Minnesota State Biomass Policies and Instruments

2000-2013

Energy Investment Loan Program (Disbursement)

Biomass Harvest Guidelines (Regulatory)

Next Generation Energy Act (Regulatory)

Environmental and Economic Incentives for Growing Hybrid Poplars to Meet Minnesota’s Demand for Biomass Products and Energy (R&D)
Rules and Regulations:

**Xcel Energy Wind and Biomass Generation Mandate (1994)** – Minnesota law (Minn. Stat. § 216B.2423) requires Xcel Energy to build or contract for 225 megawatts (MW) of installed wind-energy capacity in the state by December 31, 1998, and to build or contract for an additional 200 MW of installed capacity by December 31, 2002. The same statute also directed the Minnesota Public Utilities Commission (PUC) to require Xcel Energy to construct and operate, purchase or contract to purchase an additional 400 MW of installed wind-energy capacity by December 31, 2002, subject to resource planning and least-cost planning requirements. The total wind-energy capacity required under Minn. Stat. § 216B.2423 is 825 MW.

**Biomass Harvest Guidelines** – Provides guidance to loggers on appropriate biomass harvesting methods, location of harvest and allowable intensity (removal). These guidelines were developed in conjunction with MN Harvest Guidelines pursuant to the State Forest Practices Act.

**Next Generation Energy Act** - A bill for an Act related to Renewable Energy; enacting the Next Generation Energy Act of 2007; establishing state energy policy goals for fossil fuel-use reduction and renewable energy use; providing for electric utility renewable energy obligations of 25 percent by 2025; establishing provisions to promote community energy development; providing for transition to an energy savings requirement for electric and natural gas utilities; enacting provisions to address climate change; providing for delegation to counties for permitting wind projects under 25 megawatts.

Market Activity:

**Minnesota Net Metering (1983)** – Customer receives a check for NEG at the end of each month, calculated at the "average retail utility energy rate" (basically the utility's retail rate). The law applies to all investor-owned utilities, municipal utilities and electric cooperatives. All "qualifying facilities" up to 40 kilowatts (kW) in capacity are eligible. There is no limit on statewide capacity. Each utility must compensate customers for customer net excess generation (NEG) at the "average retail utility energy rate," defined as "the total annual class revenue from sales of electricity minus the annual revenue resulting from fixed charges, divided by the annual class kilowatt-hour sales." The purchase of NEG at a utility's retail rate distinguishes Minnesota's net-metering law from net-metering laws and programs in most other states.

Disbursements:

**Renewable Energy Production Incentive (1994)** – A separate law (Minn. Stat. § 216B.2424, also originally enacted in 1994) requires Xcel Energy to build or contract for 110 MW of electricity generated from biomass resources. The original requirement was for 50 MW by December 31, 1998 and an additional 75 MW by December 31, 2002, a total of 125 MW. The mandate was subsequently reduced to 110 MW in 2003. Additional sections of the law allocate the biomass requirement in various ways, imposing limits on the amount which may come from a single project, specific project, or fuel source.

**Xcel Energy – Renewable Development Fund Grants (1999)** – The Xcel Energy Renewable Development Fund (RDF) was created in 1999 as an outcome of 1994 Minnesota legislation concerning spent nuclear fuel at Xcel Energy’s Prairie Island Nuclear Plant. The original legislation has been amended and added to several times, expanding the amount of money collected by the fund and prescribing funding allocations for specific programs. Funding available for the grant program thus depends on the other funding obligations that need to be met with RDF funds at any given time. The Xcel RDF provides grants periodically through a Request for Proposals (RFP) process. Renewable-energy technologies eligible for funding typically include wind, biomass, solar, hydroelectric generators and fuel cells. Funding is generally split between new development projects that result in the production of renewable energy, and research and development.
**Energy Investment Loan Program** – Minnesota’s Energy Investment Loan Program will buy down up to 50% of the loan principal to 0% interest for any specific renewable energy, energy efficiency or energy conservation "capital improvement" measure with a simple payback of 10 years or less in an existing building, 50% of total project cost, up to $500,000. Each specific project must pass a 10-year simple payback threshold based on total costs and energy savings, energy payments and/or incentives from other sources.

**Research and Development:**

**Environmental and Economic Incentives for Growing Hybrid Poplars to Meet Minnesota’s Demand for Biomass Products and Energy** – Technical assistance programs focused on helping industry achieve cost reductions through pollution prevention. This project advanced industrial improvements in energy efficiency, environmental performance, and productivity that result in lower raw material and energy use, improved labor and capital productivity, and reduced generation of wastes and pollutants. This project is part of a longer range program objective to help industry save money and become more competitive by identifying and implementing energy efficient and pollution preventing technologies as an integrated strategy. It conducted plant assessments that focused on opportunities to implement technologies in the facilities.

**Cost-Share and Grants:**

**Government Services:**