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STUDY OF POLLUTION CONTROL EXEMPTION

A report submitted to the Minnesota State Legislature pursuant to Minnesota Laws 2009, Chapter 88, Article 2, Section 52.

Property Tax Division
Minnesota Department of Revenue
March 12, 2010

Per Minnesota Statute 3.197, any report to the Legislature must contain, at the beginning of the report, the cost of preparing the report, including any costs incurred by another agency or another level of government.

This report cost $27,000.

MINNESOTA · REVENUE

March 12, 2010

To the members of the Legislature of the State of Minnesota:

I am honored to present to you this study of the pollution control exemption process currently in place within the State of Minnesota. The study was headed by the Department of Revenue in response to Minnesota Laws 2009, Chapter 88, Article 2, Section 52.

The study includes input from the Minnesota Pollution Control Agency, the Minnesota Public Utilities Commission, and pollution control stakeholders from counties, cities, and utilities located throughout the great state of Minnesota.

The following report covers the process used to determine the eligibility of personal property used as part of an electric generation system for the property tax exemption. It includes data on the location, value and tax impact of the exemptions provided to date, as well as an assessment of the efficacy of the equipment in reducing pollution.

You will find the study to be an educational and informative tutorial about the valuation and taxation of utilities and the pollution control exemption process in Minnesota.

Sincerely,

Ward Einess
Commissioner of Revenue

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Introduction and Legislative Charge

This report was developed in accordance with Minnesota Laws 2009, Chapter 88, Article 2, Section 52. In 2009, the Legislature required the Minnesota Department of Revenue and the Minnesota Pollution Control Agency (MPCA) to study the pollution control exemption process as it currently exists in Minnesota. Specifically, the legislative charge states that:

> *"The commissioner of revenue, in consultation with the commissioner of the Pollution Control Agency, must study the process used to determine the eligibility of personal property located at an electric generating facility for the property tax exemption provided under Minnesota Statute, section 272.02, subdivision 10. The study must include a review of the process used, and must compile information on the location, value, and tax impact of the exemptions provided to date, as well as an assessment of the efficacy of the equipment in reducing pollution. The results of the study must be presented to the chairs and ranking minority members of the committees on taxes of the senate and the house of representatives by January 15, 2010."*

As mandated, the Department of Revenue and the MPCA studied the process used to determine the eligibility of personal property for pollution control located at an electric generating facility. This report presents a review of the exemption process, along with information on the location, value and tax impact of current exemptions, and an assessment of the efficacy of the equipment in reducing pollution.

The report covers all pollution control equipment exempt under Minnesota Statute 272.02, subdivision 10, as a part of an electric generation system, including some equipment located at substations. Also included are information and data pertaining to real and personal pollution abatement property covered by subdivision 41 of the same statute. The department determined that subdivision 41 is within the scope of this study because it specifically references subdivision 10. Taxpayers who satisfy the conditions of subdivision 41 (certain solid waste recovery mass burn facilities) also qualify as exempt pollution abatement property under subdivision 10.[1] The Great River Energy plant in Elk River is the only plant that qualifies under subdivision 41.

The report also includes additional information requested by Sen. Rod Skoe. More specifically, it examines the degree to which equipment must be directly related to pollution control for its purpose to be considered "primarily" pollution control as required by the exemption statute. It also includes a discussion on the amount of pollution control equipment in Minnesota that is eligible for both the pollution control exemption and a utility rate rider.

Finally, the report includes a review of both legislative history and court cases. Such a review provides important context for current pollution control administrative policy. It is important to note that this study is based on a review of the pollution control exemption process **as it currently exists**. Some stakeholders requested that the report include tax implications for tax types other than property tax and/or recommend changes to current tax policy. However, the Department of Revenue determined those additions would exceed the legislative mandate of this study.

[1] The full text of Minnesota Statute 272.02, subdivisions 10 and 41, is reprinted in the Appendix on page 35 for reference.

On Dec. 18, 2009, members of the Department of Revenue and the MPCA met with industry, host community and host county stakeholders regarding the pollution control exemption. These stakeholders also had an opportunity to review the report prior to its release. Their comments, questions and Revenue/MPCA responses are included at the end of this report.

Executive Summary

The legislative charge for this report was for the Department of Revenue and the Minnesota Pollution Control Agency to review and analyze the pollution control exemption as it currently exists in Minnesota. An additional request was made by Sen. Rod Skoe to include information as to how "primarily" used for pollution control is defined and how much pollution control equipment in Minnesota is eligible for both the exemption and a rate rider.

The report outlines the legislative and legal history of the exemption and also examines the roles of the Department of Revenue, MPCA and the Public Utilities Commission. An explanation of how public utilities are valued and how value is apportioned to the host communities is provided. Host communities are those cities or townships where electric generation facilities with exempt pollution control property are located. Finally, the study examines the effects of the pollution control exemption on host communities property tax base and property taxes with the pollution control exemption and without the pollution control exemption.

Highlights of the study

Roles of various agencies: Although the Department of Revenue has statutory responsibility, in practice the department primarily serves a conduit role in the process to determine what property is eligible for the pollution control exemption. The department relies heavily on the MPCA and its technical expertise to determine if equipment qualifies for the exemption. The Public Utilities Commission (PUC) is responsible for determining if a utility qualifies for a rate rider. It is possible for a utility to qualify for a rate rider on property that qualifies for the pollution control exemption.

MPCA'S review of pollution control exemption applications: The MPCA reviews applications for the pollution control equipment exemption and provides technical support to the Department of Revenue. This review and technical support centers on whether or not specific equipment mentioned in the application for exemption is used for pollution control. Typical control efficiency for pollution control equipment at power plants is over 90%. For some equipment, such as baghouses, control efficiency is over 99%.

Permits require that facilities do actual testing of the equipment shortly after the start of operation to determine if the assumptions used during the permitting process were correct and whether the facility is actually meeting the permit limits. Depending on the size and nature of the facility, it may have to do actual tests on a yearly basis or once every five years to determine if the controls are still working the way they should and whether permit limits are being met. Continuous emission monitors are used for larger facilities, such as power plants and refineries, because they have the potential to emit such large quantities of pollutants.

Cost recovery – utility base rates and rate riders: Granted through the Public Utilities Commission (PUC), utility rate riders allow changes in costs (or revenues) to be reflected in customer utility rates without going through the full, formal rate-change process. Under basic ratemaking laws and standards, utilities cannot increase their customer base rates until the PUC approves the change. Some of the riders that are widely used by electric utilities allow recovery of expenditures for renewable energy facilities, transmission lines, conservation programs and environmental improvements. Riders are generally shown as a separate line-item on customer utility bills.

There is no utility rate rider in Minnesota statutes that specifically applies to pollution control equipment. There are two rate riders through which utilities may collect some of their expenditures related to pollution control equipment. As of January 2010, Xcel Energy and Minnesota Power (Allete Inc.) are the only utilities that have collected or are collecting monies through these riders. Currently, there is no way to provide a precise breakdown of the costs being recovered through these riders that relate only to pollution control equipment.

Court cases: In situations where statute is unclear, past court cases may offer some guidance in making administrative interpretations of the law. However, decisions on the pollution control exemption are based on the permit(s) and equipment that are specific to the application being evaluated. In some previous decisions, the courts have ruled that the MPCA and Department of Revenue had too narrow a focus when interpreting what is exempt as pollution control property. Those decisions were based on the facts in those cases and did not modify the statutory definition used to evaluate applications for the exemption.

Valuation of public utility property: Under Minnesota administrative rules (Minnesota Rules 8100), there are two methods to determine value for utility property: *cost less depreciation* (CLD) and *unit valuation*. The Property Tax Division of the Department of Revenue is responsible to determine value for 14 electric-generation utilities. Currently nine of those companies receive the pollution control exemption – two are valued using CLD and seven are valued using unit valuation. The pollution control property is located in 18 host communities and 16 counties. (Note that data contained in this report is for assessment year 2008 payable 2009 when eight companies received the pollution control exemption.)

The CLD method takes the cost of all equipment located in Minnesota and allows depreciation at 2.5% per year. The resulting amount is then apportioned to all property in Minnesota based on original cost.

Under the unit valuation method, an estimate of the unit value for the entire utility company, including all of the utility's property (both real and personal) is established. Generally accepted appraisal principles – including the cost approach, income approach, and additional indicators of value – are used to value the property. If the utility company operates in multiple states, the value of the utility's property that is located in Minnesota is determined – the Minnesota allocated value. The value of the utility's property located in Minnesota that is exempt from property tax (such as certain pollution control property) or that is locally assessed is subtracted from the overall value of the utility's Minnesota property. The resulting *Minnesota apportionable value* is then distributed (apportioned) to the various taxing districts within the state.

For assessment year 2008 payable 2009, the total apportionable market value for the eight companies with pollution control exempt is $4.3 billion (apportioned to 4,782 unique properties). If pollution control equipment were taxable the apportionable market value total for the eight companies would have been $5.1 billion, a 17.3% increase. The increase in apportionable value compared to the cost of the pollution control equipment would average 50.7%. The largest increases in apportionable value would be 72.9% for WPPI Energy and 60.2% for Gas Recovery Systems and the lowest would be a 2.7% increase for Otter Tail Power Company. The cost of the exempt pollution control equipment totals $1.5 billion, or 34% of the total apportionable market value.

Valuation and tax impacts on host communities: While the exemption has statewide valuation and tax implications, the primary effects are realized in the communities where the exempt equipment is located. Statewide, approximately 98% of the value and tax implications associated with the pollution control exemption occur within and between the host communities.

Taxable Market Value:
If the pollution control equipment became taxable, statewide the taxable market value for utility property would increase by approximately $738.5 million or 8.3%. The increase in total taxable market value, however, would be less than 1% (0.13%). Of that increase, $725.6 million would be the total taxable market value increase in host communities representing a 23.5% increase in taxable market value of utility property and a 0.8% increase in total taxable market value.

The relative impact on taxable market value varies significantly among the individual host communities. The largest increase in utility taxable market value would be 61.1% in Elk River. However, this would only result in a 1.4% increase in total taxable market value. The host community of Cohasset would see a utility valuation increase of 58.4% and a 42.6% increase in total taxable value.

Tax Shift:
If local government levies were held constant, removing the pollution control exemption would result in a tax shift of $11.8 million or a 4.8% tax increase on utility properties statewide.

For utility property located in the host communities, the corresponding tax shift would be $11.6 million or a shift increase of 13.7%. The relative tax shift increase on utility property would vary significantly among the host communities. At the high end Cohasset would see an increase of 42.6% on utility property. At the low end, Montgomery Township, St. Paul, Minneapolis and St. Cloud would each see an increase of less than 1%.

Change in Tax Rates:
With the pollution control exemption, the average total local net tax capacity (NTC) rate among the host communities is 103.4. If the pollution control equipment became taxable and if local governments held their levies constant, the average NTC rate for all host communities would decline by 3.0% to 100.3. However, the impact among individual host communities would vary significantly. At the high end, the communities of Becker and Cohasset would see their NTC rates decline by 14.5% (92.3 to 78.9) and by 10.4% (85.1 to 76.3) respectively. At the low end, 12 host communities would see a decline of less than 1% in their total NTC tax rates.

The change in local tax rates also translates into a general tax impact on different types of property in each of the host communities. For example, in the community of Becker the relative tax shift increase on utility property was shown to be 29.2% and the average NTC rate was shown to decline by 14.5%. As a result, the average tax reduction for all other property (homestead, commercial, etc.) was approximately 14%.

Residential Homestead Property:
On average, residential homestead taxes would decline by $63 (3.2%) for all host communities. The average effective tax rate (ETR) would decline from 1.07% to 1.04%. The largest decrease in average homestead taxes would occur in Becker with an average reduction of $341 (15.9%). The ETR would decline from 1.02% to 0.86%.

Administrative Recommendations

Preparation of this report caused us to review our administrative oversight processes of the pollution control exemption, including the application approval process which crosses department boundaries between the Department of Revenue and the MPCA. Though we did not discover any errors, we did identify three areas where improvements could be made to eliminate potential problems. These recommendations, explained in more detail later in the report, are:

1. The original pollution control applications and orders should be matched against the current annual tax returns filed by utility companies to determine if any problems exist in reporting. To the extent that we have resources available, we will try to address this issue.

2. Currently, there is no process established to verify that pollution control equipment is still in use. The Department of Revenue could supply the MPCA with a list of currently exempted equipment based on annual reporting by the companies. However, current priorities and staffing at the MPCA do not allow for verifying that pollution control equipment is still in use.

3. Currently, the pollution control approval process usually takes more than one year to complete, as the MPCA's top priorities are construction permits and critical permit modifications. The Revenue Department may grant temporary exemptions during this process, but when applications for exemption are later denied, this can lead to valuation swings for the company over a two to three year period. To the extent that the MPCA had resources available, it will try to place a higher priority on pollution control exemption applications to address this issue.

Agency Roles in the Exemption Process

The Department of Revenue and Minnesota Pollution Control Agency each have a role in the process for approving or denying pollution control exemptions. Upon request, the Department of Revenue provides a utility company seeking an exemption with the necessary application.[2] The utility submits its completed application to the department, which then forwards the application to the MPCA.

Engineers at the MPCA examine the application and decide whether it should be approved or denied and – if it is approved – determine the percentage of equipment that is eligible for the exemption. The MPCA then informs the Department of Revenue of its decision. The pollution control approval process usually takes more than one year to complete, as the MPCA's first priorities are construction permits and critical permit modifications.

A utility company may report and receive the pollution control exemption before its application is formally approved by the MPCA. When an exemption is granted, it takes effect on the annual property assessment date of January 2. Utilities have until February 15 to apply for the exemption, after which any application received may only be evaluated for the next assessment year. If the MPCA denies an application, or assigns a higher or lower percentage than the company is requesting, an adjustment would be made to the company's property valuation for either the current year or the following year.

If an exemption is granted, the equipment, device, or real property continues to be exempt from property tax as long as the order issued by the commissioner of revenue remains in effect. Once the MPCA approves or denies an application, there is usually no further communication with the Department of Revenue. Currently, there is no process established for the department to verify with the MPCA that the equipment is still in use. The exempt pollution control equipment and its value are reported annually by the utility claiming the exemption.

The Department of Revenue relies on the recommendation of the MPCA to determine eligibility for the exemption, since the department does not have staff knowledgeable in this area. The department is responsible for communicating the decision to the utility company applying for the exemption, and to the county where the company's facility is located. The company and the county each have 60 days from the date of an order to appeal the decision to the Minnesota Tax Court.

[2] A sample pollution control equipment application can be found in the Appendix on page 37.

MPCA's Review of Pollution Control Exemption Applications

The Minnesota Pollution Control Agency reviews applications for the pollution control equipment exemption and provides technical support to the Department of Revenue. This review and technical support centers on whether or not specific equipment mentioned in the application for exemption is used for pollution control.

MPCA Review Process

The following is a brief description of the process and considerations the MPCA uses during its review. The MPCA has used the review of air pollution control equipment as its example, as this is the most frequent request received with regard to power plants.

