
Primer on Minnesota’s Property Taxation of Electric Utilities

Updated to include laws enacted in the 2006 legislative session

This information brief summarizes the current structure of electric utility property taxation. The brief covers the following topics:

- The characteristics of, methods for valuing, and property tax paid by the different types of electric utilities
 - The special personal property tax exemptions granted by the legislature for electric utilities
 - Sales tax exemptions for the construction of power plants
 - The production tax that applies to wind energy conversion systems used as an electric power source
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Introduction

Changes in the regulation and economics of the electric utility industry are making state and local utility taxes more important. These changes also raise policy questions about the way state and local governments tax utilities.

For most of the 20th century, utilities operated as regulated monopolies: they were stable businesses that earned regulated and, more or less, guaranteed rates of return. Because regulations typically allowed property taxes to be recovered through the utility's rates, the level of taxes had little effect on the rate of return earned by the utility. Furthermore, utility taxes provided a convenient and stable way for state and local governments to raise generous amounts of revenue.

Federal regulations, adopted in the 1990s, allowing competition in wholesale pricing of electric power has begun to change the economics of the industry. Some states have also begun to allow retail competition. If competitive market forces set utility prices, state and local taxes can affect the rate of return on and viability of utility investments. Utility consumers (especially large commercial and industrial customers) have become more aware of the effect of taxes on their utility bills and, along with the utilities, are seeking to reduce utility taxes, including property taxes.

The Minnesota Legislature has made a variety of utility property tax changes in response to this changing environment. This information brief:

- Describes the various types of utilities and how Minnesota taxes utility property
- Discusses methods of valuing utility property
- Provides data on the total property taxes paid by utilities
- Lists exemptions and special provisions granted by the legislature over the last 20 years
- Describes the taxation of wind energy conversion systems, which was based on property through payable 2003 and, beginning in calendar year 2004, based on production

Types of Electric Utilities

Investor-owned utilities (IOUs) are private, for-profit corporations whose rates are regulated by the Minnesota Public Utilities Commission (PUC). The five IOUs that serve Minnesota (Xcel, Allete, Alliant, Ottertail, and Northwestern Wisconsin Electric) are vertically integrated utilities; the IOUs generate, transmit, and distribute their own electricity and may also buy power from wholesale producers. Property owned by these utilities is subject to property tax, unless specifically exempted.

Rural electric associations (co-ops) are nonprofit organizations whose rates are overseen by a board composed of co-op members.¹ Co-ops are not vertically integrated. There are two basic types of co-ops:

- **Distribution cooperatives** provide retail electric service directly to Minnesota consumers. There are about 40 distribution co-ops in Minnesota. The distribution co-ops pay a fee of 10 cents per customer in lieu of the property tax on their distribution lines located outside of incorporated areas.² This fee is collected by the Department of Revenue (DOR) and deposited in the general fund. For fiscal year 2005, the statewide total collections were about \$48,000. Any of their distribution lines that are located within incorporated areas are subject to property tax; however, the majority of the lines are outside of incorporated areas and pay the in-lieu fee of 10 cents per customer. Co-op-owned substations are subject to property tax.
- **Generation and transmission cooperatives** generate and transmit electricity to distribution co-ops. There are six generation and transmission cooperatives that serve Minnesota distribution co-ops.³ Generation and transmission cooperatives are generally subject to property taxation, unless specifically exempted.

Municipal utilities (Munis) are public, nonprofit utilities overseen by local public utilities commissions or city councils. Munis are generally not vertically integrated. As with co-ops, there are two kinds of municipal utilities.

- **Distribution Munis**, like their cooperative counterparts, provide retail electric services to Minnesota consumers. There are about 125 distribution Munis in Minnesota.
- **Municipal power agencies (MPAs)** provide distribution Munis with generation and transmission services. There are six MPAs operating in Minnesota.⁴

Both distribution Munis and MPAs are generally exempt from property tax, but an MPA pays in-lieu payments to each taxing authority within whose taxing jurisdiction its property is situated. These in-lieu payments equal the amounts of taxes which would have been payable if its property were owned by a private person. *Minn. Stat. § 453.54, subd. 20.*

Distribution Munis, while not subject to a specific statutory requirement to pay in-lieu taxes to taxing jurisdictions in which they operate, often do make contributions (monetary and otherwise) to their host city.

¹ One distribution cooperative, Dakota Electric Association, has elected to be rate-regulated by the PUC.

² *Minn. Stat. §§ 273.40 and 273.41.*

³ The six "G&T" co-ops are: Basin Electric Power Association, Dairyland Power Cooperative, East River Electric Power Cooperative, L&O Power Cooperative, Minnkota Power Cooperative, and Great River.

⁴ The six MPAs are: Missouri River Energy Services, Heartland Consumer Power District, Southern Minnesota MPA, Central Minnesota MPA, Northern Minnesota MPA, and Minnesota MPA.

Independent power producers (IPPs) are nonutility power producers that generate electricity solely for sale at wholesale and have no transmission or distribution lines (e.g., NRG, Landfill Gas, Minnesota Methane, Gas Recovery, and American Transmission Company (LLC of Wisconsin Power)). IPPs are generally private corporations, subject to property tax (unless specifically exempted), but are treated as utilities for property tax purposes.

Determining a Utility's Value

Utilities are valued and assessed under a "dual" property tax system:

- 1) The Department of Revenue (DOR) values the property that constitutes the utility's operating property using the unit value system. The "unit value" method estimates the market value for the entity as an integrated whole, rather than valuing each part and parcel separately. The unit value is then apportioned among the jurisdictions where the property is located, based on a formula.
- 2) Local assessors value the utility's nonoperating property, which consists of all offices, garages, warehouses, and land.

There are three approaches to valuing property—cost, income, and sales (market). However, DOR uses only cost and income in establishing market values of electric utilities. Sales are considered, but are not used due to lack of data and other concerns.

