single tree selection for nearly 60 years. Our forest provides jobs to many people whose livelihood depends on the health of the forest ecosystem and the forest products industry. We are also concerned about the health of Missouri forest resources beyond our boundaries.

Pioneer Forest doesn't believe that the woody biomass electricity plants are a good idea on such a large scale. There is no question that the forests in the Missouri Ozarks have a substantial supply of small diameter, low value trees. The question becomes, will the trees be harvested responsibly and sustainably? We feel that it is highly unlikely that trees will be harvested like "weeding a garden" leaving higher quality trees to grow. In reality, there are several factors that take place that will keep a thinning operation from happening.

First, in order to meet the demand for the proposed Salem, MO biomass electricity plant, which is estimated to require 325,000 green tons of biomass annually, mechanized equipment will be required to harvest the material. Cordwood cutters with chainsaws will not be able to meet the demand. Mechanized tree harvesters, wood chippers, tractor trailers, and large tree-length loaders will be necessary for the increased production needs. Most loggers in the Ozarks are currently not utilizing this type of equipment. Therefore, a substantial investment would be necessary to purchase the necessary equipment to meet the demand for the product. In fact, the Missouri Forest Products Association states in their Woody Biomass Technology Demonstration Workshop that it would take 1.45-1.85 million dollars to equip one logging crew to supply a 2 MW power plant. With this kind of investment, a logger cannot pick and choose poor quality trees to thin. In order to pay for equipment, the logger will need to produce several loads per day. A statewide timber stand improvement will not result on an adequate return on the investment of his equipment. Clearcutting would become the most practical option for the logger to keep himself in the black on his equipment investment.

Secondly, it is critical that biomass harvests use best management practices (BMP's) for the harvest of biomass. However, these practices only work if they are implemented and implemented correctly; they do no good if placed on a bookshelf. Many who assisted the development of biomass BMP's also oppose making them mandatory, opting instead for voluntary compliance. Even if a professional forester is used, they could simply write cookie cutter management plans requiring clearcuts on every acre of land that he/she visits as long as BMP's are implemented. Clearcutting on a grand scale is not what is best for Missouri forests. There are other values involved; for example, aesthetics, soil micro-organisms, soil productivity, forest interior birds, and water quality to list a few. Most private landowners do not like to be told what to do with their land. Currently, Missouri has no state forestry law mandating sound forest management decisions. However, if clearcutting on a scale that the Ozarks has never seen before begins

to happen and BMP's are not implemented, we can be assured that new and restrictive forestry law will be ushered into existence.

Thirdly, biomass markets will directly compete with other established markets. Nearly all sawmill residues are already being utilized. Additionally, the charcoal and pallet industry are established markets in the Salem area. The type of wood that this power plant would require is nearly identical to what is being used for charcoal and blocking (pallet lumber). Couple that with an emerging pulpwood market, and it becomes clear that a power plant of this size will be in direct competition with pulp, pallet, and charcoal material. There is little doubt that if a plant is built in Salem, approximately 150-200 full time positions will be lost at the charcoal plants. They would simply close up shop and move somewhere else. These jobs would be lost at the expense of creating only 25-30 full time positions at the biomass electric plant. Furthermore, if the cost of pallet material increases, it becomes more costly to ship goods which could affect prices at the grocery store.

Finally, using Pioneer Forest data we calculated what the demands of such a large facility would consume in terms of acreage. We have nearly 4000 board feet of sawlogs per acre (Int. ¼" Rule). Add this amount to the nearly 3000 board feet of cordwood and we have nearly 7000 board feet per acre as a forest wide average. If we were to be the only supplier for a facility of this size, and cutting everything (both sawlogs and cordwood) for energy production we would be clearcutting over 7200 acres annually. It would deplete our timber in less than 20 years. Keep in mind that this is everything off of a typical acre of our land. This number is likely to be much higher as loggers would sell grade and tie logs to sawmills and need lower value small diameter logs to supply the power plant. This is not how we choose to manage our forest. There are many others who agree.

By Terry Cunningham (Forest Manager, Pioneer Forest) and Jason Green (Forester, Pioneer Forest) who together have a combined experience of 41 years of forest management experience in the Missouri Ozarks.