1. The MPCA's Operational Support Division – Fiscal Section receives the application from the Department of Revenue.
2. The Fiscal Section forwards the application to the Industrial Division – Air Quality (AQ) Permit Section.
3. The application is assigned to an AQ permit engineer in the AQ Permit Section for review.
4. The AQ engineer pulls up an electronic copy of the permit for the facility under consideration.
5. The AQ engineer compares the pollution control equipment included in the request to that listed in the most current permit. All AQ permits clearly identify all pollution control equipment that a facility is required to use to meet its limits. Additionally, the AQ permit typically identifies control efficiencies and requirements for control equipment if process equipment is being operated. For an example, see page 65 in the Appendix.
6. If the AQ engineer finds that the permit requires operation of the pollution control equipment requested to be tax exempt; then the MPCA process is complete. For the MPCA, equipment must be listed in the permit as used to control air emissions to meet the MPCA's definition of what qualifies to be tax exempt. See page 65 in the Appendix.
7. The final step for the MPCA would be to determine if any ancillary equipment (pumps, blowers, tanks, electrical or mechanical equipment) is part of the request. For example, a wet scrubber to control air emissions may require pumps to send water to it for it to operate and that water may need to be returned to a storage tank once it is used to clean an air stream. The wet scrubber could not function if the pump and the tank did not exist. Thus, the MPCA would consider the pump and tank pollution control equipment. The question posed is "are all the parts of the system described needed to create a viable pollution control system?"
8. Once the review is complete, the AQ permit engineer writes a memorandum to the Department of Revenue indicating the MPCA's determination.

If the MPCA finds items that do not qualify for the exemption, the reasons why (in the agency's opinion) the equipment does not qualify are detailed in a memorandum. The MPCA does not review the cost of equipment, only its function. Typical control efficiency for pollution control equipment at power plants is over 90%. For some equipment, such as baghouses, control efficiency is over 99%.

Background

The MPCA considers a range of factors when evaluating applications for the pollution control equipment exemption. Some of the more common or notable considerations are discussed below.

1. **How does the MPCA determine primarily? How are distinctions made between the pollution control aspects of a piece of equipment versus other functions such as safety? In other words, how much of the equipment needs to be pollution control-related for it to be considered 'primarily' pollution control".**
   The MPCA finds a piece of equipment as "pollution control equipment" only if it is used to meet a specific limit in the company's AQ permit. If the equipment is required on a continual basis (anytime the facility operates) to meet a specific limit that is related to a federal or state rule, or an U.S. Environmental Protection or MPCA requirement, it is considered to be pollution control equipment and recommended to receive the property tax exemption. In some cases there may be a side benefit in that the company might also operate it for safety, but the overriding reason for the equipment must be pollution control to receive an MPCA exemption.

2. **Does the MPCA ever revoke a permit for pollution control?**
   It is possible that MPCA could revoke a permit, but unlikely if the facility is operating and the company is in compliance. The more likely scenario is that a company would request to have a piece of pollution control equipment removed from the AQ permit. Typically, a company would only ask for equipment to be removed in situations where the emission unit it was controlling was also removed, or where a rule or regulation was changed and the emission unit is now meeting that standard without the use of the control equipment.

3. **What is the pollution control permit for and what determines who needs to file for a pollution control permit? Is it a permit to build a plant that will emit pollution in the air and they need to show that the pollution is less than established limits?**
   An MPCA permit is required to ensure federal and state air emission standards are met by emission sources at a facility. Air emission standards have been developed at the federal and state level through legislation and rulemaking to protect public health and the environment. See Table 1 on next page. If a facility has a potential to emit pollutants above any of the levels listed in the table below they are required to get an AQ Permit. Air pollution control equipment may not be used to avoid a permit. Air pollution control equipment may be used to allow you to get a less burdensome type of permit, or meet state or federal standards. Permit limits define the emission numbers that must be met by the use of control equipment. Lower emissions means fewer federal and state requirements needed at a facility.

Table 1: Regulated Air Pollutants

Pollutant	Total Facility PTE Thresholds (tons per year)	
	Federal	**State**
Nitrous Oxides ($NO_{x)}$	100	100
Sulfur Dioxide (SO2)	100	50
Volatile Organic Chemicals (VOCs)	100	100
Particulate Matter	100	100
Particulate Matter less than 10 microns (PM_{10})	100	25
Particulate Matter less than 2.5 microns ($PM_{2.5}$)	100	100
Carbon Monoxide (CO)	100	100
Lead (Pb)	NA	0.5
1 Hazardous Air Pollutants (HAPs)	10	10
Greater than 1 HAP (> 1 HAP)	25	25

4. **How does the MPCA determine efficacy of the pollution control equipment? Is the efficacy of the equipment determined only at the time of installation or is it also reviewed as the equipment ages?**
   The efficacy of the equipment is theoretically determined based on manufacturer information and other similar operating facilities when the permit is first issued. Permits require that facilities do actual testing of the equipment shortly after the start of operation to determine if the assumptions used during the permitting process were correct and that the facility is actually meeting their permit limits. Depending on the size and nature of the facility, it may have to do actual tests on a yearly basis or once every five years to determine if the controls are still working the way they should and permit limits are being met. For larger facilities, such as power plants and refineries, continuous emission monitors are used because they have the potential to emit such large quantities of pollutants. Therefore it is critical to know instantaneously if they are violating a permit limit.

5. **Are there specific rules or statutes that govern pollution control?**
   MN Rules, parts 7011.0060 to 7011.0080 specifically discuss the operation of pollution control equipment. Furthermore, the Air Quality permit (see page 65 in the Appendix) contains the actual rule being addressed in the Air Quality permit.

Cost Recovery: Utility Base Rates and Rate Riders

As part of this study, the Department of Revenue and the MPCA were asked by Sen. Rod Skoe to include information about utility property that may be eligible for the pollution control exemption and also eligible for cost recovery through statutory rate riders or other means.

Granted through the Public Utilities Commission (PUC), utility rate riders allow changes in costs (or revenues) to be reflected in customer utility rates without going through the full, formal rate-change process. Under basic ratemaking laws and standards, utilities cannot increase their customer base rates until the PUC approves the change. Approval is usually part of a *general rate case,* in which the PUC examines all investments, costs and revenues. The longest-standing exception to that standard has been fuel adjustment clauses, known as *FCAs* for electric utilities and *PGAs* for natural gas utilities. Using FCAs, electric utilities can adjust customers' monthly bills to reflect increases or decreases in the cost of fuel used for generation and power purchased from others sources.

There are 19 other types of utility rate riders allowed or required by Minnesota statute – though they cannot all be used by every utility, and some of them are not being used at this time. Some of the riders that are widely used by electric utilities allow recovery of expenditures for renewable energy facilities, transmission lines, conservation programs and environmental improvements. Riders are generally shown as a separate line-item on customer utility bills.

Rate riders may allow utilities to begin recovering eligible costs from customers sooner than they could without a rider; they also may allow utilities to avoid filing full rate cases as frequently as they would otherwise. Whether eligible costs are recovered through a rate rider or reflected in a utility's base rates they must be:

- reasonable and prudently incurred, and
- related to activities and investments used and useful for providing utility service to its customers.

Rate riders and base rates allow utilities to recover the same types of costs. The costs of completed projects being recovered through rate riders generally become part of a later rate case, after which any remaining costs are recovered through base rates.

Federal and state taxes – both income and property taxes –paid by utilities are considered when setting utility rates. Certain utility-owned property, such as attached machinery or pollution control equipment, may be either partly or wholly exempt from tax. In these cases, costs related to that property reflected in utility rates are lower than they would be without the tax exemption. This is true whether the utility begins recovery of the costs through a rate rider or directly through base rates established in a rate case.

There is no utility rate rider in Minnesota statutes that specifically applies to pollution control equipment. There are two rate riders through which utilities may collect some of their expenditures related to pollution control equipment:

- the Emissions Reduction Rider under Minn. Stat. §216B.1692, enacted in 2001, and
- the Mercury Emissions Reduction Rider under Minn. Stat. §216B.683, enacted in 2006.

As of January 2010, Xcel Energy and Minnesota Power (Allete Inc.) are the only utilities that have collected or are collecting monies through riders under these statutes. Currently, there is no way to provide a precise breakdown of the costs being recovered through these riders that relate only to pollution control equipment.[3]

Minnesota Laws 2009, Chapter 110, Section 33, requires the PUC to submit a utility rates study to the Legislature by June 30, 2010. This study will (among other things) "assess the impact of automatic cost-recovery mechanisms [rate riders] on prices charged to utility consumers compared to traditional cost-recovery mechanisms [and] alternative forms of utility rate regulation that may be used in place of automatic cost-recovery mechanisms." The study is not anticipated to address tax-related issues, but it may provide information of interest on the use of riders in utility ratemaking.

[3] For more background and information on these statutes and riders, please consult the Public Utility Commission's "Report to the Legislature on Emission Reduction Projects Under Minnesota Statutes 216B.1692" (March 2008). This report is available online at *http://www.puc.state.mn.us/portal/groups/public/documents/pdf_files/000661.pdf*.

Legislative and Court Case History

Following is a review of both legislative history and court cases. Such a review provides important context for current pollution control administrative policy.

Legislative History

The Minnesota Pollution Control Agency was established in 1967. An exemption for pollution control equipment was enacted that same year. Amended several times, the exemption has resided in various paragraphs and subdivisions of Minnesota Statute, section 272.02. Eligibility criteria for the exemption have become more specific over time, as detailed below.

The pollution control exemption was codified in 1967, effective for assessment year 1968. The exemption was granted by order of the commissioner of taxation (later changed to revenue), who had the ability to request the advice of a pollution control agency. Under the original statute, property was eligible for the exemption so long as it was used solely for abatement of air or water pollution. (*Minn. Stat. § 272.02, subd. 1[15](1967)*)

In 1969, the statute was amended to apply to property used *primarily* for abatement and control of air or water pollution. The exemption could apply to either all or a portion of any qualifying equipment or device. These amendments also specified that the equipment must meet the standards, regulations or criteria of the MPCA, and be installed in accordance with a permit or order issued by the agency. Property was exempt so long as the MPCA permit remained in effect. (*1969 Minn. Laws, Ch. 1064, sec. 1*)

The statute was amended in 1980 to exclude real property used primarily for solid waste disposal. (*1980 Minn. Laws, c. 564, art 13, sec. 1*, and *1980 Minn. Laws, c. 602, art 2*)

Eligibility for the exemption was narrowed further in 1989. The exemption was amended to apply to personal property (i.e. not real property) generally and to real property only if used primarily for abatement and control of air, water or land pollution as part of an agricultural operation or an electric generation system. Personal property was defined to include "ponderous machinery," or immovable heavy equipment that would otherwise be considered real property under common law. (*1989 Minn. Laws, 1 Sp. c. 1, art. 3, sec. 2*)

Wastewater treatment facilities were made eligible for the exemption in 1991. (*1991 Minn. Laws, c. 291, art. 1, sec. 10*)

In 2001, the Legislature specified that the information furnished by the MPCA must include statements about how exempted equipment meets agency standards and whether the equipment is installed and operated in accordance with those standards. Another amendment stipulated that the property remains exempt so long as the order issued by the revenue commissioner (rather than the MPCA) remains in effect. (*2001 Minn. Laws, 1 Sp. c. 5, art. 7, sec. 13*)

In addition, there have been a number of technical changes over the years that are not discussed in this report.

Past Court Cases

Courts have generally decided pollution control exemption issues on a case-by-case basis. The basic questions raised in court cases are usually:

- whether the classification itself is an arbitrary or unreasonable classification for tax purposes;
- whether or not the property is being used for its exempt purpose;
- whether the commissioner has acted arbitrarily; or
- whether the taxpayer has followed the procedural steps required to qualify for the exemption.

There are relatively few court cases that concern the pollution control exemption. Five cases have been decided (detailed below). The exemption was denied in only one case, which was decided on procedural grounds, as opposed to the purpose of the equipment or other factors.

The general direction of these decisions is that the pollution control exemption should be allowed if the property abates pollution and if the taxpayer has completed the necessary procedural steps. But the most important consideration is whether the property is being used directly or indirectly for its exempt purpose (i.e. to abate pollution). The question to be answered is: "Are all the parts of the system described needed to create a viable pollution control system?"

Court decisions involving the pollution control exemption include:

Northern States Power Co. v. Commissioner of Revenue, 1978 WL 1030
(Minn. Tax, September 26, 1978)
The Tax Court held that a "modified off-gas system" operating under a permit issued by the Nuclear Regulatory Commission qualified for the exemption. The petitioner had argued that the statute required that the equipment be operated under a permit issued by the Minnesota Pollution Control Agency and not the federal agency. The court considered that the intent of the statute was to control pollution and protect health and the equipment qualified whether it was operated under a permit issued by the MPCA or the Nuclear Regulatory Commission which had recently pre-empted the area of regulating nuclear plants. The court found that failure to grant the exemption resulted in an arbitrary and unreasonable classification for tax purposes, contrary to the Equal Protection Clause of the Fourteenth Amendment. This case was settled prior to appeal to the Minnesota Supreme Court.

United Power Association v. Commissioner of Revenue, 483 NW 2nd, 74
(Minn. 1992)
Affirmed the Tax Court decision that the exemption applied to storage buildings and conveyer system which were integral parts of a plant burning refuse derived fuel (RDF) even if the storage facility and conveyor in isolation would not abate pollution. The court also found that the property also qualified as a boiler modification necessary to efficient burning and handling of refuse derived fuel under a separate exemption.

Northern States Power v. Commissioner of Revenue, 1983 WL 1970
(Minn. Tax, Nov. 21 1993)
Held that noise pollution is pollution for purposes of the pollution control exemption.

Northern States Power Co. v. Commissioner of Revenue v. County of Goodhue v. City of Red Wing, 1996 WL 611134
(Minn. Tax Oct 17, 1996) (No. 6662, 6663)
The Tax Court ruled that a safeguards electrical system operated in accordance with a permit issued by the federal Nuclear Regulatory Commission qualified for the pollution control exemption even though it did not have a permit issued by the Minnesota Pollution Control Agency and the separate exemption in Minn. Stat. §272.02,subd. 7 (1990) for "garbage burners" did not narrow the scope of the exemption.

American Crystal Sugar v. County of Polk, 2007 WL 987265
(Minn. Tax Regular Div.)
The taxpayer argued that its equalization pond, anaerobic basin and clarifier should qualify for the pollution control exemption. Court held on purely procedural grounds that since the taxpayer had not filed an application with the commissioner of revenue or a statement of exemption with the county, it could not raise the issue in a summary judgment motion.

Administrative Areas for Improvement

As noted in the Executive Summary, preparation of this report caused us to review our administrative oversight processes of the pollution control exemption, including the application approval process which crosses department boundaries between the Department of Revenue and the MPCA. Although we did not discover any errors, we did identify three areas where improvements could be made to eliminate potential problems:

1) The Department of Revenue recommends that the original pollution control applications and orders should be matched against the current annual tax returns filed by utility companies. This administrative check would match equipment that originally received the exemption to exempted equipment that is currently being claimed by the utility. We do not know if any problems exist in reporting. To the extent that we have resources available, we will try to address this issue.