Prior to January 1, 2000, cost (less depreciation) was the only factor used in determining the value of co-ops. However, beginning with the 2000 assessment, a co-op could elect on the unit-value basis or continue to be valued using cost (less depreciation) as the only factor.^{5, 6}

The current unit-value formula that DOR uses in determining the market value of the utility is:

$$0.75 \times (\text{the original cost}^7 \text{ of the utility property less allowable depreciation}^8), \text{ plus} \\ 0.25 \times (\text{the utility's capitalized income during the most recent three years}^9)$$

Given this approach, the property values of Minnesota electric utilities have remained relatively stable for property-tax purposes. Some states rely more heavily on utilities' income-producing

⁵ [Minnesota Rules, part 8100.0300](#), subpart 6, allows co-ops this option.

⁶ Cost is used as the factor in determining the market value of MPAs, since no MPA has elected the unit-value option.

⁷ In determining property values, DOR also includes improvements and the cost of construction in progress on the date of the assessment.

⁸ [Minnesota Rules, part 8100.0300](#), subpart 3, limits electric companies' allowable depreciation for property-tax purposes to 20 percent of the cost of the property, plus 50 percent of the excess amount (over the 20 percent).

⁹ The income component of the equation uses the utility's net income for the most recent three years weighted consecutively at 40 percent, 35 percent, and 25 percent, respectively, and applies at a capitalization rate. [Minnesota Rules, part 8100.0100](#), subpart 5, defines the capitalization rate as the relationship of income to capital investment or value, expressed as a percentage.

ability to determine property values and consequently experience wider variations in their property valuations. DOR is in the process of adopting new administrative rules for determining a utility's valuations (see discussion below).

DOR then determines what portion of an electric company's total property value is allocated to Minnesota using the following formula:

$$\begin{aligned} \text{Minnesota's share of total value} &= 0.90 \times (\text{original cost of utility property in} \\ &\quad \text{Minnesota/total original cost of utility} \\ &\quad \text{property in all states of operation) plus} \\ &\quad 0.10 \times (\text{gross operating revenue from Minnesota} \\ &\quad \text{operations/gross operating revenue from all} \\ &\quad \text{states)} \end{aligned}$$

DOR then deducts from the Minnesota allocation the (1) utility nonoperating property (i.e., land, offices, garages, warehouses, etc.) and (2) rights-of-way, since these items are valued by local assessors. Lastly, the Minnesota portion of utility property is adjusted to exclude property statutorily exempt from Minnesota property taxes (e.g., pollution control equipment).

New Rules for Determining a Utility's Value

As a result of administration valuation appeals and tax court cases involving utilities, the Commissioner of Revenue is updating the administrative rules prescribing the method for the valuation and assessment of utility companies for property tax purposes. DOR hired an independent consultant to prepare a report on current rules. DOR staff have analyzed the consultant's report, received comments from other interested parties regarding the report, and held open forum meetings to receive comments on the report.

An advisory committee was formed in the fall of 2005 to help DOR write suggested changes to the rules. The committee consists of seven members representing various types of utilities, seven members representing counties, and various DOR employees. The committee met several times, reviewed proposed changes to the rule, and provided the department with comments and suggestions with respect to both valuation policy and specific rule language. The rulemaking process is moving forward and the department's goal is to have a new rule in place for the 2007 assessment year. The department has also indicated that it may use the advisory committee to give advice on any suggested future rule amendments.

Property Tax

After DOR determines the market value of the utility's operating property, it certifies the value to the county auditor where the property is located, and the property becomes part of the local tax base.

The county auditor applies the appropriate class rates to the market value. A listing of the major property classes and their respective class rates for taxes payable in 2006 is shown in the table

below.¹⁰ These class rates apply statewide and are set by the legislature. The table also shows whether the state general tax and school operating referendum levies apply to the properties.

**Class Rate Schedule — Major Property Types by Class
 Taxes Payable 2006**

	Class Rate	Subject to State Tax	Subject to Operating (Excess Levy) Referenda ¹¹
Residential Homestead:			
Up to \$500,000 market value	1.0%	no	yes
Over \$500,000 market value	1.25	no	yes
Apartments (4 or more units)	1.25	no	yes
Commercial-Industrial-Public Utility: ¹²			
Up to \$150,000	1.5	yes	yes
Over \$150,000	2.0	yes	yes
Electric generation machinery	2.0	no	yes
Agricultural Land & Buildings Homestead: ¹³			
Up to \$600,000 market value	0.55	no	no
Over \$600,000 market value	1.0	no	no
Nonhomestead	1.0	no	no

House Research Department

Applying the appropriate class rate to the utility's market value yields the utility's net tax capacity. The utility's property tax is determined by multiplying its net tax capacity times:

- 1) the total local tax rate (i.e., the county, city/town, school district, and special taxing districts), plus
- 2) the statewide general tax rate (where applicable; see table above)

For property taxes payable in 2006, the table on the following page shows the statewide utility market value by type of property and estimated property tax. Utility personal property is taxable as shown in the table, even though personal property (including both inventories and attached machinery) of nonutility businesses have been exempt since the early 1970s.

¹⁰ The table is a very abbreviated listing of the class rates. There are numerous subclasses of property and minor exceptions within the major classes.

¹¹ School operating referendum levies (sometimes called "excess levy" referenda) and all county, city, and town referendum levies are levied on referendum market value. School debt levies are levied against *all* property based on net tax capacity.

¹² A utility is allowed to receive the first-tier class rate (up to the \$150,000 market value limit) on only one property per county.

¹³ House, garage, and one acre treated the same as residential homestead.