2) Currently, there is no process established to verify that pollution control equipment is still in use. We rely on the companies to accurately report what equipment is exempt and still in use. The MPCA does not have a list of exempt pollution control equipment. The Revenue Department could supply such a list based on annually reporting by the companies (see current detailed listing in Appendix on page 48). However, this is a low priority issue for the MPCA and is outside the current scope of its programs. The MPCA's emphasis is on issuing timely permits; current staffing and priorities do not allow for verifying that pollution control equipment is still in use.

3) Currently, the pollution control approval process usually takes more than one year to complete, as the MPCA's top priorities are construction permits and critical permit modifications. The deadline for submitting an application for exemption to the commissioner of revenue is February 15 in order to receive the exemption for the current assessment year. If the Revenue Department does not receive a recommendation back from the MPCA within four to five months, it temporarily allows the exemption to the company. If the exemption is later denied, the company's value would be adjusted in the next valuation cycle to account for the exemption they had been temporarily allowed. If an exemption was temporarily allowed and subsequently denied, it results in swings in valuation over a two to three year period. To the extent that the MPCA has resources available, it will try to place a higher priority on pollution control exemption applications to address this issue.

Valuation of Public Utility Property

Overview

Under Minnesota administrative rules (Minnesota Rules 8100), there are two methods to determine value for utility property: *cost less depreciation* (CLD) and *unit valuation*. The Property Tax Division of the Department of Revenue is responsible to determine value for 14 electric-generation utilities. Three of these utilities are valued using the cost less depreciation method; 11 are valued using the unit value method. Most cooperatives and municipal power agencies use the CLD method.

Under the cost less depreciation method, the commissioner of revenue establishes the CLD value for a utility company (or cooperative association) based on a formula prescribed in Minnesota Rule 8100.0300, subpart 6. This method takes the cost of all equipment located in Minnesota and allows depreciation at 2.5% per year. The resulting amount is then apportioned to all property in Minnesota based on original cost.

Two utilities valued under the CLD method currently receive a pollution control exemption:

- Southern Minnesota Municipal Power
- WPPI Energy (Wisconsin Public Power, Inc.)

Under the unit valuation method, the commissioner of revenue establishes an estimate of the unit value for the entire utility company, including all of the utility's property (both real and personal). Generally accepted appraisal principles – including the cost approach, income approach, and additional indicators of value – are used to value the property.

If the utility company operates in multiple states, an additional step is needed to determine the value of the utility's property that is located in Minnesota – the Minnesota allocated value. The value of the utility's property located in Minnesota that is exempt from property tax or that is locally assessed is subtracted from the overall value of the utility's Minnesota property. The resulting *Minnesota apportionable value* is then distributed (apportioned) to the various taxing districts within the state.[4]

Seven unit value companies currently receive a pollution control exemption:

- Allete Inc. (through its subsidiary, Minnesota Power)
- Alliant Energy Corp. (through its subsidiary, Interstate Power and Light Co.)
- Gas Recovery Systems LLC
- Great River Energy
- Waste Management Renewables (effective for the 2009 assessment year – prior to the 2008 assessment year MN Methane received an exemption on the same parcel)
- Otter Tail Power Company
- Xcel Energy

The data used in the valuation, allocation, and apportionment processes are drawn from reports that the utility companies submit to the department, which makes periodic examinations of the supporting data.

[4] The valuation of utility property is explained in more detail in the Appendix on page 38.

The cost of pollution control equipment is reported by the utilities to the Department of Revenue on the required annual report submitted by the utility.

Effect of Pollution Control Exemption on Value and Relationship to Cost

The following analysis focuses on the effect of the pollution control equipment exemption on value and how that compares to the cost of the pollution control equipment. This comparison is made at a company level.

This analysis is based on data for assessment year 2008 and taxable year 2009. This data was used because it is the most current value and levy data available. The pollution control exemption affects electric generation equipment owned by eight companies.

Table 2 shows the valuations for each of the utility companies receiving the pollution control exemption. Unit value, Minnesota allocated value and the apportionable value are shown with pollution control equipment exempt and with pollution control taxable. The companies are listed in alphabetical order. Note that two companies, Southern MN Municipal Power and WPPI Energy do not show a unit value or a MN allocated value since their values are determined using the cost less depreciation (CLD) method. Unlike the unit value method, the CLD method of valuation determines the value based entirely on cost and includes only the cost of property located in MN.

Column A on Table 2 gives the unit value for the entire company, both within and outside of Minnesota. Column B shows the Minnesota allocated value, which is the amount of the unit value in column A that is determined to be located in Minnesota. Column C contains the apportionable market value for each company under current law. The apportionable value is the Minnesota allocated value minus any exempt (such as pollution control equipment, vehicles, etc.) or locally assessed property (such as land) in Minnesota.

Columns E and F reflect what would happen if pollution control equipment were taxable. Note that the unit value and the MN allocated value do not change if exempt property becomes taxable, since the value of the exempt property is included in both the unit value and the MN allocated value. The apportionable value is where any changes from exempt to taxable or vice versa would be reflected, since the apportionable value includes adjustments for Minnesota exemptions and locally assessed property. Column G shows the percent change in apportionable market value if pollution control equipment became taxable.

For assessment year 2008 taxes payable 2009, the total apportionable market value for the eight companies with pollution control exempt is $4.3 billion. If pollution control equipment was taxable, the apportionable market value total for the eight companies would have been $5.1 billion, a 17.3% increase. The largest increases in apportionable value would be 72.9% for WPPI Energy and 60.2% for Gas Recovery Systems and the lowest would be a 2.7% increase for Otter Tail Power Company.

Table 3 shows the apportionable market value of each of the eight companies with pollution control equipment exempt and with it taxable, as shown on the preceding table. However, this table also shows the cost of the exempt pollution control equipment by company. Column A shows the apportionable market value with pollution control exempt totaling $4.3 billion for the eight companies. The cost of the exempt pollution control equipment for the eight companies totals $1.5 billion, or 34% of the total

apportionable market value. If pollution control equipment were taxable, the total apportionable market value would be $5.1 billion, an increase of $749 million or 17.3%.

It is important to note that if pollution control equipment became taxable, the increase in market value is not equal to the cost of the equipment. Overall, the average market value increase for the companies would equal 50.7% of the cost of the equipment. Column G shows that if pollution control equipment became taxable, for all companies, except Gas Recovery Systems, LLC, the increase in market value is less than the cost of the equipment. The range of difference, of 47.2 to 145.6, in the market value as a percent of cost if pollution control becomes taxable is due to multiple factors within the unit valuation system, including the relationship between the total unit value and the cost indicator of value. The spike in market value difference as a percentage of cost of 145.6 for Gas Recovery Systems, LLC is caused by the ratio of system unit value and the cost indicator of value used to determine the total excludables allowed. Because Gas Recovery Systems has a system unit value of 4,387,945 and a system cost indicator of 1,944,000 the excludables allowed ratio is at 225.7173%. The ratio allows Gas Recovery Systems, LLC to exclude the cost of the pollution control equipment at a rate that is higher than the actual cost.

Table 2 – Valuation Determination by Company

2008 Assessment for Taxes Payable in 2009

			Pollution Control Exempt		Pollution Control Taxable		
Company	Unit Value	MN Allocated Value	Apportionable Market Value (AMV)	AMV as % of MN Allocated Value	Apportionable Market Value (AMV)	AMV as a % of MN Allocated Value	Percent Change in AMV
	A	B	C	D	E	F	G
Alliant Energy Corp	2,104,043,309	101,485,332	74,644,526	73.6	78,045,928	76.9	4.6
Allete Inc - MN Power	969,036,097	958,080,798	504,298,846	52.6	625,598,177	65.3	24.1
Gas Recovery Systems, LLC	3,776,959	3,776,959	2,326,943	61.6	3,727,223	98.7	60.2
Great River Energy	1,568,254,977	909,586,738	416,030,571	45.7	447,511,703	49.2	7.6
Xcel Energy	4,950,954,302	4,621,295,044	2,973,033,582	64.3	3,456,480,386	74.8	16.3
Otter Tail Power Company	550,544,543	189,378,015	123,353,301	65.1	126,680,249	66.9	2.7
Southern MN Municipal Power*			211,897,457		292,377,173		38.0
WPPI Energy*			32,674,127		56,506,450		72.9
Total			4,338,259,353		5,086,927,289		17.3

*These companies are valued using cost less depreciation, which only uses MN data.

Table 3 – Apportionable Value and Relationship to Cost by Company

2008 Assessment for Taxes Payable in 2009

Company	Apportionable Market Value PC Exempt	PC Equipment Cost	Cost as % of Market Value (B/A)	Apportionable Market Value PC Taxable	Market Value $ Difference (D-A)	Market Value % Difference (E/A)	Market Value Difference as a Percent of Cost (E/B)
	A	B	C	D	E	F	G
Alliant Energy Corp.	74,644,526	5,645,194	7.6	78,045,928	3,401,402	4.6	60.3
Gas Recovery Systems, LLC	2,326,943	961,800	41.3	3,727,223	1,400,280	60.2	145.6
Great River Energy	416,030,571	57,683,868	13.9	447,511,703	31,481,132	7.6	54.6
Allete Inc - MN Power	504,298,846	223,972,950	44.4	625,598,177	121,299,331	24.1	54.2
Otter Tail Power Company	123,353,301	6,274,140	5.1	126,680,249	3,326,948	2.7	53.0
Southern MN Municipal Power	211,897,457	126,849,445	59.9	292,377,173	80,479,716	38.0	63.4
WPPI Energy	32,674,127	31,816,423	97.4	56,506,450	23,832,323	72.9	74.9
Xcel Energy	2,973,033,582	1,023,179,521	34.4	3,456,480,386	483,446,804	16.3	47.2
Total	**4,338,259,353**	**1,476,383,341**	**34.0**	**5,086,927,289**	**748,667,936**	**17.3**	**50.7**

Apportionment of Value to Parcel Level

After the unit valuation of the utility company has been allocated to the state of Minnesota and has been adjusted for non-formula-assessed property, it is apportioned or distributed to taxing districts in Minnesota in which the company operates. This apportionment is made by the commissioner of revenue according to Minnesota Rule 8100.0600 and is based on current cost data submitted by the utility companies in the annual reports filed with the commissioner.

In the state of Minnesota, eight companies had an exemption for pollution control in assessment year 2008. Each of the 87 counties in Minnesota has one or more parcels that are owned by one of the eight companies. The combined Minnesota apportionable market value for these companies is $4,338,259,353. This value is apportioned to 4,782 unique properties.

Pollution control exemptions for a company affect that company's values in each taxing district in which it operates, not just where the pollution control equipment is located. Because utility companies are valued as a unit, when property is added or removed most parcels feel some impact, either in an upward or downward shift.

Whether an individual property's market value is less or greater because of an exemption is based on the apportionment factor, which is multiplied by the original cost of each parcel of property a company owns. The apportionment factor is equal to the company's total apportionable value divided by total original cost. The apportionment factor can go up or down when property is exempted or becomes taxable, depending on the relationship between apportionable value and original cost on the property changing tax status compared to the relationship between the same data (apportionable value and original cost) at a company level. If the factor goes up due to an addition, then all values for the company will increase. However, if the factor goes down due to an addition, then the only parcel(s) that

will see an increase in value are those where the additional property is located. All others will see a decrease in market value. Refer to the example in Table 4 for further clarification.

The final step in the process is the equalization of the value of utility structures. If the county-wide sales ratio of commercial/industrial (C/I) property is 90% or greater, then no equalization adjustment is made.[5] If the C/I sales ratio is less than 90%, then the market value of utility structures are adjusted at a parcel level to coincide with the assessment levels of commercial and industrial property within the county. The sales ratio is computed by the Department of Revenue through an analysis of the certificates of real estate value filed by the buyers or sellers of property within each county. All utilities operating within a particular county are equalized at the same percentage. No adjustment for equalization is made to machinery or personal property.

Apportionment Example

Table 4 illustrates how newly taxable property affects all of the company's parcels that are state assessed either positively or negatively. The determining factor is whether the apportionment factor including the newly taxable property is higher or lower than the current apportionment factor.

Company A is a company with property in 66 counties and Company B has property in 63 counties. Each company has exemptions for pollution control property. The current apportionment factor for each company is shown on line 3 of Table 4. Company A has an apportionment factor of 0.59659 and Company B has an apportionment factor of 0.43784. Under current law with pollution control equipment exempt, line 8 reflects the value of a parcel with no structure value and no pollution control equipment, that has a hypothetical original cost of $10,000,000 and belongs to Company A as $5,965,900. If that same parcel belonged to Company B, the value would be $4,378,400. The difference in value is due to the apportionment factor (value/cost) calculated for each company as reflected on line 3.

If pollution control equipment were taxable, it would affect these two companies differently. Table 4, lines 7-10 show what would happen to the value of a parcel that does not have any structures or pollution control equipment located on it. If each company has a similar property with a hypothetical cost of $10,000,000 (line 7) and if pollution control equipment were taxable, the value on that parcel would be 6.4% lower compared to the current value if it belonged to Company A (line 9 compared to line 8; $5,582,600 compared to $5,965,900). If the property belonged to Company B and if pollution control equipment were taxable, the value on that parcel would be 1.0% higher compared to the current value (line 9 compared to line 8; $4,423,800 compared to $4,378,400).

[5] Note: If the county where the property is located has six or more sales of commercial/industrial (C/I) property, then the C/I sales ratio for that county is used. If the county has fewer than six sales, the overall sales ratio for all property types within that county is used.

Table 4 – Apportionment Factor Example

	Company A	Company B
Pollution Control Exempt		
1. Total Apportionable Value	416,030,571	2,973,033,582
2. Total Original Cost	697,348,090	6,790,177,912
3. Apportionment Factor (1/2)	0.59659	0.43784
Pollution Control Taxable		
4. Total Apportionable Value	447,511,703	3,456,480,386
5. Total Original Cost	801,621,098	7,813,357,430
6. Apportionment Factor (4/5)	0.55826	0.44238
Parcel without Pollution Control		
7. Hypothetical Original Cost	10,000,000	10,000,000
8. Value – PC Exempt (7*3)	5,965,900	4,378,400
9. Value – PC Taxable (7*6)	5,582,600	4,423,800
10. Percent Change (9/8)	-6.4%	1.0%

The apportionable market value for each company shown in Table 3 (column A) and totaling $4,338,259,353 is apportioned to the parcel level based on cost. Structure values are then equalized as previously discussed. From that point we can look at values at a local level. Table 5 shows utility market values by host community after each company's value has been apportioned to the parcel level and structure values equalized. Note that this table reflects utility market values for all utility property located in the host communities of $3,093,133,000. It includes the portion of the value located in the community for the company(ies) that receives the pollution control exemption. It also includes the value of any other utility companies that have utility value located in the community. The table reflects what the community's total utility market value is with the pollution control exemption and what the utility value would be if pollution control equipment were taxable. The table is arranged in order by the percent change that would occur in the community's total utility market value if pollution control equipment were taxable. Overall, the average increase in utility market value in the host communities would be 23.5%. Elk River would see the largest percentage increase in utility value at 61.1% and Montgomery would see virtually no impact.

Table 5 – Effect of Pollution Control Exemption on Utility Property Market Value

Host Communities – 2008 Assessment for Tax Payable in 2009

Host Community (County)	Market Value of Utility Property* Pollution Control Exempt	Market Value of Utility Property* Pollution Control Taxable	Utility Market Value $ Difference (B-A)	Utility Market Value % Difference (B/A)
	A	B	C	D
ELK RIVER (Sherburne)	51,026,000	82,192,000	31,166,000	61.1
COHASSET (Itasca)	220,353,000	348,968,000	128,615,000	58.4
OAK PARK HEIGHTS (Washington)	182,883,000	285,617,000	102,734,000	56.2
BECKER (Sherburne)	549,084,000	812,708,000	263,624,000	48.0
HOYT LAKES (St. Louis)	25,692,000	37,051,000	11,359,000	44.2
RED WING (Goodhue)	423,434,000	549,332,000	125,898,000	29.7
MANYASKA TOWNSHIP (Martin)	20,511,000	23,318,000	2,807,000	13.7
FERGUS FALLS (Otter Tail)	38,798,000	43,280,000	4,482,000	11.6
MANKATO (Blue Earth)	53,916,000	59,714,000	5,798,000	10.8
BURNSVILLE (Dakota)	142,392,000	156,616,000	14,224,000	10.0
MONTICELLO (Wright)	251,576,000	274,892,000	23,316,000	9.3
GRANITE FALLS (Chippewa)	14,138,000	14,967,000	829,000	5.9
INVER GROVE HEIGHTS (Dakota)	85,967,000	89,519,000	3,552,000	4.1
LENT TOWNSHIP (Chisago)	22,278,000	22,662,000	384,000	1.7
SHAKOPEE (Scott)	30,110,000	30,571,000	461,000	1.5
MINNEAPOLIS (Hennepin)	529,271,000	533,808,000	4,537,000	0.9
ST. CLOUD (Benton)	42,661,000	43,021,000	360,000	0.8
ST. PAUL (Ramsey)	408,277,000	409,756,000	1,479,000	0.4
MONTGOMERY (LeSueur)	766,000	766,000	0	0.0
Total	$3,093,133,000	$3,818,758,000	725,625,000	23.5

* Includes real public utility property plus all personal property since utility property makes up the majority of taxable personal property.

NOTE: The market value of utility property shown in column A includes that portion of the market value of the eight companies with pollution control exemption that is located within the community, as well as the utility value of any other utility company located within their community.

Tax Implications of the Pollution Control Exemption

Background

The following analysis will focus on the tax implications of the pollution control exemption for "host" communities. Host communities are those cities and townships where the electric generation facilities with exempt pollution control equipment are located.

It should also be pointed out that this analysis was limited to assessing only the tax implications of the pollution control exemption. The report did not evaluate the costs/benefits nor the broader economic and environmental implications associated with pollution control equipment. This level of analysis was beyond the legislative scope mandated for the report.

The data used for this analysis shows the effect of all pollution control equipment that is part of an electric generation system becoming taxable and the corresponding impact on the host communities. As was discussed in the previous section, unit value is the basis for determining market value for most utility property. Utility property becoming taxable in one district where a utility company is located affects the market value of all the property owned by that company throughout the state and due to the apportionment factor the relative value and tax effects can be either positive or negative.

While the exemption has statewide implications, the primary effects are realized in the communities where the exempt equipment is located. Statewide, approximately 98 percent of the value and tax implications associated with the pollution control exemption occur within and between the host communities. As a result, the primary focus of this analysis will be on the host communities. Specifically, the analysis will show the total impact of the exemption on taxable value and the total combined property tax (city/town, county, school, special districts, and state general tax) and total local combined tax rates.

The tax impact analysis was done using the Department's property tax model and it was based on data for assessment year 2008 and taxable year 2009. This data was used because it was the most current value and levy data available. It should also be noted for purposes of this analysis total public utility property was calculated by summing utility-owned real property and all personal property. All personal property was used because utilities own the majority of personal property subject to property tax in Minnesota.

Value and Tax Impacts on Host Communities

The pollution control exemption affects electric generation equipment located in 19 host city/township communities located in 17 counties. Table 6 summarizes the valuation and tax impacts of the pollution control exemption for the state as a whole and for the host communities. The table arranges the host communities based on each taxing area's relative share of total taxes from utility property. Under current law, with pollution control equipment exempt, close to half of the taxing areas have more than 10% of total taxes generated by utility property. The taxing area of the city of Becker has the greatest share (70.36%) of total taxes coming from utility property and the city of Shakopee has the lowest share (1.46%).

Taxable Market Value: If the pollution control equipment became taxable, statewide the taxable market value for utility property would increase by approximately $738.5 million or 8.3%. The increase

in total taxable market value, however, would be less than 1 percent (0.13%). Table 6 also shows that 98 percent ($725.6 million) of that increase would be located in host city/township communities resulting in a 23.5% increase in taxable market value of utility property located in these jurisdictions. The increase in total taxable market value in these jurisdictions would be 0.8 percent.

The relative impact on taxable market value, however, varies significantly among the individual host communities. The largest increase in utility taxable market value would be 61.1% in Elk River. However, this would only result in a 1.4% increase in total taxable market value. The host communities of Becker, Cohasset, and Oak Park Heights would see significant increases in both utility and total taxable market value.

Tax Shift: Table 6 also shows the relative tax shift that would result. If local government levies were held constant, removing the pollution control exemption would result in a tax shift of $11.8 million (includes $1 million of state general tax shift) or a 4.8% tax increase on utility properties statewide. The relative shift in share of total taxes from utility property would increase to 3.36% from 3.20%.

For utility property located in the host communities, the corresponding tax shift would be $11.6 million or a shift increase of 13.7%. The relative shift in share of total taxes from utility property would increase to 6.09% from 5.37%. The relative shift in share in utility tax would also vary significantly among the host communities. At the high end, Cohasset would see an increase of 42.6% in taxes from utility property with a percentage share increase to 69.9% from 59.2%. The taxing area of Becker would also see a relatively large tax-share shift onto utility properties. Some of the increase in both of these cases (Cohasset and Becker) is due to a shift of county-wide taxes from outside the host communities into those jurisdictions. At the low end, the Town of Montgomery would see virtually no change with relatively small changes occurring in St. Paul, Minneapolis and St. Cloud.

Change in Tax Rates and Impact on Residential Homesteads

Table 7 shows the impact of removing the pollution control exemption on the total local combined tax rates for each of the host communities.

With the pollution control exemption, the average net tax capacity (NTC) combined local tax rate for the host communities is 103.4 and the average referendum market value tax rate (RMT) is 0.1583. If the pollution control equipment became taxable and if local governments held their levies constant, the average NTC rate for all host communities would decline to 100.3 (-3.0%) and the RMT rate would decline to 0.1556 (-1.7%). However, the impact among individual host communities would vary significantly. At the high end, the communities of Becker and Cohasset would see their NTC rates decline by 14.5 percent (92.3 to 78.9) and by 10.4 percent (85.1 to 76.3) respectively. At the low end, 12 host communities would have less than a 1 percent decline in their total NTC tax rates.

The change in local tax rates also translates into the general tax impact on different types of property in each of the host communities. As was discussed above, if the pollution control equipment became taxable this would result in a total tax shift of $11.6 million (13.7%) onto utility property and away from other properties located in the host communities. For example, in the community of Becker the relative tax shift increase on utility property was shown to be 29.2 percent and the average NTC rate was shown to decline by 14.5 percent. As a result, the average tax reduction for all other property (homestead, commercial, etc.) was approximately 14 percent.

Table 7 also shows the tax impact on residential homesteads if the pollution control equipment became taxable. On average, residential homestead taxes would decline by $63 or -3.2 percent for host communities. The average residential effective tax rate (ETR) would decline from 1.07 percent to 1.04 percent. The largest decrease in homestead taxes would occur in Becker with a reduction of $341 or 15.9 percent. The ETR would decline from 1.02 percent to 0.86 percent.

Table 6 – Effect of Pollution Control Exemption in Host Communities

Utility Market Values and Net Tax, 2008 Assessment for Taxes Payable in 2009

in thousands (000)

City/Town	Utility Tax % Share Total Tax PC Exempt	Utility MV With PC Exempt	Utility MV With PC Taxable	$ Chg.	% Chg.	% Chg. in Total MV	Utility Tax With PC Exempt	Utility Tax With PC Taxable	$ Chg.	% Chg.	Utility Tax % Share PC Taxable
Becker	70.36%	549,084	812,708	263,624	48.0%	28.7%	12,605	16,287	3,682	29.2%	77.97%
Cohasset	59.18%	220,353	348,968	128,615	58.4%	23.1%	4,250	6,062	1,812	42.6%	69.86%
Manyaska	43.54%	20,511	23,318	2,807	13.7%	2.5%	344	377	33	9.6%	46.03%
Hoyt Lakes	41.97%	25,692	37,051	11,359	44.2%	10.0%	876	1,163	287	32.8%	51.35%
Red Wing	34.85%	423,434	549,332	125,898	29.7%	7.3%	11,664	13,865	2,201	18.9%	40.56%
Oak Park Heights	29.87%	182,883	285,617	102,734	56.2%	14.2%	3,924	5,565	1,641	41.8%	39.24%
Monticello	27.47%	251,576	274,892	23,316	9.3%	1.8%	6,548	6,984	436	6.7%	29.08%
Granite Falls	18.14%	14,138	14,967	829	5.9%	0.6%	539	563	24	4.5%	18.88%
Lent	17.34%	22,278	22,662	384	1.7%	0.1%	714	726	12	1.7%	17.59%
Fergus Falls	8.85%	38,798	43,280	4,482	11.6%	0.6%	1,070	1,166	96	9.0%	9.62%
Inver Grove Heights	5.26%	85,967	89,519	3,552	4.1%	0.1%	2,419	2,491	72	3.0%	5.41%
Elk River	4.40%	51,026	82,192	31,166	61.1%	1.4%	1,758	2,518	760	43.2%	6.34%
Burnsville	3.93%	142,392	156,616	14,224	10.0%	0.2%	3,891	4,190	299	7.7%	4.23%
St. Paul	3.54%	408,277	409,756	1,479	0.4%	0.0%	12,945	12,984	39	0.3%	3.56%
Mankato	3.33%	53,916	59,714	5,798	10.8%	0.2%	1,485	1,604	119	8.0%	3.59%
Minneapolis	2.38%	529,271	533,808	4,537	0.9%	0.0%	17,648	17,778	130	0.7%	2.39%
Montgomery	2.32%	766	766	-	0.0%	0.0%	19	19	-	0.0%	2.32%
St. Cloud	2.03%	42,661	43,021	360	0.8%	0.0%	1,357	1,366	9	0.7%	2.05%
Shakopee	1.46%	30,110	30,571	461	1.5%	0.0%	847	857	10	1.2%	1.48%
Total	**5.37%**	**3,093,133**	**3,818,758**	**725,625**	**23.5%**	**0.8%**	**84,903**	**96,565**	**11,662**	**13.7%**	**6.09%**
Statewide	**3.20%**	**8,890,643**	**9,629,158**	**738,515**	**8.3%**	**0.1%**	**246,983**	**258,808**	**11,825**	**4.8%**	**3.36%**
Metro	**2.07%**	**3,617,430**	**3,751,362**	**133,932**	**3.7%**	**0.0%**	**102,511**	**104,880**	**2,369**	**2.3%**	**2.12%**
Non-Metro	**5.25%**	**5,273,212**	**5,877,796**	**604,584**	**11.5%**	**0.2%**	**144,473**	**153,928**	**9,455**	**6.5%**	**5.59%**

Table 7 – Effect of Pollution Control Exemption in Host Communities

Tax Rates and Residential Homestead Tax, 2008 Assessment for Taxes Payable in 2009

Host Community	Average NTC Tax Rate			Referendum Tax Rate			Residential Property Homestead			
	w/ Exempt	Taxable	% Chg.	w/ Exempt	Taxable	% Chg.	Avg.$ Chg. Tax	Avg. % Chg. Tax	ETR w/ Exempt	ETR Taxable
Becker	92.3	78.9	-14.5	0.1881	0.1589	-15.5	-341	-15.9	1.02	0.86
Cohasset	85.1	76.3	-10.4	0.0186	0.0177	-4.8	-231	-10.9	0.82	0.73
Manyaska Twp.	58.7	58.2	-0.9	0.1549	0.1531	-1.1	-11	-1.2	0.59	0.58
Hoyt Lakes	159.7	148.3	-7.1	0.0271	0.0263	-3.0	-76	-9.4	1.22	1.11
Red Wing	116.8	108.2	-7.4	0.2147	0.2023	-5.8	-176	-7.8	1.26	1.17
Oak Park Heights	86.5	78.8	-9.0	0.1356	0.1339	-1.2	-175	-8.6	0.92	0.84
Monticello	105.5	103.7	-1.7	0.1937	0.1916	-1.1	-39	-1.8	1.14	1.12
Granite Falls	144.6	143.7	-0.6	0.3656	0.3643	-0.4	-10	-0.7	1.52	1.51
Lent Twp.	113.1	113.1	-0.1	0.0275	0.0275	0.0	-2	-0.1	1.11	1.11
Fergus Falls	109.5	108.8	-0.6	0.1140	0.1136	-0.4	-8	-0.7	0.99	0.98
Inver Grove Heights	86.7	86.6	-0.1	0.1728	0.1727	0.0	-4	-0.1	1.00	0.99
Elk River	123.4	119.6	-3.1	0.1776	0.1767	-0.5	-92	-2.9	1.34	1.30
Burnsville	84.1	83.9	-0.3	0.2678	0.2674	-0.1	-7	-0.3	1.05	1.04
Mankato	96.1	95.9	-0.3	0.1423	0.1421	-0.1	-4	-0.3	0.97	0.97
Minneapolis	124.8	124.8	0.0	0.2061	0.2061	0.0	-1	0.0	1.39	1.39
Montgomery	73.3	73.3	0.0	0.0962	0.0962	0.0	0	0.0	0.77	0.77
St. Cloud	105.1	104.9	-0.2	0.1765	0.1765	0.0	-3	-0.1	1.09	1.09
St. Paul	102.9	102.9	0.0	0.1894	0.1894	0.0	-18	0.0	1.15	1.15
Shakopee	96.2	96.2	0.0	0.1398	0.1398	0.0	-1	0.0	1.04	1.04
Average	**103.4**	**100.3**	**-3.0**	**0.1583**	**0.1556**	**-1.7**	**-63**	**-3.2**	**1.07**	**1.04**
Statewide	**95.8**	**95.6**	**-0.3**	**0.1748**	**0.1745**	**-0.2**	**-6**	**-0.3**	**1.08**	**1.08**
Metro	**97.3**	**97.2**	**-0.1**	**0.1988**	**0.1987**	**-0.0**	**-2**	**-0.1**	**1.13**	**1.13**
Non-Metro	**93.9**	**93.5**	**-0.5**	**0.1284**	**0.12**	**-0.4**	**-8**	**-0.5**	**0.99**	**0.99**

Responses from Pollution Control Stakeholders

Responses from Stakeholder Meeting - December 18, 2009

1. **What sort of recommendations will the Department of Revenue make in the study of the pollution control exemption?**

   The department will review the exemption process as it currently exists and provide a list of what equipment is currently receiving the exemption. The only recommendations we would make in the study would be administrative and compliance-related.