**Statewide Utility Market Value and Property Taxes
 by Type of Property¹⁴
 Taxes Payable in 2006**
 (all figures in millions)

Type of Property	Market Value Amount	Market Value % of Total	Tax Amount	Percent of Total	Effective Tax Rate
Land and buildings	\$856	11.7%	\$27.2	12%	3.3%
Electric generation machinery	1,457	19.9	32.9	13.9	2.3
Other machinery	1,169	15.9	36.8	17.8	3.2
Transmission lines ¹⁵	1,704	23.2	55.5	24.7	3.4
Distribution lines	212	2.9	7.4	3.7	3.5
Pipelines	1,934	26.4	61.2	27.9	3.2
Total	\$7,332	100.0%	\$221	100.0%	3.1%

House Research Department

To put this in context with all property on a statewide basis for taxes payable in 2006:

- The total taxable market value of utility property (\$7.3 billion) is about 1.6 percent of the total taxable market value of all property (\$464 billion);
- The total utility property tax of \$221 million is about 3.5 percent of the total tax on all property (\$6,244 million).

Thus, utility property taxes (3.5 percent) are more than twice the utility's property share of taxable market value (1.6 percent).¹⁶

Utility property is not uniformly distributed throughout the state. Therefore, the proportion of taxable utility market value and tax within any particular taxing district to its total market value and tax varies dramatically within the state.

Power line credit. Incentives for landowners to accept transmission lines on their property will likely be a legislative issue in the near future. A property tax credit enacted in 1980 to address this issue is worth noting, even though the total dollar amount of credits paid are small. The power line credit was established to reduce the property tax burden of those taxpayers whose properties have high-voltage electrical lines on them, as an incentive for taxpayers to accept

¹⁴ The market value and taxes in this category are for all utilities. Due to data constraints, it is not easy to separate the values and taxes by type of utility. However, electric utilities constitute over two-thirds of the total value of all utility property.

¹⁵ Includes value and tax amounts for transmission and distribution lines that are excluded from the general tax base in determining tax rates and are subject to the countywide tax rate. For taxes payable in 2004, these lines were valued at \$195 million with a tax burden of \$5.7 million. *Minn. Stat. § 273.37, subd. 2.*

¹⁶ The comparable ratios for commercial/industrial (nonutility) are 31.3 percent taxes to 13.1 percent taxable market value.

these power lines. In order to qualify for the credit, the property must be crossed by a transmission line of 200KV or more, constructed after June 30, 1974.

In 1981, utility companies made direct payments to qualifying property owners to compensate them for having these high voltage lines pass over their property. However, the direct payments were changed to property tax credits beginning with taxes payable in 1982/1983. For taxes payable in 2006, the total statewide power line property tax credit was only \$81,900. *Minn. Stat. § 273.42*.

Exemptions

In Minnesota, a utility's attached machinery and other personal property is taxable (i.e., transformers, turbines, etc.).^{17, 18, 19} Over the past two decades, the legislature has granted many property tax exemptions for the attached machinery and other personal property at *newly constructed facilities*. These exemptions have been adopted in response to requests from companies proposing to build new electric generating facilities²⁰ in Minnesota (see list of exemptions made since 1994 below). With the precedent for these exemptions so well established, it is quite likely that this trend will continue for future proposed facilities.²¹

Electric Utilities

The following is a list of the proposed facilities for which their attached machinery and other personal property have been exempted from property taxation by the legislature in the past 20 years. As one can see, many exemptions have been enacted. No general exemption has ever been enacted for this type of property, although there has been discussion about enacting that type of legislation, instead of exempting the attached machinery and personal property one facility at a time. Some of the facilities have also been granted exemptions from sales tax for construction materials and supplies. These exemptions are shown as footnotes.

1994

L.S. Power Plant: Exemption for a cogeneration system that used natural gas as a primary fuel. The exemption required that the plant be constructed before July 1, 1997. The plant was constructed in Cottage Grove and is operational. *Laws 1994, ch. 513. Minn. Stat. § 272.02, subd. 29.*

¹⁷ Personal property of nonutility commercial and industrial businesses are exempt (i.e., inventories, tools, machinery, etc.).

¹⁸ Companies in Minnesota that generate electric power for their own use, and not for resale, are exempt from taxation on the personal property used to generate the power. *Minn. Stat. § 272.027.*

¹⁹ Personal property used primarily for the abatement and control of air, water, or land pollution is exempt from property tax. *Minn. Stat. § 272.01, subd. 10.*

²⁰ These facilities have primarily been peaking and intermediate-load facilities.

²¹ Many assume that even if electric restructuring were to occur, transmissions and distribution lines would probably remain taxable because they are not subject to competition as are the actual generation facilities.

1996/2005

Market value exclusion for electric power generation efficiency:

1996: Exemption for facility that produces electricity at very high efficiency levels and has significantly lower pollution emissions than conventional power production facilities. It provides for a subtraction equal to 5 percent of market value of qualifying property for each percentage point that the facility is operating above 35 percent efficiency. Although this is a general exemption, it was designed for a specific company (Koch Refining; now called Flint Hills Resources) and project, which was to be a cogeneration facility. The required efficiency level could only be met by existing power production facilities in Minnesota by implementing significant and expensive changes to the facility. This provision is often referred to as the “cogeneration” provision, since at that time, those were the only types of facilities that could achieve the required efficiency. *Laws 1996, ch. 444. Minn. Stat. § 272.0211, subd. 2.*

2005: The 2005 Legislature modified the formula for determining a plant's efficiency for the market value exclusion; the new formula uses a ratio of energy output to energy input during normal base-load operation. The threshold for a generation facility to qualify for the sliding scale market value exclusion was increased from 35 percent to 40 percent, and the exclusion for each percentage point above the threshold was increased from 5 percent to 8 percent. This formula increase updates the sliding scale exclusion to today's efficiency standards, given the new technology now available. *Laws 2005, ch. 151, art. 3, secs. 9 and 10.*

DOR has granted market value exclusions for a few facilities under this law. They are Xcel's Black Dog plant (Burnsville), Minnesota Power's plant at Potlatch (Cloquet/Carlton County), and two natural gas-fired peaking plants serving Dakota Electric (Hastings and Lakeville) owned by Energy Alternatives (wholly owned subsidiary of Dakota Electric).