2. **Any discussion of the legal challenges of this law - court decisions, appeals, etc.?**

   All legal challenges that we are aware of are included in the report, as well as a brief history of the exemption.

3. **Will the study give broader information on what equipment is eligible for the exemption and equipment descriptions? Related to this is an attempt to give a feel of the economic impact distribution across consumers, the companies and the host communities.**

   An appendix is included in the study that includes a description of all equipment that qualifies for the exemption. The economic impact of the pollution control is not in the scope of this project. However, within the body of the study there are tables that will show part of the impact to the host communities. All interested parties will also have the opportunity to address the impact to them individually in the Appendix.

4. **How is the report being presented to the Legislature or Committee?**

   The final report will be completed in March. We plan to give a final draft to interested stakeholders for comments before the study is finalized.

5. **What will be the economic impact on the host communities?**

   The report will focus on the property tax implications based on actual data from 2008, payable in 2009. It is beyond the scope of the study to address the economic impact with the pollution control exemption and without.

6. **Will the study give consideration to other taxes that pollution control applies to? For example, sales tax?**

   Consideration to other tax types is outside the scope of the study.

7. **Will more than one year of data be included in the study to get a broader picture? How is depreciation on pollution control equipment handled?**

Due to the timing of the study, only one year is being included in the study. Analyzing additional years going back is beyond the time and staffing available to us. The year that is included in the study should present a true picture of the pollution control exemption. Pollution control equipment is depreciated the same as the rest of the company's plant. See valuation explanation starting on page 38.

The following section contains questions submitted by the Coalition of Utility Cities after the December 18, 2009 stakeholder meeting:

1. **The role of stakeholders. At what point in the process, if any, are affected taxing jurisdictions such as cities, counties and school districts notified? Are these stakeholders provided an opportunity to weigh in on the exemption application?**

   The Department of Revenue relies on the recommendation of the Pollution Control Agency for its determination of exemption since the department does not have staff knowledgeable in this area. The exemption is based solely on the pollution control equipment meeting the eligibility criteria. Therefore, there is no opportunity for the affected taxing jurisdictions to weigh in on the exemption application. The department is responsible for communicating the decision to the company applying for the exemption, as well as the county where the pollution control equipment is located. The company and the county have 60 days from the date of the order to appeal to the Minnesota Tax Court.

2. **Post-exemption review. After the exemption has been granted, is there any review of whether the equipment is achieving the proposed pollution reductions?**

   This question is answered by the MPCA in question #4 on page 10.

3. **Required v. discretionary equipment. Are utilities receiving exemptions for equipment that they are required to install under state or federal rules and regulations?**

   This is addressed in the procedures given by the MPCA, starting on page 8.

4. **Impact of legal decisions. As raised by Oak Park Heights Mayor Beaudet, we hope that the history section will touch on the impact that the court decisions, such as *United Power Association v. Commissioner of Revenue,* have had on the review process and the criteria for exemption.**

   As noted in the body of this report, past court cases may offer some guidance in making administrative interpretations of the law in situations where statute is unclear. However, decisions on the pollution control exemption are based on the permit(s) and equipment that are specific to the application being evaluated.

   In some previous decisions, the courts have ruled that the Department of Revenue and MPCA had too narrow a focus when interpreting what is exempt as pollution control property. Those decisions were based on the facts in those cases and did not modify the statutory definition used to evaluate applications for the exemption.

Taken collectively, the decisions may provide general guidance useful on a case-by-case basis. But the MPCA still evaluates applications on the basis of whether the equipment is used for pollution control as defined in the statute.

The court decision in *United Power Association v. Commissioner of Revenue* provides guidance in some situations. However, this decision has limited scope since most waste-to-energy or facilities using RDF are publicly owned. In one case, *American Crystal Sugar v. County of Polk*, the decision was made on procedural grounds and provides no guidance as to what equipment should qualify for the exemption.

5. Recovery of pollution control costs. Do utilities recover the costs associated with pollution control equipment through other means, whether through a rate rider or by waiting to include in a rate case?

This question is addressed in the Cost Recovery section on page 11.

6. Different utility entities. How does the pollution control exemption affect the different types of utilities, such as investor-owned utilities, rural electric associations and municipal utilities? Who is taking advantage of the exemption and how does it affect their property taxes?

For taxes payable 2010, there are nine companies in Minnesota currently receiving the pollution control exemption. Four of those companies are investor-owned utilities, three are independent power producers, one is a rural electric association (co-op) and one is a municipal power agency. See Tables 2 and 3 for data relating to the impact on each company.

The following section contains comments submitted by Xcel Energy after the Dec. 18, 2009, stakeholder meeting:

Thank you for giving Xcel Energy the opportunity to provide information for the DOR's pollution control study report. Below is the information we feel should be included in the report. Also, attached are documents pertaining to all non-DOR references cited.

History:

According to Page 14 of the 1976 Minnesota Research Bulletin # 05 ("The Minnesota Tax Story") by the Department of Economic Development, the property tax burden for corporations was among the highest in the nation in 1967. The 1967 Tax Reform and Relief Act marked the beginning of an effort to create an equitable and more favorable tax climate in Minnesota by eliminating the personal property tax. The exemption did not come all at once, however. It was phased in from 1967 - 1973, when personal property became fully exempt. Though this general exemption has not been applicable to utility companies to date, the legislative history has been to not expand the personal property tax for utility companies. For example, in the mid 1990's, the legislature began granting utility companies several specific personal property tax exemptions for newly constructed facilities. A year-by-year list of exemptions is detailed in "Primer on Minnesota's Property Taxation of

Electric Utilities," an information brief developed by the Minnesota House of Representatives Research Department, updated October 2006.

Page 14 of Research Bulletin # 05 also stated that to encourage and enhance the ecology of Minnesota, the 1967 Act provided additional tax relief related to environmental concerns. Personal property used principally for the abatement of air, water or land pollution was exempt from property tax. There was no phase-in, and utility companies were included within the scope of this exemption. Consequently, since nonutility companies are fully exempt on their personal property, the pollution control exemption only apples to utility companies, resulting in equal property tax treatment with respect to this subset of property.

Interplay with other Minnesota taxes and what other states allow - As noted in Thomsen Reuters' Checkpoint RIA tax research product, air and water pollution have become national concerns in recent years. As a result, more than 30 states offer some form of property tax exemption to encourage businesses to help in the clean-up. Unlike Minnesota, most of these states also offer some form of sales/use tax exemption. In Minnesota, pollution control equipment is not considered capital equipment; therefore, sales or use tax paid for such equipment purchases is not refundable. Consequently, the current property tax exemption reduces the cost of environmental compliance and prevents multiple, recurring taxation.

Senator Skoe's additional information request:

In the DOR's December 3, 2009 letter to pollution control stakeholders, Senator Skoe requested that it would be very beneficial to understand how the "primarily" standard in the exemption language is applied in practice. For example, how distinctions are made between the pollution control aspects of a piece of equipment versus other functions such as safety. This issue was specifically addressed in a 1996 Minnesota Tax Court case involving Northern States Power Company. The question to be resolved in that case was whether standby electrical equipment, known collectively as the "Safeguards Electrical System," which was designed to provide emergency power to prevent shutdown and the release of radiation at the company's two nuclear plants, was primarily used for pollution control under Minn. Stat. Section 272.02, Subd 1(9). The court held that even though the purpose of the equipment was for safety, its primary use was for pollution control, and the exemption speaks to use, not purpose. The court further reasoned that the equipment, when viewed in isolation, does not control or abate pollution; however, it was an integral part of the radiation containment process during emergencies. This case is a good illustration of other functions such as safety not being mutually exclusive to the primary use of pollution control.

Because the foregoing information provides important context, we request the DOR incorporate this information directly in its report. The company will provide separate comments after the report is completed and issued to stakeholders.

Comments submitted by Southern Minnesota Municipal Power Agency regarding the Draft Minnesota Department of Revenue Study of the Pollution Control Exemption :

The study does a good job of laying out the history of the pollution control equipment exemption and its application and we commend the Department of Revenue for their efforts. While we respect the comments made regarding the scope of the analysis, Southern Minnesota Municipal Power Agency believes the study does not provide a broad enough context of the application of the exemption to enable legislators to evaluate and make informed decisions regarding potential changes to, or the elimination of the exemption.

The study attempted to outline the potential changes to effected utilities, and spent significant time on the tax impacts of the effected taxing jurisdictions. However there was no analysis on the potential impact on electric consumers, nor any analysis of the public policy implications of increasing the costs of emissions reduction – at a time when emissions reduction continues as the central focus of both state and federal energy policy.

Since 2001, Minnesota electric utilities have faced a steady increase in Minnesota energy policies aimed at reducing emissions; the Renewable Energy Objective which was modified to the Renewable Energy Standard (one of the most aggressive in the U.S.), significant transmission investment to deliver renewable energy, more aggressive Conservation Investment Programs (CIP), Minnesota's mercury reduction act, prohibitions against building new coal plants in Minnesota or importation of energy from coal plants outside of Minnesota. Likewise federal regulatory efforts under the U.S. Environmental Protection Agency have been stepped up, and unprecedented energy and climate change legislation looms in Congress.

The result has been a string of rate increases over the past five years by Minnesota electric utilities. Minnesota electric consumers are bearing these costs in the face of the worst recession since the great depression, with the cost of climate change language looming around the corner. An elimination of the pollution control equipment exemption would increase the benefits already being received by a number of taxing jurisdictions. However, that benefit comes at the expense of electric rate payers across the state including those in our Member communities who have already seen significant increases to produce reliable electricity in the most environmentally friendly manner.

We do not believe that it good public policy, especially at this time, to tax the capital improvements and investments made to reduce emissions and thereby increase the costs that Minnesota residents and businesses will have to pay for environmental improvements?

Financial information needed to evaluate this issue is not contained within the current study.

Best Regards,

John Winter, Director
Finance and Accounting
Southern MN Municipal Power Agency

Comments of the Coalition of Utility Cities regarding the Draft Minnesota Department of Revenue Study of the Pollution Control Exemption

Note: The Coalition of Utility Cities includes Becker, Cohasset, Granite Falls, Hoyt Lakes, Monticello, Oak Park Heights, and Red Wing.

Notification to Host Communities

The study demonstrates that a small group of cities throughout the state are significantly impacted by the pollution control exemption. Yet current procedures do not allow for notice to or comment by the cities. Although counties are notified, cities are not. Some counties pass this information along to the cities, but many do not. The Coalition of Utility Cities urges the Department of Revenue to include host cities in the notifications.

The process also lacks an adequate method for raising questions about or objections to an exemption. Counties have 60 days to file an appeal with the Minnesota Tax Court after an order is granted for an exemption. Cash strapped local governments will rarely be in a position to fund this type of appeal. Moreover, cities are not afforded a remedy. A better solution would be to allow local government units to raise their concerns earlier in the process.

History

Xcel Energy submitted comments regarding how utility companies are taxed differently than other companies. Utilities, particularly Investor-owned Utilities, are treated differently than other businesses in many ways, such as guaranteed service areas and a guaranteed rate of return. Thus, it is not surprising that the property tax system treats them in a different manner as well.

It is also important to point out that when communities agreed to host coal plants or nuclear facilities, they understood the trade-off would be that the community would be compensated through property taxes the facility would pay. Yet, through the years the amount and the proportional share that utilities have paid has significantly eroded. Between 2002 and 2009, the amount of total property taxes paid by the utilities remained flat, while residential homestead experiences a 87.9% increase and commercial industrial saw a 54.7% increase.

The pollution control tax exemption was enacted in 1967 at a time when regulation regarding air, water, and land pollution was insignificant and in some cases, nonexistent. Forty years later, this tax exemption does not serve as an incentive for adding equipment at large coal plants or nuclear plants. Rather, it is providing a reward for following the law. Legislators and environmental groups elsewhere have begun to recognize that these tax incentives for equipment that is required by law are not the best method for promoting environmental stewardship. In fact when the state of Oregon phased out a similar pollution tax credit, groups like Environment Oregon and the Oregon Environmental Council supported the move because controlling pollution at these facilities should be considered part of doing business.

Nuclear

The Electric Generation System Pollution Control Equipment Cost Detail contains two large line item exemptions at the Prairie Island and Monticello nuclear facilities that are simply labeled “Nuclear”.

These line items are worth approximately $77 million at the Prairie Island facility and approximately $25 million at the Monticello facility. Unlike every other item in the 15 pages of cost detail, the label for this equipment does not describe the nature of the equipment being exempted. The dollar amounts for the "Nuclear" item at both facilities seem to correspond to the ratio of dry cask storage at the two facilities, which raises the question of whether the "nuclear" refers to dry cask storage. Because of the significant dollar amount associated with these items, greater clarity should be provided regarding the nature of these exempted items.

Prepared by Flaherty & Hood, P.A. for the Coalition of Utility Cities

NOTE: The report has been changed in response to the above comment to include the breakdown of cost for "Nuclear".

Appendix

Minnesota Statute 272.02 Exempt Property

Subd.10. **Personal property used for pollution control.** Personal property used primarily for the abatement and control of air, water, or land pollution is exempt to the extent that it is so used, and real property is exempt if it is used primarily for abatement and control of air, water, or land pollution as part of an agricultural operation, as a part of a centralized treatment and recovery facility operating under a permit issued by the Minnesota Pollution Control Agency pursuant to chapters 115 and 116 and Minnesota Rules, parts 7001.0500 to 7001.0730, and 7045.0020 to 7045.1260, as a wastewater treatment facility and for the treatment, recovery, and stabilization of metals, oils, chemicals, water, sludges, or inorganic materials from hazardous industrial wastes, or as part of an electric generation system. For purposes of this subdivision, personal property includes ponderous machinery and equipment used in a business or production activity that at common law is considered real property.

Any taxpayer requesting exemption of all or a portion of any real property or any equipment or device, or part thereof, operated primarily for the control or abatement of air, water, or land pollution shall file an application with the commissioner of revenue. The Minnesota Pollution Control Agency shall upon request of the commissioner furnish information and advice to the commissioner.

The information and advice furnished by the Minnesota Pollution Control Agency must include statements as to whether the equipment, device, or real property meets a standard, rule, criteria, guideline, policy, or order of the Minnesota Pollution Control Agency, and whether the equipment, device, or real property is installed or operated in accordance with it. On determining that property qualifies for exemption, the commissioner shall issue an order exempting the property from taxation. The equipment, device, or real property shall continue to be exempt from taxation as long as the order issued by the commissioner remains in effect.

Subd 41. **Pollution abatement property.**
Property, including real property, qualifies as exempt pollution abatement property under subdivision 10, if the following conditions are satisfied.

(a)(1) The property is part of a refuse-derived fuel facility converted from a coal burning electric generation facility and the property consists of:

(i) boiler modifications necessary to efficient handling and burning of refuse-derived fuel and transfer of the heat produced by combustion of the fuel;

(ii) ash handling and storage systems, such as vacuum-pneumatic equipment, conveyors, crushers, and storage buildings to remove, convey, process, and temporarily store bottom and fly ash from the burning of refuse-derived fuel;

(iii) control systems, such as computers, to control the operation of equipment described in clauses (i) to (iv) and other pollution abatement equipment; and

(iv) equipment to monitor emissions into the air and combustion efficiency; or

(2) the property is a solid waste resource recovery mass burn facility.

(b) The facility was constructed and will be operated under a contractual arrangement providing for payment, in whole or part, of the property tax on the property by a political subdivision of the state.

Application for Pollution Control Property Tax Exemption

MINNESOTA Department of Revenue

Application for Exemption of Tax on Property Used for Pollution Control

PT-63

Name of business which occupies or uses the property — Date of application

Name(s) of property owner

Street address (box number, rural route) — City — State — Zip code

Check box and fill in name of city or township where property is located — County

☐ city ☐ township

Fill in the legal descriotion of the real property as shown on tax records

Describe the purpose of your business

Pollution control equipment or devices for which the tax exemption is requested *(use a separate sheet if necessary)*

Name of equipment or device — Pollution Control Agency permit number — Date permit issued

I declare the real and personal property listed above was constructed or installed after June 1, 1967, and is totally or primarily used for the abatement and control of air, land or water polution.

Name (print or type) — Title — Daytime phone ( )

Signature — Date

Keep the pink copy for your records. Mail the yellow and white copies to:

Minnesota Department of Revenue
Property Tax Division
Mail Station 3340
St. Paul, MN 55146-3340

Rev. 10/96

Detailed Explanation of the Valuation Process for Public Utility Property

Overview

Under Minnesota administrative rules (Minnesota Rules), there are two methods to determine value for utility property: *cost less depreciation* (CLD) and *unit valuation*. The Property Tax Division of the Department of Revenue is responsible to determine value for 14 electric-generation utilities. Three of these utilities are valued using the cost less depreciation method; 11 are valued using the unit value method. Most cooperatives and municipal power agencies use the CLD method.

Under the cost less depreciation method, the commissioner of revenue establishes the CLD value for a utility company (or cooperative association) based on a formula prescribed in Minnesota Rule 8100.0300, subpart 6. This method takes the cost of all equipment located in Minnesota and allows depreciation at 2.5% per year. The resulting amount is then apportioned to all property in Minnesota based on original cost.

Under the unit valuation method, the commissioner of revenue establishes an estimate of the unit value for a utility company, including all of the utility's property (both real and personal) that is subject to tax. Generally accepted appraisal principles – including the cost approach, income approach, and additional indicators of value – are used to value the property.

If the utility company operates in multiple states, an additional step is needed to determine the value of the utility's property that is located in Minnesota. The value of the utility's property located in Minnesota that is exempt from property tax or that is locally assessed is subtracted from the overall value of the utility's Minnesota property. The resulting *Minnesota apportionable value* is then distributed to the various taxing districts within the state.

The data used in the valuation, allocation, and apportionment processes are drawn from reports that the utility companies submit to the department, which makes periodic examinations of the supporting data. These reports include: Minnesota Department of Revenue Annual Utility Reports (UT forms), Reports to the Minnesota Public Utilities Commission, Annual Reports to Shareholders, Annual Reports to the Federal Energy Regulatory Commission, United States Department of Agriculture, Rural Utility Service or equivalent, and other publicly available sources of information regarding rates.

Cost Less Depreciation Valuation of Utility Property

The cost less depreciation (CLD) method of determining value is noted here because there are cooperative associations that are eligible for the pollution control exemption that elect to be valued under this method. Cooperative associations may irrevocably elect to have their property valued using the unit value method.

As stated above, this method takes the cost of all equipment located in Minnesota and allows depreciation at 2.5% per year. The resulting amount is then distributed (or *apportioned*) to each individual parcel based on original cost. Exempt property, such as pollution control equipment, is excluded from the cost before it is reported to the Department of Revenue.

Unit Valuation of Utility Property

As previously noted, the unit valuation method is based on the total value of a utility's property assets (both real and personal) that are subject to tax. Cost appraisal approaches, additional steps in the unit valuation process and other factors or notable issues are discussed in detail below.

Cost Approach:

The cost indicator of value considered in the utility valuation formula is determined as follows:

	Original Cost
-	*Depreciation of the system plant*
+	*Cost of improvements to the system plant*
+	*Original cost of all types of construction work in progress that are installed by the assessment date*
+	*Cost of property held for future use*
+	*Contributions in aid of construction*

Original cost less depreciation is presumed to be equal to historical cost less depreciation. For rate-regulated companies, the same type of cost that is used in the rate- base calculation must be used.

Income Approach:

The income indicator of value is estimated by weighting the capitalized net operating earnings of the utility company for the most recent three years as follows: most recent year, 40%; previous year, 35%; and second year previous, 25%. Utilities may request the removal of nonrecurring items of income or expense. The commissioner determines if the removal of the item is appropriate. The net income is capitalized by applying a capitalization rate that is computed annually using the *band of investment* method.

Additional Indicators of Value:

Additional indicators of value, other than the cost and income indicators, may exist in some situations. When additional indicators of value exist, the commissioner has the discretion to use these additional indicators in computing the unit value of a utility. One example of an additional indicator of value is the stock and debt indicator.

The stock and debt indicator of value is based on the market value of stock and debt. The stock and debt indicator is premised on the accounting equation:

Assets = Liabilities + Owner's Equity.

Adding the market value of individual units of a company's debt and equity interests to the current liabilities results in gross market value. The stock and debt indicator works best when the company that is being valued is engaged in only one business and publicly traded on a large scale.

Reconciliation:

Once the indicators of value are determined, they are then weighted. Currently, the default weightings are: cost approach – 50%, income approach – 50%, and market indicator (stock and

debt, etc.) – 0%. The weightings are frequently adjusted based on appraiser judgment and must always equal 100%. For example, the cost indicator may be given less weight if the appraiser determines the data used in the cost method is not as reliable of an indicator as the income method for a particular company. After the indicators are weighted, they are then added together resulting in the total unit value for the company.

Allocation of Value to Minnesota:
For unit value companies that operate in multiple states, the following calculation must occur to give value to that portion located in Minnesota. Gross revenue derived from operations in Minnesota divided by gross revenue from all states is weighted at 10%. The original cost of the company's utility property located in Minnesota divided by the total original cost of property in all states of operation is weighted at 90%. The two percentages are added together to determine the *Minnesota allocation percentage*, which is then multiplied by the unit value to determine the *Minnesota allocated value*.

Deduction for Exempt and Locally Assessed Property:
The cost of pollution control equipment is reported by the utilities to the Department of Revenue as a depreciable excludable on the annual report the utility is required to file. The excludable is depreciated at the rate of total plant depreciation. The department currently does not cross-check the listing of pollution control equipment submitted annually by the company against the department orders for exemption that have been sent to the company, therefore, it is unknown if there are reporting errors.

After the Minnesota portion of the unit value of the utility company is determined, any property which is not state assessed (locally assessed or which is exempt from ad valorem tax) is deducted from the Minnesota portion of the unit value. Each year, utility companies submit a listing of the cost of all Minnesota excludables. A partial listing of excludables includes land, rural distribution lines, locally assessed items, and pollution control, among others. Land is not depreciated, but distribution lines, locally assessed items and pollution control are depreciated. The depreciation percentage is calculated using the following formula: total system plant depreciation/total system depreciable plant cost. This factor is then multiplied by all Minnesota depreciable excludables. One more calculation, which helps align the excludables to the system value, is performed to determine the total deduction, which is then removed from the Minnesota allocated value.

The process differs for cost less depreciation companies. The exempt pollution control is removed from the original cost of the equipment and land values that the company provides. This carries forward to give the company an exemption on their pollution control equipment.

Apportionment of Value:
After the unit valuation of the utility company has been allocated to the state of Minnesota and has been adjusted for non-formula-assessed property, it is apportioned or distributed to the taxing districts in Minnesota in which the company operates. This apportionment is made by the commissioner of revenue based on current cost data submitted by the utility companies in annual reports filed with the commissioner.

The current cost of the company's operating utility property in Minnesota is calculated by taking the current original cost in each taxing district as of the last assessment date plus the original cost of new construction reduced by the original cost of property retired since the last assessment date. The Minnesota apportionable value is divided by this total current original cost to determine the apportionment factor. That factor is then multiplied by the current original cost in each taxing district to determine the market value in each district.

The final step in the process is the equalization of the value of utility structures. If the county-wide sales ratio of commercial/industrial (C/I) property is 90% or greater, then no equalization adjustment is made.[6] If the C/I sales ratio is less than 90%, then the market value of utility structures are adjusted at a parcel level to coincide with the assessment levels of commercial and industrial property within the county. The sales ratio is computed by the Department of Revenue through an analysis of the certificates of real estate value filed by the buyers or sellers of property within each county. All utilities operating within a particular county are equalized at the same percentage. No adjustment for equalization is made to machinery or personal property.

[6] Note: If the county where the property is located has six or more sales of commercial/industrial (C/I) property, then the C/I sales ratio for that county is used. If the county has fewer than six sales, the overall sales ratio for all property types within that county is used.

Glossary of Terms

This glossary includes many terms that are used in the unit valuation process. It also includes terms related to pollution control equipment that may be found in the listing of company pollution control equipment elsewhere in the Appendix.

Abatement: The reduction or elimination of pollution.

Allocation: The process of dividing the unit value of a utility company among the states in which the utility operates.

Apportionment: The process of distributing that portion of the utility company's unit value which has been allocated to Minnesota to the various taxing districts in which the utility company operates.

Ash: The mineral content of a product remaining after complete combustion.

Baghouse: An air pollution control device that traps particulates by forcing gas streams through large permeable bags usually made of glass fibers.

Band of investment: A method used to compute a capitalization rate. The simplest form of band of investment computation requires estimating the appropriate debt/equity ratio, the interest cost of debt, and, typically the most subjective element, the rate of return on equity capital. The weighted rates for debt and equity are added to obtain the band of investment rate.

Basalt: Consistent year-round energy use of a facility; also refers to the minimum amount of electricity supplied continually to a facility.

Basin: A tract of land in which the ground is broadly tilted toward a common point. Water that falls onto any portion of the basin is carried toward the common point by a single river system.

Boiler: A vessel designed to transfer heat produced by combustion or electric resistance to water. Boilers may provide hot water or steam.

Bottom Ash: The non-airborne combustion residue from burning pulverized coal in a boiler; the material which falls to the bottom of the boiler and is removed mechanically; a concentration of non-combustible materials, which may include toxics.

Capitalization rate: The relationship of income to capital investment or value, expressed as a percentage.

Cathodic Protection: A technique to prevent corrosion of a metal surface by making it the cathode of an electrochemical cell.

Cells: In solid waste disposal, holes where waste is dumped, compacted, and covered with layers of dirt on a daily basis.

Chlorinator: A device that adds chlorine, in gas or liquid form, to water or sewage to kill infectious bacteria.

Clarifier: A tank in which solids settle to the bottom and are subsequently removed as sludge.

Condensate: 1.Liquid formed when warm landfill gas cools as it travels through a collection system. 2. Water created by cooling steam or water vapor.

Continuous Emission Monitor (CEM): A type of air emission monitoring system installed to operate continuously inside of a smokestack or other emission source.

Contributions in aid of construction: Money paid to another utility, to be used directly or indirectly for the construction or acquisition of plant; or the contribution of property that is used as plant.

Cooling Tower: A structure that helps remove heat from water used as a coolant; e.g., in electric power generating plants.

Cooperative association: "Cooperative association" includes municipal power agencies and pipelines that are not common carriers.

Damper: An adjustable flap controlling the air admitted beneath the fire-bed.

Demineralization: A treatment process that removes dissolved minerals from water.

Dewater: 1. Remove or separate a portion of the water in a sludge or slurry to dry the sludge so it can be handled and disposed of. 2. Remove or drain the water from a tank or trench.

Dike: A low wall that can act as a barrier to prevent a spill from spreading.

Discharge: Flow of surface water in a stream or canal or the outflow of ground water from a flowing artesian well, ditch, or spring. Can also apply to discharge of liquid effluent from a facility or to chemical emissions into the air through designated venting mechanisms.

Draft: 1. The act of drawing or removing water from a tank or reservoir. 2. The water which is drawn or removed.

Drift: Deposits of boulders, gravel, sand, clay or till moved and deposited by a glacier or the water from a melting glacier.

Effluent: Liquid flowing out of a system, such as a discharge of liquid waste from a factory or water leaving a sewage treatment plant.

Electric company: Any company engaged in the generation, transmission, or distribution of electric power, excluding municipal corporations.

Electrostatic Precipitator (ESP): A device that removes particles from a gas stream (smoke) after combustion occurs. The ESP imparts an electrical charge to the particles, causing them to adhere to metal plates inside the precipitator. Rapping on the plates causes the particles to fall into a hopper for disposal.

Emission: Pollution discharged into the atmosphere from smokestacks, other vents, and surface areas of commercial or industrial facilities; from residential chimneys; and from motor vehicle, locomotive, or aircraft exhausts.

Flue Gas: The air coming out of a chimney after combustion in the burner it is venting. It can include nitrogen oxides, carbon oxides, water vapor, sulfur oxides, particles and many chemical pollutants.

Flush: 1. To open a cold-water tap to clear out all the water which may have been sitting for a long time in the pipes. In new homes, to flush a system means to send large volumes of water gushing through the unused pipes to remove loose particles of solder and flux. 2. To force large amounts of water through a system to clean out piping or tubing, and storage or process tanks.

Fly Ash: Non-combustible residual particles expelled by flue gas.

Historical cost: The cost of a property item regardless of the present owner or interim sales transaction. It usually refers, in utility properties, to the cost of a property item when first devoted to public service.

Hopper: A general term for a chute with additional width and depth to provide a volume for temporary storage of materials. The bottom of the hopper chute typically has a mechanism to control the flow of materials, thus allowing them to be metered out at the desired rate.

Host community: The host community is the city or township in which electric generation facilities with exempt pollution control equipment is located.

Host county: The host county is the county in which the exempt pollution control equipment is located.

Hydrolysis: The decomposition of organic compounds by interaction with water.

Investor-owned utilities (IOUs): Private, for-profit corporations whose rates are regulated by the Public Utilities Commission.

Leachate: Liquids that have percolated through a soil that carry substances in solution or suspension. Liquids can be rain water or snow melt that enter soil and carry contaminates from buried wastes. Leachate can seep into ground or surface water, or pool on or around a landfill.

Liner: 1. A relatively impermeable barrier designed to keep leachate inside a landfill. Liner materials include plastic and dense clay. 2. An insert or sleeve for sewer pipes to prevent leakage or infiltration.