1997

Biomass, waste wood:²² Exemption for equipment that is part of a system that generates biomass electric energy and satisfies a portion of the Prairie Island biomass mandate on Xcel Energy in [section 216B.2424](#), or a system that produces energy using waste wood.

Exemption requires local approval of the governing bodies of each affected county, city/town, and school district. That approval may be rescinded by a later referendum if a petition is signed by 10 percent of

²² *Minn. Stat. § 297A.71, subd. 8.* The 1997 Legislature also enacted a law that exempted the purchases of construction materials and supplies from the sales and use taxes imposed for a system that meets the requirements. This law was recodified in 2000. (*Laws 1997, ch. 231, art. 7, sec. 27; Laws 2000, ch. 418, art. 1, sec. 15.*)

the voters in the county voting in the last general election. Property exempted under this provision is limited to a maximum of five assessment years, beginning with the assessment year immediately following when the personal property is put into operation. No known facilities qualify for the exemption under this provision. *Laws 1997, ch. 231, art. 2, sec. 8. Minn. Stat. § 272.02, subd. 43.*

1997 **Laskin Plant (St. Louis County): Provision has expired.** Exemption for equipment of a facility with a capacity of 110 megawatts, whose operation was integral to the development and operation of a new, adjacent industrial park.

Exemption required local approval from the governing bodies of the county, city/town, and school district. Approval could have been rescinded by a later referendum if a petition were signed by at least 10 percent of the number of persons voting in the county in the last general election. Exemption could not exceed five years beginning with the assessment year immediately following when the property was put into operation and expired thereafter. This exemption expired if the industrial park was not built by July 1, 2001. This exemption was enacted for a plant proposed for St. Louis County. However, no exemption was granted under this provision and it has expired. *Laws 1997, ch. 231, art. 2, sec. 57* (never codified in Minnesota Statutes).

1999 **Lakefield Junction (Martin County):** Exemption for equipment of a peaking facility proposed to be constructed in Martin County that is part of a simple-cycle, combustion-turbine electric generation facility that exceeds 250 megawatts of installed capacity.

The exemption required that construction of the facility begin after July 1, 1999, and before July 1, 2003. The plant is in operation and is owned by Great River Energy. *Laws 1999, ch. 243, art. 5, sec. 3. Minn. Stat. § 272.02, subd. 33.*

1999 **Rapids Energy Center, Grand Rapids (Itasca County): Facility plans cancelled.** Exemption for equipment of a facility if the electric generating facility was operational on January 2, 1999, and sold to a Minnesota electric utility. This was enacted for a plant proposed to be sold to Minnesota Power and expanded from 30 megawatts to 250 megawatts. Plans to build this facility were cancelled in August 2002. *Laws 1999, ch. 243, art. 5, sec. 4. Minn. Stat. § 272.027, subd. 2.*

1999 **Direct-reduction steel mill:** Exemption for equipment of an electric generating facility if the facility, when completed, has a capacity of at least 450 megawatts; is adjacent to a taconite mine direct-reduction steel mill; and supplies over 60 percent of its electricity generated in the prior

year to the adjacent direct-reduction plant and steel mill. No construction has begun on this facility. *Laws 1999, ch. 243, art. 5, sec. 4. Minn. Stat. § 272.027, subd. 3.*

2000

Pleasant Valley Station (Mower County): Exemption for equipment of an electric generation peaking facility, proposed to be constructed in Mower County by Great River Energy, that is a simple-cycle, combustion-turbine electric generation facility that exceeds 250 megawatts of installed capacity.

Construction of this facility had to begin after January 1, 2000, and before January 1, 2004. This facility has been constructed and is in operation. *Laws 2000, ch. 490, art. 5, sec. 4. Minn. Stat. § 272.02, subd. 44.*

2001/2003/2005

Fibro Minn (Swift County)²³

2001: A personal property exemption was granted by the 2001 Legislature for a plant that was to be built in the city of Benson (Swift County). It was designed to generate power using poultry litter as a primary fuel source to satisfy a portion of the Prairie Island biomass mandate under [section 216B.2424](#). Construction was to begin by December 31, 2002. *Laws 2001, 1st spec. sess. ch. 5, art. 3, sec. 18.*

2003: The 2003 Legislature extended the construction date to December 31, 2003. *Laws 2003, ch. 127, art. 2, sec. 6.*

2005: The 2005 Legislature extended the date by which construction must begin in order for a facility to qualify for a personal property tax exemption from December 31, 2003, to December 31, 2005. *Laws 2005, ch. 151, art. 3, sec. 1. Minn. Stat. § 272.02, subd. 47.*

2001

Waste tire cogeneration facility (Fillmore County):²⁴ Provision has expired. Exemption for equipment of an electric generating facility designed to use waste tires as a primary source and that was a cogeneration electric generating facility of 15 to 25 megawatts of installed capacity.

²³ *Minn. Stat. § 297A.71, subd. 25.* The 2001 Legislature enacted a law that exempted the purchases of construction materials and supplies from the sales and use taxes imposed for a system that uses poultry litter and other biomass electric generation facility. The expiration date was extended in 2005 and is effective for sales from June 30, 2001, to July 1, 2007. *Laws 2001, ch. 5, art. 3, sec. 18; Laws 2000, ch. 151, art. 3, sec. 1.*

²⁴ *Minn. Stat. § 297A.71, subd. 27.* The 2001 Legislature also enacted a law that exempted the purchases of construction materials and supplies from the sales and use taxes imposed for a system that utilizes waste tires as a primary fuel in generating electricity. This provision has expired. *Laws 2001, ch. 5, art. 3, sec. 69.*

Construction of the facility had to begin after January 1, 2000, and before January 1, 2004. This exemption was enacted for a facility proposed to be located in the city of Preston (Fillmore County). This facility received its air permit from the MPCA in July 2003, but the developer withdrew the project. *Laws 2001, 1st spec. sess., ch. 5, art. 3, sec. 19. Minn. Stat. § 272.02, subd. 48.*

2001/2006

Biomass electric generating facility²⁵

2001: Exemption for equipment of an electric generating facility designed to utilize biomass as a primary fuel source. It must also be constructed for generating power that will be sold under a contract approved by the PUC, for a biomass mandate imposed under [section 216B.2424](#).

Although this exemption was written broadly to apply to any facility that met the criteria and for which construction began after January 1, 2000, and before December 31, 2002, only the St. Paul district energy facility qualified for the exemption. The plant is operated by Trigent Cinergy. *Laws 2001, 1st spec. sess., ch. 5, art. 3, sec. 21.*

2006: The 2006 Legislature extended the construction date to December 31, 2005, to allow the Laurentian biomass facility (a joint project of the cities of Hibbing and Virginia) to qualify for the exemption. *Laws 2006, ch. 259, art. 4, sec. 5. Minn. Stat. § 272.02, subd. 45.*

2001/2003

Northom; Itasca Power Company^{26, 27}

2001: Exemption for equipment of a new wood-burning biomass generation facility that satisfies a portion of the biomass mandate imposed on Xcel Energy (Northern States Power) in the Prairie Island legislation (1994 and 2003). The facility must have a generation capacity of between 10 and 20 megawatts; be located in a certain northern area; utilize biomass residue wood, sawdust, bark, chipped

²⁵ *Minn. Stat. § 297A.71, subd. 27.* The 2005 Legislature enacted a law that exempted the purchases of construction materials and supplies made by municipal joint powers to construct, expand, or improve electric generation facilities used to meet the biomass mandate. There is no expiration date for this provision. *Laws 2005, ch. 3, art. 5, sec. 16.*

²⁶ *Minn. Stat. § 297A.71, subd. 21.* The 2000 Legislature enacted a law that exempted the purchases of construction materials and supplies from the sales and use taxes imposed for a system that utilizes residue wood, sawdust, bark, chipped wood or brush to generate electricity, uses a grate combination system, and has a gross capacity of 15 to 21 megawatts. This provision expired in July 2005. *Laws 2000, ch. 418, art. 1.*

²⁷ The exemption granted under this section is effective regardless of whether the facility is needed or selected to fulfill some portion of the biomass mandate.

wood, or brush as a primary fuel source; and be operational by December 31, 2002. *Laws 2001, 1st spec. sess., ch. 5, art. 3, sec. 13. Minn. Stat. §§ 216B.2424, subd. 5; 216B.1691, subd.6.*

2003: The 2003 Legislature extended the operational date by an additional three years to December 31, 2005. *Laws 2003, ch. 127, art. 2, sec. 31.*

Additionally, the legislature required Xcel Energy to enter into a power purchase agreement with this facility by January 1, 2004, for 10 to 20 megawatts of biomass energy and capacity at a price not to exceed \$55 per megawatt-hour. Contract referred to the PUC; no facility yet under construction. *Laws 2003, 1st spec. sess., ch. 11.*

2002

Waseca County: Provision has expired. Exemption for equipment of a combined-cycle, natural gas turbine electric generation facility of between 43 and 46 megawatts of installed capacity. The facility had to utilize a combined-cycle gas turbine generator fueled by natural gas, be connected to an existing transmission line, be located on an underground natural gas storage aquifer, be designed as an intermediate load facility, and have received local approval from the governing body of the county for the exemption of personal property.

Construction of the facility had to begin after January 1, 2002, and before January 1, 2004. *Laws 2002, ch. 377, art. 4, sec. 7. Minn. Stat. § 272.02, subd. 51.*

2002

Beltrami County: Exemption for equipment of a simple-cycle, combustion-turbine electric generation facility of more than 40 megawatts and less than 50 megawatts of installed capacity.

The facility must utilize natural gas as a primary fuel; be located by certain natural gas pipelines and a transmission line; be designed to provide peaking, emergency backup, or contingency services; and satisfy a resource deficiency identified in an approved integrated resource plan filed under [section 216B.2422](#).

Construction of the facility had to begin after January 1, 2001, and before January 1, 2005. The plant is in operation and is owned by Ottertail Power. *Laws 2002, ch. 377, art. 4, sec. 8. Minn. Stat. § 272.02, subd. 52.*

2002/2003/2005/2006 Crown Hydro (Minneapolis)²⁸

2002: A personal property exemption was granted by the 2002 Legislature for this plant that was to be built in the city of Minneapolis. It was a 3.2 megawatt, run-of-the-river hydroelectric generation facility. Construction was to begin by January 1, 2004. *Laws 2002, ch. 377, art. 4, sec. 9. Minn. Stat. § 272.02, subd. 53.*

2003: The 2003 Legislature extended the construction date to January 1, 2005. *Laws 2003, ch. 127, art. 2, sec. 7.*

2005: The 2005 Legislature provided an additional two years to January 1, 2007, and deleted the requirement that the generating facility be located on publicly owned land. *Laws 2005, ch. 151, art. 3, sec. 2.*

2006: The 2006 Legislature extended the construction date to January 1, 2009. *Laws 2006, ch. 259, art. 4, sec. 6.*

2002/2006 Rahr Malting (Shakopee/Scott County)

2002: Exemption for equipment of an electric generation facility that has a generation capacity of less than 25 megawatts. The facility must provide process heating needs in addition to electrical generation and utilize agricultural by-products from the malting process and other biomass fuels as its primary fuel source.