Municipal utilities (Munis): public, nonprofit utilities overseen by local public utilities commissions or city councils. There are two kinds of municipal utilities:

> **Distribution Munis,** like their co-operative counterpart, provide distribution electric services to retail customers. In Minnesota, there are 126 electric distribution Munis and 31 natural gas distribution Munis.
>
> **Municipal power agencies (MPAs)** provide distribution Munis with electric generation and transmission services. The six MPAs (also known as "joint operating agencies") operating in Minnesota are Central Minnesota MPA, Heartland Consumers Power District, Minnesota MPA, Missouri River Energy Services, Northern MPA, and Southern Minnesota MPA.

Neutralization: Decreasing the acidity or alkalinity of a substance by adding alkaline or acidic materials, respectively.

Nitrogen Oxides (NOx): Nitrogen oxides, or NOx, is the generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. Many of the nitrogen oxides are colorless and odorless. However, one common pollutant, nitrogen dioxide (NO2) along with particles in the air can often be seen as a reddish-brown layer over many urban areas. Nitrogen oxides form when fuel is burned at high temperatures, as in a combustion process. The primary sources of NOx are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuels.

Non-formula assessed property: "Non-formula assessed property" means property of a utility which is valued by the local or county assessor rather than by the commissioner of revenue.

Opacity: The amount of light obscured by particulate pollution in the air; clear window glass has zero opacity, a brick wall is 100 percent opaque. Opacity is an indicator of changes in performance of particulate control systems.

Original cost less depreciation: The original cost of the property to the present owner, minus any depreciation attributable to the property.

Particulates: 1. Fine liquid or solid particles such as dust, smoke, mist, fumes, or smog, found in air or emissions. 2. Very small solids suspended in water; they can vary in size, shape, density and electrical charge and can be gathered together by coagulation and flocculation.

Pipeline company: Any company engaged in the transmission of natural gas, gasoline, petroleum products, or crude oil via a fixed line of pipes.

Precipitator: Pollution control device that collects particles from an air stream.

Qualifying construction work in progress: The cost of materials and associated charges which are not yet placed in a permanent site.

RDF: Refuse-Derived Fuel

Runoff: That portion of precipitation or irrigation water that flows off a field or paved area and enters surface water.

Rural electric associations (co-ops): nonprofit organizations whose rates are overseen by a board composed of co-op members. There are two types of co-ops:

Distribution cooperatives provide distribution electric service to Minnesota consumers. There are 45 distribution co-ops in Minnesota.

Generation and transmission cooperatives (G&T's) generate and transmit electricity to distribution co-ops. The six generation and transmission cooperatives that serve Minnesota distribution co-ops are Basin Electric, Dairyland Power, East River Electric, Great River Energy, L&O Power, and Minnkota Power.

Scrubber: An air pollution device that uses a spray of water or reactant or a dry process to trap pollutants in emissions.

Sewage: The waste and wastewater produced by residential and commercial sources and discharged into sewers.

Slurry: A watery mixture of insoluble matter resulting from some pollution control techniques.

Solid Waste: Trash and garbage without enough liquid to flow freely.

SPCC: Spill Prevention, Containment, and Countermeasure

Stack: A chimney, smokestack, or vertical pipe that discharges used air.

Storage: Temporary holding of waste pending treatment or disposal, as in containers, tanks, waste piles, and surface impoundments.

Sulfuric acid (H2SO4): Sulfuric acid is a strong mineral acid. It is soluble in water at all concentrations. Sulfuric acid has many applications, and is one of the top products of the chemical industry.

Sulfur dioxide (SO2): Sulfur dioxide is a heavy, pungent, colorless gas formed primarily by the combustion of coal, oil, and diesel fuels. Elevated levels can impair breathing, lead to other respiratory symptoms, and at very high levels aggravate heart disease. People with asthma are most at risk. Sulfur dioxide also contributes to acid rain, which can damage plants, lakes and buildings.

Sump: A pit or tank that catches liquid runoff for drainage or disposal.

Supernate: Precipitation is the formation of a solid in a solution or inside another solid during a chemical reaction or by diffusion in a solid. When the reaction occurs in a liquid, the solid formed is called the precipitate, and the liquid remaining above the solid is called the supernate.

System plant: The total tangible property, real and personal, of a company which is used in its utility operations in all states in which it operates.

Thermocouple: A Thermocouple is a junction between two different metals that produces a voltage related to a temperature difference. Thermocouples are a widely used type of temperature sensor for measurement and control and can also be used to convert heat into electric power.

Turbidimeter: A device that measures the cloudiness of suspended solids in a liquid; a measure of the quantity of suspended solids.

Unit value: The value of the entire system plant of a utility company taken as a whole without any regard to the value of its component parts.

Urea-Formaldehyde Foam Insulation: A material once used to conserve energy by sealing crawl spaces, attics, etc.; no longer used because emissions were found to be a health hazard.

Venturi effect: The Venturi effect is the reduction in fluid pressure that results when a fluid flows through a constricted section of pipe.

VSD: Virtually Safe Dose

Sources: Minnesota Pollution Control Agency, U.S. Environmental Protection Agency, California Environmental Protection Agency, Minnesota House of Representatives House Research, Regulation of Energy Utilities in Minnesota, Wikipedia, Minnesota Administrative Rules, 8100.0100 Definitions, and Western States Association of Tax Administrators Appraisal Handbook

Electric Generation System Pollution Control Equipment Cost Summary

2008 Assessment for Taxes Payable in 2009

County	Host Community	Company Name	Cost of Equipment
Benton	St. Cloud	Xcel Energy	200,175
Blue Earth	Mankato	Xcel Energy	12,125,483
Chippewa	Granite Falls	Xcel Energy	1,583,642
Chisago	Lent Township	Xcel Energy	421,222
Dakota	Burnsville	Xcel Energy	30,356,973
Dakota	Inver Grove Heights	Xcel Energy	4,035,120
Dakota	Inver Grove Heights	Gas Recovery	961,800
Goodhue	Red Wing	Xcel Energy	274,886,759
Hennepin	Minneapolis	Xcel Energy	22,181,626
Itasca	Cohasset *	MN Power WPPI	201,647,205 31,816,423
LeSueur	Montgomery	Alliant Energy Corp	3,313
Martin	Manyaska Township	Alliant Energy Corp	5,641,881
Otter Tail	Fergus Falls	Otter Tail Power Company	6,274,140
Ramsey	St. Paul	Xcel Energy	18,336,028
Scott	Shakopee	Xcel Energy	602,701
Sherburne	Becker *	Xcel Energy Southern MN Municipal Power Agency	382,774,137 126,849,445
Sherburne	Elk River	Great River Energy	57,683,868
St. Louis	Hoyt Lakes	MN Power	22,325,745
Washington	Oak Park Heights	Xcel Energy	228,186,591
Wright	Monticello	Xcel Energy	47,489,064
Total			**$1,476,383,341**

* Plants at Cohasset and Becker have joint owners.