Construction of the facility had to begin after January 1, 2002, and before January 1, 2006. Construction began in 2005. The facility was anticipated to be operational in about two years. *Laws 2002, ch. 377, art. 4, sec. 10. Minn. Stat. § 272.02, subd. 54.*

2006: The 2006 Legislature extended the construction date to January 1, 2008. *Laws 2006, ch. 259, art. 4, sec. 7.*

2002/2003/2006 Mesaba Energy Projects

There are currently two proposed sites for the Mesaba Energy Project, in accordance with Minnesota Statutes, sections 116C.51-69, and Minnesota Rules, part 4400/1150, subpart 1.C. The West Range site is primarily located within the city limits of Taconite in Itasca County. The East Range site is primarily located within the city limits of Hoyt Lakes in St. Louis County. *Minn. Stat. §§ 272.02, subd. 55; 216B.1694, subd. 2.*

²⁸ *Minn. Stat. § 297A.71, subd. 33.* The 2005 Legislature enacted a law that exempted the purchases of construction materials and supplies used or consumed in the construction of a hydroelectric generating facility for sales from December 31, 2004, to December 31, 2007. This was extended in 2006. *Laws 2006, ch. 259, art. 3, sec. 2.*

2002: Exemption for equipment of an electric generation facility sited on an energy park located on an active or former mining or industrial site within the taconite tax relief area. The facility had to have on-site access to existing railroad infrastructure and direct rail access to a Great Lakes port, sufficient private water resources on site, and be designed to host at least 500 megawatts of electric generation.

Construction of the first 250 megawatts at the facility had to commence after January 1, 2002, and before January 1, 2005. This exemption was enacted for a facility proposed to be located in St. Louis County (the old LTV plant site). Construction of up to an additional 750 megawatts had to commence before January 1, 2010. *Laws 2002, ch. 377, art. 4, sec. 11.*

2003: Legislation was enacted in 2003 providing a number of regulatory incentives for this energy project on the Iron Range. *Laws 2003, 1st spec. sess., ch. 11.*

2006: No construction commenced under the 2001 or 2003 legislation. The 2006 legislation deleted the requirements that the facility be located on a mining or industrial site (though it still must be in the taconite tax relief area), have direct rail access to a Great Lakes port, and have sufficient private water resources on site. It modified the requirement for on-site access to railroad infrastructure to access to existing railroad infrastructure within less than three miles.

Additionally, the 2006 legislation also required the facility: to be designated as an innovative energy project, to receive resolution approval from the governing body where the proposed facility is to be located, and to have an agreement with the host county, city/township, and school district for a payment in lieu of property taxes. These location requirements were broadened so that the site can be in either St. Louis or Itasca counties.

The law also extended the construction commencement dates to after January 1, 2006, and before January 1, 2010, for the first 500 megawatts of the facility and before January 1, 2015, for the additional 750 megawatts. *Laws 2006, ch. 259, art. 4, sec. 8.*

2003/2005

Calpine (Mankato/Blue Earth County)

2003: Exemption is for equipment of a combined-cycle, combustion-turbine electric generation facility that exceeds 550 megawatts of installed capacity and designed to utilize natural gas as a primary fuel. The facility cannot be owned by a public utility as defined in [section 216B.02](#), subdivision 4; must be located close to existing natural gas

pipeline and existing electrical transmission substation and outside the seven-county metro area; must be designed to provide energy and ancillary services; and have received a certificate of need under [section 216B.243](#).

Construction of the facility must begin after January 1, 2004, and before January 1, 2007. Construction of the facility has begun. *Laws 2003, ch. 127, art. 2, sec. 8. Minn. Stat. § 272.02, subd. 56.*

2005: The 2005 Legislature reduced the plant's minimum size from 550 to 300 megawatts and allowed any expansion to be exempt without regard to when construction begins. *Laws 2005, ch. 151, art. 3, sec. 3.*

2003

Great River Energy (Rosemount/Dakota County): Exemption is for equipment of a combined-cycle, combustion-turbine electric generation facility that exceeds 150 megawatts of installed capacity and utilizes natural gas as a primary fuel. It must be owned by an electric generation and transmission cooperative; located close to natural gas pipelines and a high-voltage electric transmission line; designed to provide intermediate energy and ancillary services and received a certificate of need under [section 216B.243](#), demonstrating demand for its capacity; and has received local approval from the county and city in which the site is located.

The exemption will take effect only if the owner of the facility enters into agreements with the governing bodies of the county and the city where the facility is located (in the Dakota Electric service territory). The agreements may include a requirement that the facility pay a host fee to compensate the county and the city for hosting the facility.

Construction of the facility must begin after January 1, 2004, and before January 1, 2009. Plans to build this facility were put on hold due to a multiyear power purchase agreement from another utility. *Laws 2003, ch. 127, art. 2, sec. 9. Minn. Stat. § 272.02, subd. 67.*

2005

Electric generation facility personal property (Cannon Falls/Goodhue County): Exemption is for equipment that is part of an existing simple-cycle, combustion-turbine electric generation facility that exceeds 290 megawatts of installed capacity. It must utilize natural gas as a primary fuel; be designed to provide peaking, emergency backup, or contingency services; and have received approval from the governing body of the county and city for the exemption.

Construction of the facility must begin after January 1, 2005, and before January 1, 2009. *Laws 2005, ch. 151, art. 3, sec. 4. Minn. Stat. § 272.02, subd. 68.*

- 2005** **Electric generation facility personal property (Faribault/Rice County):** Exemption is for equipment that is part of an electric generation facility that exceeds 150 megawatts of installed capacity. The facility must be designed as a combined-cycle facility, although initially it will be operated as a simple-cycle combustion turbine and utilize natural gas as a primary fuel.
- To qualify for the exemption, the municipal power agency (that will own and operate the facility) must agree to make payments in lieu of property taxes to the host city.
- Construction of facility must begin after January 1, 2004, and before January 1, 2006. Construction has begun on the facility. *Laws 2005, ch. 151, art. 3, sec. 5. Minn. Stat. § 272.02, subd. 69.*
- 2005** **Electric generation facility personal property (Shakopee/Scott County):** Exemption is for equipment that is part of an existing simple-cycle, combustion-turbine electric generation facility that exceeds 300 megawatts of installed capacity. It must utilize natural gas as a primary fuel; be designed to provide peaking, emergency backup, or contingency services; and have received approval from the governing body of county and city for the exemption.
- Construction of facility expansion must begin after January 1, 2004, and before January 1, 2005. This exemption is for the new attached machinery and personal property for the expansion of an existing plant (Blue Lake) in Shakopee owned by Xcel Energy. *Laws 2005, ch. 151, art. 3, sec. 6. Minn. Stat. § 272.02, subd. 70.*
- 2005** **Electric generation facility personal property (Cambridge/Isanti County):** Exemption is for equipment that is part of a single-cycle, combustion-turbine electric generation facility that exceeds 150 megawatts of installed capacity. The facility must be designed to utilize natural gas as a primary fuel; provide peaking, emergency backup, or contingency services; and have received approval from the governing body of the county and the township for the exemption.
- Construction of the facility must begin after July 1, 2005, and before January 1, 2009. This exemption is for a proposed generating facility to be built by Great River Energy in the city of Cambridge (Isanti County). A certificate of need was issued in November 2005; construction should begin in April 2006. *Laws 2005, ch. 151, art. 3, sec. 8. Minn. Stat. § 272.02, subd. 71.*
- 2005** **Electric generation facility personal property (Blooming Grove Township/Waseca County):** Exemption is for equipment that is either

part of (1) a simple-cycle, combustion-turbine electric generation facility, or (2) a combined-cycle, combustion-turbine electric generation facility that does not exceed 325 megawatts of installed capacity. The facility must be designed as either a peaking or intermediate load facility, and must utilize either a simple-cycle or a combined-cycle combustion-turbine generator fueled by natural gas. The facility must have received approval from the governing body of the county for the exemption.

Construction must begin after January 1, 2006, and before January 1, 2008. This facility/exemption replaces one proposed in 2002 for a facility that was never constructed. *Laws 2005, ch. 151, art. 3, sec. 8. Minn. Stat. § 272.02, subd. 72.*

2005

Biomass/Minneapolis Midtown Exchange: Exemption is for equipment that is part of an electric generation facility that generates up to 30 megawatts of installed capacity. The facility must be designed to utilize at least 90 percent waste biomass as a fuel, not be owned by a public utility, be located within a city of the first class, have its primary location at a former garbage transfer station, and be designed to have the capability to provide baseload energy and district heating.

Construction of the facility must begin between January 1, 2004, and January 1, 2008. The proposed facility will be located in Minneapolis and will supply energy to the former Sears site (Midtown Exchange). *Laws 2005, 1st spec. sess., ch. 3, art. 1, sec. 6. Minn. Stat. § 272.02, subd. 82.*

2006

Electric generation facility personal property (Lower St. Anthony/Minneapolis):²⁹ Exemption is for equipment that is part of a 10.3-megawatt run-of-the-river hydroelectric generation facility. Construction must begin after April 30, 2006, and before January 1, 2009. *Laws 2006, ch. 259, art. 4, sec. 9. Minn. Stat. § 272.02, subd. 84.*

Energy and Pollution Control Property

In addition to the above exemptions, Minnesota also exempts some energy and pollution control equipment from property tax located at facilities that are otherwise subject to property taxes. The estimated market value exempted for these property types for the 2005 assessment was about \$680 million. This exemption amount has remained relatively stable in recent years since no major generating facilities have been built. Most of the exemption is for pollution control equipment (some structures are also exempted).

²⁹ The 2006 Legislature exempted from sales tax the materials and supplies used or consumed in the construction of a 10.3-megawatt hydroelectric generating facility in lower St. Anthony.

Wind Energy Conversion Systems

The taxation of wind in Minnesota has been an important policy question as technology has advanced to make wind systems more economic to install. On the one hand, policymakers wanted to keep the tax on this source of energy low to promote this renewable resource. On the other hand, the areas of the state in which the wind resource is abundant are relatively poor in terms of tax capacity (little industry, etc.). The local government units in these areas want to tax wind energy systems to raise local revenues. Responding to this tension, the legislature has enacted numerous changes to the taxation of wind energy conversion systems ranging from a total exemption, through graduated property tax system, to the current production tax.

The Past: 1991 through 2003 Property Tax

The original law, enacted in 1991, exempted all wind energy conversion systems installed after January 1, 1991, that were used as an electric power source. *Laws 1991, ch. 316, sec. 2.*

In the following years, numerous changes were made to the taxation or exemption of these systems based on the size of the system. The table below summarizes the tax status of each type of wind energy conversion system for taxes payable in 2003. *Minn. Stat. § 272.02, subd. 2.*

Taxation of Wind Energy Conversion Systems; Taxes Payable 2003

Size of System	Land	Foundations and Support Pads	Structures	Turbines, Blades, Transformers, and Equipment
Small (less than 2 megawatts)	Taxable	Exempt	Exempt	Exempt
Medium (more than 2 megawatts, but less than 12 megawatts)	Taxable	Taxable	Exempt for 5 years; 30% taxable thereafter	Exempt
Large (more than 12 megawatts)	Taxable	25% taxable	25% taxable	25% taxable

House Research Department

Prior to the 2000 assessment, county assessors were responsible for valuing wind conversion systems. However, beginning with the 2000 assessment, the responsibility was transferred to DOR. *Laws 2000, ch. 490, art. 5, sec. 15. Minn. Stat. § 273.37, subd. 3.* This section has been repealed since the wind conversion systems are now exempt from property tax and are subject to an in-lieu production tax.

Defining the Size of System

Under this property tax structure, an important issue was how to define the size of the system. Since smaller units were taxed preferentially, wind developers attempted to make these projects seem smaller than they actually were. The 2001 Legislature reacted by specifying the total size of wind energy conversion systems for purposes of property taxation. These changes required combining the nameplate capacity of all wind energy conversion systems located within five

miles of each other, constructed in the same calendar year, and under the same ownership in determining if the system is a small-, medium-, or large-scale system. These changes applied to wind energy systems installed after January 1, 2001. The changes continue to apply to the wind energy production tax beginning in payable 2004. *Laws 2001, 1st. spec. sess., ch. 5, art. 3, sec. 16. Minn. Stat. §272.02, subd. 22.*

The 2006 Legislature expanded the definition of wind energy conversion systems to include substations used and owned by one or more wind energy conversion facilities. These substations will now be subject to production tax and exempt from property tax. *Laws 2006, ch. 259, sec. 10. Minn. Stat. § 272.029, subd. 1.*

Payments in Lieu of Property Tax

The 2001 Legislature also allowed a developer of a new or existing medium- or large-scale wind energy conversion system to negotiate with the city or town and the county where the system is located to establish a payment in lieu of property taxes on the property. The payment is to provide fees or compensation to the host jurisdictions to maintain public infrastructure and services. The payment-in-lieu agreement must be signed by the parties and filed with the Commissioner of Revenue and the county recorder. Upon execution and filing of the agreement, the personal property of the system is exempt from property tax. The exemption is effective for the same duration as the in-lieu payments are in effect. No known negotiations are in effect under this provision. *Laws 2001, 1st spec. sess., ch. 5, art. 3, sec. 22. Minn. Stat. § 272.028.*

This payment in lieu of property tax was modified to a payment in lieu of the production tax by the 2002 Legislature. *Laws 2002, ch. 377, art. 4, sec. 12. Minn. Stat. § 272.028.*

The Present: 2004 and Thereafter, Wind Energy Production Tax (WEPT)

The local governments weren't satisfied with the changes made by the 2001 Legislature. They argued that an acceptable in-lieu payment would not be agreed upon and that the taxes based on property were not sufficient. After lengthy discussions, the legislature enacted a production tax in 2002 beginning with taxes payable in 2004. *Laws 2002, ch. 377, art. 4, sec. 13. Minn. Stat. § 272.029, subd. 1.*

The new law imposes a production tax on the production of electricity from wind energy conversion systems in lieu of the property tax installed after January 1, 1991. However, the land on which the systems are located remains subject to property tax. *Laws 2002, ch. 377, art. 4, sec. 6; further amended by Laws 2002, ch. 400, sec. 9. Minn. Stat. § 272.029, subd. 1.*

The production tax rates are based on the size of the wind energy conversion system. They are as follows:

- Large-scale systems (nameplate capacity of more than 12 megawatts) pay 0.12 cents per kilowatt-hour
- Medium-scale systems (nameplate capacity between two and 12 megawatts) pay 0.036 cents per kilowatt-hour

- Small-scale systems (nameplate capacity of two megawatts or less) pay 0.012 cents per kilowatt-hour
- Exempt from the production tax: Very small conversion systems with a nameplate capacity of 0.25 megawatts or less and small-scale systems (two megawatts or less) owned by a political subdivision

Reporting

By February 1 of each year (beginning in 2005), the owner of the wind energy conversion system must file a report to DOR detailing the amount of electricity produced in the previous calendar year. (The filing date was March 1 for 2004, but the 2005 Legislature changed the date to February 1 to allow DOR and local governments more time for administrative and budget planning purposes.) The tax, based on the size of the wind conversion system, must be paid to the county on or before May 15 and October 15, and distributed along with the regular property tax settlements made by the county treasurer to the local governments.

Tax Distribution

For taxes payable in 2004 and 2005 the distribution of the WEPT revenues are based upon the local tax rates; i.e., the proportion that each of the local taxing jurisdiction's tax rates were to the total tax rate where the wind energy conversion system is located. The state is not included in the distribution of revenues.

For taxes payable in 2006 and thereafter, the distribution of the WEPT will be fixed percentages: 80 percent to counties, 14 percent to cities/townships, and 6 percent to school districts. [Laws 2005, ch. 151, art. 5, sec. 15. Minn. Stat. § 272.029, subd. 6.](#)

The amount of the production tax distributed in 2006 is almost \$1.4 million. That tax is based on the calendar year 2005 wind energy production. A county-by-county breakdown of the total tax amount is shown on the following page.

**Total Estimated Wind Production Tax by County
Based on 2005 Production Tax, Due in 2006
(Total All Taxing Jurisdictions)**

Murray	\$448,483
Lincoln	409,973
Pipestone	403,557
Martin	31,589
Jackson	23,420
Mower	16,984
Dodge	13,185
Rock	5,632
Nobles	1,681
Clay	661
Rice	516
Sherburne	106
Total	\$1,355,787

Number of Systems

There are 108 private wind energy projects in the state; 95 are categorized as small scale, seven are medium scale, and six are large scale (as of the summer of 2006). There are also five municipal wind energy systems (cities of Elk River, Marshall, and Moorhead, and the Southern Minnesota Municipal Power Agency and the Wisconsin Public Power Inc.). They are small-scale systems and are exempt because they are publicly owned. The majority of the systems are located in southwest Minnesota. Since the tax on these systems is now a production tax, their market value is unknown.

Production Incentives

The legislature provided production incentives to wind facilities under two megawatts. The incentive is equal to 1.5 cents per kilowatt-hour if the facility is developed prior to January 2005; or 1 to 1.5 cents per kilowatt-hour if developed after that date. \$9.4 million is available annually for this incentive through 2017. *Laws 2005, 1st spec. sess., ch. 1, art. 4, secs. 14 and 51. Minn. Stat. §§ 116C.779, subd. 2; 216C.41, subd. 2.*

The 2003 legislation required Xcel Energy to deploy 300 megawatts of wind energy capacity in the state by 2010, in addition to the 825 megawatts the utility is already committed to deploy. *Laws 2003, 1st spec. sess., ch. 11. Minn. Stat. § 216B.1691, subd. 6.*

For more information about property taxes and electric utilities, visit our web site, www.house.mn/hrd/issinfo/tx_prop.htm.