Electric Generation System Pollution Control Equipment Cost Detail

2008 Assessment for Taxes Payable in 2009

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
Benton	Granite City	St. Cloud	FUEL OIL STORAGE DIKE AND LINER	Xcel Energy	200,175	**200,175**
Blue Earth	Key City	Mankato	FUEL OIL EARTHEN DIKE & CLAY LINER	Xcel Energy	219,456	**219,456**
Blue Earth	Wilmarth	Mankato	DIVERSION OF MISC PLANT DRAIN FROM HOT	Xcel Energy	5,992	
			PRECIPITATORS, ASH HANDLING SYSTEM		2,519,411	
			BOILER MODIFICATIONS, BOTTOM ASH		1,108,630	
			ASH WATER FILTRATION EQUIP		19,058	
			EMISSION MONITORING SYSTEM CEMS		578,585	
			AIR PARTICULATE SAMPLERS		17,589	
			SCRUBBER AND BAGHOUSE AIR POLLUTION		7,656,763	**11,906,027**
Chippewa	Minnesota Valley	Granite Falls	ELECTROSTATIC PERCIPITATORS	Xcel Energy	714,104	
			ASH DISPOSAL BASIN		58,010	
			SEWAGE PUMP & DRAINFIELD		17,625	
			COAL STORAGE AREA RUNOFF CONTROL		13,559	
			OPACITY MONITOR		10,940	
			COAL DUST COLLECTION SYSTEM		230,999	
			CONTINUOUS EMISSION MONTORING SYS		538,405	**1,583,642**
Chisago	Chisago Co Sub	Lent Township	NOISE ABATEMENT ENCLOSURES	Xcel Energy	421,222	**421,222**
Dakota	Black Dog	Burnsville	SEWAGE DISPOSAL & COAL	Xcel Energy	75,185	
			BLOWDOWN DILUTION EQUIP.		9,325	
			MONITORING EQUIPMENT: TURBIDIMETER,		48,371	
			FLY ASH VACUUM SYSTEM		238,573	
			CHIMNEY, PRECIPITATORS, DRAFT EQUIP,		12,162,016	
			COAL DUST SUPPRESSSION EQUIPMENT		740,306	
			COAL DOCK AREA DRAINAGE		1,817,047	
			COOLING POND MONITOR & CONTROL		224,443	
			REPLACE COAL WEIGHTOMERS		45,769	
			ASH POND ZERO DISCHARGE		2,441,822	
			LIMESTONE HANDLING & STORAGE SYSTEM-100%		552,218	
			PRECIPITATOR NOISE REDUCTION		12,351	
			BAGHOUSES, COAL DUST COLLECTING		6,702,612	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page Dakota	Black Dog	Burnsville	CONTINUOUS EMISSIONS MONITORING SYSTEM	Xcel Energy	652,114	
			BOTTOM ASH DEWATERING SYSTEM		1,642,336	
			FLOOD BERM/DIKE		2,992,486	**30,356,973**
Dakota	Dakota	Inver Grove Heights	Reduce landfill gas emissions	Gas Recovery Systems, LLC	961,800	**961,800**
Dakota	Inver Hills	Inver Grove	CLAY LINER (1' THICK)	Xcel Energy	1,131,064	
			ENVIRONMENTAL MONITORING		347,486	
			STACK EMISSION CONTROL EQ.		18,001	
			TURBINE EXHAUST SYSTEM		2,538,569	**4,035,120**
Goodhue	Prairie Island	Red Wing	COOLING TOWER & CONTROL HOUSE	Xcel Energy	18,264,000	
			SEWAGE DISPOSAL SYSTEM		2,386	
			WASTE DISPOSAL-RECYCLE CONTROL SYSTEM		1,305,609	
			ENVIRONMENTAL MONITORING		290,414	
			NUCLEAR			
			• Primary containment & reactor vessel isolation system		35,084,665	
			• Containment vessel air handling system A) Air cooling syst. B) Internal cleanup syst. C) Purge/Ventilation syst.		2,275,068	
			• Shield building ventilation syst.		1,078,279	
			• Safety injection syst.		4,635,420	
			• Containment vessel internal spray syst.		1,031,902	
			• Residual heat removal syst.		0	
			• Component cooling water syst.		2,773,239	
			• Reactor protection syst.			
			• Diesel generators		1,863,618	
			• Emergency DC power			
			• Auxiliary building special ventiliation		14,304,071	
			• Radwaste building/ventilation A) Radwaste building B) Radwaste vent. syst.		2,474,251	
			• Process radiation monitoring syst.		3,301,350	
			• Gaseous waste disposal syst.		2,539,546	
			• Liquid waste disposal syst.		3,701,961	
			• Solid waste disposal syst.		1,370,166	
			• Spent fuel pool cooling syst.			
			• Auxiliary feedwater syst.		1,478,604	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page Goodhue	Prairie Isl.	Red Wing	UPGRADE NUETRALIZER TANK SYSTEM	Xcel Energy	1,167,631	
			MODIFY CIRCULATING WATER INTAKE		37,079,459	
			NOISE ABATEMENT EQUIPMENT		248,181	
			UNIT 1 & 2 SAFEGUARDS ELECTRICAL SYSTEM		109,821,113	
			INSTALL BUSES		16,385,090	**262,476,024**
Goodhue	Red Wing	Red Wing	SEWAGE TREATMENT PLANT	Xcel Energy	45,257	
			BLOWDOWN DILUTION EQUIPMENT		11,683	
			UPGRADE DUST COLLECTING SYSTEM		4,851,755	
			REFUSE DERIVED FUEL MOD.		22,398	
			ASH WATER ZERO DISCHARGE		44,051	
			CONTINOUS EMISSION MONITOR SYSTEM		514,354	
			AQCS SYSTEM		6,921,238	**12,410,735**
Hennepin	Riverside	Minneapolis	530' UNIT #8 STACK	Xcel Energy	1,907,827	
			ELECTRIC VIBRATORS		662	
			BOILER DILUTION EQUIP		210,904	
			SULFURIC ACID CONCRETE BLOCK		9,193	
			DIESEL FUEL STORAGE CONCRETE		12,260	
			SMOKE DENSITY RECORDERS		30,581	
			COAL DUST SUPPRESSION EQUIPMENT		470,129	
			UPGRADE PERCIPITATOR UNIT #8		4,109,192	
			WATER MONITORING EQUIPMENT		93,494	
			COAL STORAGE RUNOFF POND		677,472	
			TRANSFORMER BASIN MODIFICATION		19,044	
			ADD'L ASH SETTLING CELL		125,168	
			BAGHOUSE FILTERS, SPRAY DRYER		10,555,549	
			ASH STORGE SITE IMPROVEMENTS AT		45,118	
			SLAG SETTLING SYSTEM		416,816	
			NOISE ABATEMENT		140,101	
			INST MUFFLERS ON UNITS #6 & 7 ID FANS		678,385	
			CONTINUOUS EMMISSIONS MONITORING SYSTEM		1,988,109	
			CONTAINMENT WALL		8,978	
			SOLID WASTE DISPOSAL FACILITY		682,643	**22,181,626**
Itasca	Boswell Plant	Cohasset	See MN Power's Exempt Property	WPPI Energy	31,816,423	**31,816,423**
Itasca	Boswell Plant	Cohasset	Wet ID Fan Conversion Unit 4	Allete Inc - MN Power	105,961	
			Clarifiers & Appurtenances/Ash Pond Piping		2,161,900	
			Cooling Tower & Appurtenances/Ash Pond		13,210,836	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page	Boswell Pl.	Cohasset	Bottom Ash Hoppers Units 1 & 3	Allete Inc - MN Power	1,672,952	
Itasca			Chlorinator & Appurtenances		1,500	
			Boiler Blow-Off Piping		2,900	
			Ash Settling Basin Jet Pump		28,700	
			Vertical Ash Nozzle Pump		9,900	
			Scrubber Installation & New Stack		735,900	
			Replace Seal Tanks & Effluent System		59,193	
			Install Clay Bottom - 6B Clarifier		171,700	
			Install Inlet Duct Flush System		500	
			Install Stack Rain Elimination Equipment		312,680	
			Oil Separation Pit		66,400	
			Waste Water Treatment - Blanket		40,959	
			Purchase Hydro Laser		3,710	
			Modify Unit 3 Chimney		15,500	
			Replace Fiberglass Vessels		53,934	
			Install Unit 3 AQCS (92%)		5,983,602	
			Repair Ash Return Pump Motors		19,700	
			Repair Clarifiers Construction		666,010	
			Replace Under-flow Piping		8,500	
			Replace Unit 3 Effluent Tank piping & lining		75,678	
			Install Unit 3 AQCS(92%)		3,116,470	
			Install Units 1 & 2 AQCS		8,170,400	
			Modify Units 1, 2 & 3 Coal Handling		5,711,493	
			Replace Units 1 & 2 Bag Detectors		42,800	
			Additions & Modifications Unit 4		1,293,481	
			Construct Unit 4 (71.5% Ash Pond 50% Stack)		110,299,378	
			Baghouse Walkway		1,619	
			Spare Baghouse Blower		18,859	
			Sulfuric Acid Treatment Unit 3		224,285	
			Cooling Tower Sump Pumps		12,609	
			Install Continuous Emissions Monitor		(0)	
			Construct Oil Catchment Basin Unit 4		36,880	
			Upgrade Environmental Instrumentation		23,280	
			Scrubber Ventilation System		35,767	
			Denslurry Area Ventilation System		29,065	
			Purchase SO2/NOx Analyzer		13,414	
			Unit 3 Clarifier Under-flow Repair		39,642	
			Fly Ash Pond PH Adjustment (71.5%)		19,597	
			Replace Unit 3 Hydrolazer Pump		11,409	
			Seals Fly Ash Venturi Pumps Unit 4		74,474	
			AQCS Improve Venturi Recycle Tanks		43,067	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page	Boswell Pl.	Cohasset	Replace Fly Ash Discharge Line Unit 4	Allete Inc - MN Power	11,069	
Itasca			Modify AQCS Absorber Pump Crane Unit 4		13,785	
			Replace unit 1 & 2 Expansion Joints		34,108	
			Replace Baghouse Air Dryer		23,269	
			Unit 3 Replace Drift Eliminators		95,338	
			Replace Scrubber Controls Unit 3		46,904	
			Replace Scrubber Breeching Exp. Joints		25,629	
			Absorber Pump Gear Box Unit 4		18,276	
			Rerubber Absorber 4A unit 4		538,815	
			Upgrade Seal Air Fans Unit 4		10,050	
			Reheat Stack Expansion Joints Unit 4		57,532	
			Spray Pump Modifications Unit 4		42,070	
			Replace Supernate Return Piping System		37,957	
			Coal Handling Dust Collector Repairs		59,643	
			Replace Stage Monitor on Clarifier		31,380	
			Replace Unit 4 Tower Isolation Valves		48,350	
			Replace Town Lining 4D Insulation		490,973	
			Slope Protection Unit 4 Supernate Pond		194,843	
			Rerubber 4B Absorber Tower		168,265	
			Upgrade Dust Collectors Well		116,960	
			Install Steel Cladding Inlet Duct Floor		54,534	
			Upgrade Coal Dust Collection System		73,755	
			Piping		7,703	
			Dust Plow		5,740	
			Scrubber Roof Section Unit 3		29,048	
			Replace Units 1 & 2 Filter Bags		0	
			Replace Rubber in Venturies Unit 4		(169,407)	
			Replace Absorber Mist Eliminator Unit 4		9,094	
			Replace Supernate Return Line		98,929	
			Unit 4 Crossover Piping		63,467	
			Unit 4 Reline Venturi Pump		17,870	
			Replace Ash Hopper Refractory		77,992	
			Install CEM Equipment Unit 4		695,449	
			Replace Dust Collector DC-8		189,606	
			Replace Filter System-Water Treatment		117,186	
			Install CEM Equipment Units 1 & 3		901,253	
			Unit 1 Replace Reverse Air Fan Exp. Joint		4,447	
			Replace Venturi Rubber Lining		0	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page	Boswell Pl.	Cohasset	Replace Cooling Tower Header	Allete Inc - MN Power	156,304	
Itasca			LP/HP Scrubber Spray Gaskets		(924)	
			Reline Absorber/Venturi Pumps (Urethane)		50,653	
			Replace 4A Cooling Tower Fan Cell		34,956	
			Replace 4A Cooling Tower Fan Cell		21,107	
			Replace Absorber Spray Headers		746,697	
			Replace Baghouse Duct Expansion Joint		7,640	
			Bottom Ash Return Cleaning System		19,411	
			Install DCS System		2,915,749	
			Replace Cooling Tower Fan		11,366	
			Install Coal Dust Processing System		309,238	
			Insulate Dust Collectors		105,403	
			Install CEM for NOX Compliance		268,532	
			NOX Environmental Compliance		1,813,601	
			Low NOX Burner Project		2,061,717	
			NOX Upgrade		1,130,400	
			Environmental Distributive Control		716,458	
			NOX Upgrade		136,226	
			Replace #1&2 Bags in Baghouse Compr		44,095	
			Replace Bags in Baghouse		(0)	
			Replace Unit #3 Cooling Tower Fill		422,062	
			Replace Cooling Tower Drift Eliminator		109,621	
			Absorber/Venturi Replace Rubber Lining		198,378	
			Clarifier Under-flow Repair		223,975	
			Modify Absorber Mist Eliminator		40,544	
			Modify Absorber Mist Eliminator		47,916	
			Cooling Tower Piping Unit 3		18,500	
			Replace Pipe Fly Ash Hopper		11,792	
			FRP Bands Unit 3 Cooling Tower Head		8,365	
			Clarifier under-flow Improvements Unit 3		204,896	
			Service Platforms - Scrubber Clarifier		13,015	
			Fly Ash Pond Return PH Adjustment		1,466	
			Purchase Baghouse Controls		8,426	
			Install Flexible Hose in Ash Line		551,861	
			Ash Line Modifications		360,315	
			Replace Hydrolazer		26,095	
			Modify Misc. HVAC Ductwork Unit 3		17,200	
			Sump Additions & Modifications		32,483	
			Replace Bags in Baghouse		(642)	
			Replace Venturi Spray Piping		84,252	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page	Boswell Pl.	Cohasset	Replace Bottom Ash Rubber Elbows	Allete Inc - MN Power	21,584	
Itasca			Bellow Seals - Baghouse		0	
			Stack Drain Pump Improvements		65,517	
			Bottom Ash Improvements		14,873	
			Install ESP Outlet Duct Drain		6,400	
			Upgrade AQCS Modicon Controls		164,318	
			Door on AQCS Venturi		11,520	
			Rubber Lining AQCS Venturi		36,640	
			Modify Oil Solids Extractor		88,888	
			Demineralizer Regeneration Tank		20	
			Modify Outlet Ductwork Unit 3		348,469	
			Chemical System Modifications Units 3 & 4		95,438	
			Replace Unit 4 Supernate Pump Piping		39,415	
			Improve Transition Duct to ESP Unit 4		20,480	
			Upgrade Waste Water System		19,606	
			Extend Trenching Stack to Drain(50%)		47,482	
			Replace Unit 3 Raw Water Pump		31,327	
			Replace Unit 4 AQCS Slurry Sample		11,559	
			Convert Unit 4 Cooling Tower to H2SO4		16,986	
			Spare Parts Unit 4 AQCS Pumps		26,880	
			Units 1 & 2 Life Expansion Project		968,709	
			Replace Valves - AQCS & Waste Water		78,480	
			Modifications to AQCS Building		1,297	
			Unit 4 AQCS Test Scrubber		43,680	
			Modify Cooling Tower Valve Unit 4		26,240	
			Bottom Ash Improvements Units 4		52,212	
			Bottom Ash Improvements Units 1 & 2		26,200	
			Modify Stack Breeching		71,491	
			ACQS Agitator Paddles Unit 4		97,900	
			AQCS Reline Crossover Ducts Unit 4		118,193	
			Drainline Repair		27,715	
			Choke for Chimney Unit 4		57,576	
			Replace Stack Landing Grating		8,965	
			Replace Hydraulic Drive System		118,178	
			Ash Pond Slope Protection		21,312	
			Bottom Ash Upgrade Unit 4		427,519	
			Replace Unit 4 AQCS Slurry Lines		740,206	
			Install Stack Chimney Seal Unit 4 (50%)		28,947	
			Modify AQCS Emergency Deluge System		7,985	
			Install Environmental Instrumentation		29,846	
			Certification of SO2 Continuous Emissions		3,440	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page	Boswell Pl.	Cohasset	Noise Abatement Equipment Unit 4	Allete Inc - MN Power	5,408,720	
Itasca			Noise Abatement Equipment		7,942	
			Return Water Pump from Scrubber Pond		143,007	
			Return Pumps & Piping Unit 3 Scrubber		238,390	
			Motorized Discharge Valves Unit 3		49,328	
			U4 Repl Stak Brchg Expansion Joints		330,880	
			U4 Repl #4 Bottom Ash Piping		83,165	
			U4 Cooling Tower Replace 1 Cell		47,333	
			U4 Replace 6th Floor Ash Transfer		32,639	
			Common Replace 1 & 2 bags		72,069	
			U4 Reinsulate Hot Reheat		11,218	
			U4 Replace Bottom Ash Refractory		128,163	
			U4 Replace 640' Bottom Ash Piping		77,065	
			Common Replace 1 & 2 bags		213,836	
			4 Cooling Tower Fill		100,614	
			4 Replace 4B Absorber Struts		157,933	
			3 Replace Cooling Tower Fill		382,093	
			4 Replace Bottom Ash Seal Trough		49,277	
			Common Dry Chemical Building Roof		30,791	
			3 Replace 1100' Bottom Ash Pipe		168	
			Replace 3 Quench & first Stage Piping		39,737	
			3 Instal ID Fan Guillotines		165,063	
			U4 Circulating Water Pump		16,080	
			U4 Circulating Water Pump Value		12,864	
			Common Replace 2-2 & 2-7 Baghouse		90,644	
			3 Chimney Lining, damper s &lining, duct, tanks		402,235	
			3 Circulating Water Pump		5,802	
			1&2 Opacity Monitors		116,372	
			4 Precipitator Electrodes & Control System		53,887	
			4 Absorber/Venturi Liners		44,202	
			Common #15 Dust Conveying System		45,300	
			4 Rerubber 4D Venturi Lining & Nozzle		146,402	
			4 Induce Draft Fans Duct Lining		18,589	
			4 Economizer to Separator Tank		32,564	
			Unit 4 Absorber Building Roof		81,104	
			1 Baghouse Exp Joint, Nox burners, Rev Air duct Exp Joints		148,210	
			Common 318 Dust Collector		37,776	
			3 3A Duct Flusher Pump		22,137	
			U4 Re-Rubber 4C Venturi Lining		119,666	
			Bottom Ash Piping		274,047	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page	Boswell Pl.	Cohasset	U3 Clarifier Overflow Pipe	Allete Inc - MN Power	51,125	
Itasca			U 3 Clarifier Building Roof		48,529	
			U3 Bottom Ash Sluice Gates		45,562	
			Baghouse Rebaggin 2-8 Compartments		27,742	
			U3 Bottom Ash Hopper Refractory Lining		49,141	
			U3 Bottom Ash Hopper Refractory Lining		(166)	
			U3 Mechanical Damper Drive Unit		40,474	
			Baghouse Bags in Compartments 1-7		31,418	
			U2 Baghouse Compartments 2-5		24,719	
			U2 Baghouse		56,453	
			U2 Baghouse		(111)	
			U3 Circulating Water Pumps		24,701	
			1070 Account		(3,869)	
			U4 Venturi System		118,411	
			U4 Venturi System		(464)	
			1070 Account		(54)	
			U4 Tower Basin Foundation Cooling Tower		60,189	
			U4 Tower Superstructure Cooling Tower		797,968	
			U4 Tower Superstructure Cooling Tower		892,281	
			U4 Tower Superstructure Cooling Tower		1,438,467	
			U4 Tower Superstructure Cooling Tower		(171,373)	
			U4 Absorber & Venturi System		37,108	
			U4 Circulating Water Pumps		115,863	
			Common Dust Suppression Equipment		63,568	
			U4 Replace Absorber Building Roof		94,439	
			Common U1 / U2 Replace Baghouse Bags		289,355	
			Common U1 / U2 Install Guillotine Damper on Outlet Duct		291,271	
			U3 Replace Cooling Tower Hot Water Basins		169,200	
			U4 Replace Absorber Pump		13,276	
			U4 Replace Absorber Pump		59,800	
			U4 Replace Venturi Pump		13,276	
			U4 Replace Venturi Pump		59,800	
			U4 Rerubber Venturiy System Lining		129,613	
			U4 Replace Steel Absorber Building - Module D (WO - 1131737) 3111 C417		132,980	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page Itasca	Boswell Pl.	Cohasset	U4 Replace Steel Absorber Building - Module B (WO - 1160991) 3111 C417	Allete Inc - MN Power	281,628	
			U4 Replace Steel Absorber Building - Module C (WO - 1143869) 3111 C417		(133)	
			U3 Cooling Tower Circulating Water Piping		22,205	
			U3 Cooling Tower Area Prep Fill /Mist Eliminator		148,030	
			U3 Cooling Tower Fan Deck		102,721	
			U3 Cooling Tower Hot Water Basin		167,598	
			U3 CT Cells, Fan, Wiring & Lighting , Motor		473,863	
			U3 Cooling Tower Variable Speed Drives		402,946	
			U3 Replace Cooling Tower Hot Water Basins		(174,100)	
			U3 Cooling Tower		(115,546)	
			Fuel Wet Suppression Applicator Spray System		59,504	
			Fuel Wet Suppression Applicator Spray System		52,397	
			Fuel Wet Suppression Applicator Spray System		54,031	
			Fuel Wet Suppression Applicator Spray System --- Reverse 2005 -- 1070		(52,397)	
			Fuel Wet Suppression Applicator Spray System		(794)	
			Baghouse Bags		311,495	
			U4 ID Outlet Fan and Expansion Joints		158,527	
			U3: Rebuild Cooling Tower D		1,545,728	
			U3: Rebuild Cooling Tower D		(805)	
			U3 Wet Scrubber Dust Flusher Pump		25,419	
			Retired: Wet Scrubber Dust Flusher Pump		(19,223)	
			Dumper Hoods & Ductwork		344,132	
			Retired: Coal Dumper Dust Collect Hoods and Ductwork		(495,946)	
			U3 Environmental Compliance			
			Foundation Work -- 1070		5,276,594	
			Retired: U3 Service Water Pipe		(3,056)	
			Retired: U4 Cooling Make Up Service Water Pipe		(146,124)	
			U3 Mercury Continuous Emission Monitor		532,288	
			U3 Mercury Continuous Emission Monitor - Shelter		28,026	
			U2 Replace ID Fan		117,396	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page Itasca	Boswell Pl.	Cohasset	U4 Replace Bottom Ash Line - 8 inch Basalt Piping	Allete Inc - MN Power	320,789	
			Retired: Bottom Ash Line 8 Inch Carbon Pipe		(362,163)	
			Replace Dumper Dust Collector		1,668,400	
			Replace Dumper Dust Collector - Foundation		69,007	
			Replace Dumper Dust Collector - Dust Suppression		145,571	
			U3 Stack Chimney Stack Elevator		96,452	
			Retired: U3 Chimney Stack Elevator		(21,006)	
			U4 Mercury Continuous Emission Monitors		251,422	
			U3 Sanitary Treatment Effluent Redirect - NPDES			
			Sewage Lift Station		161,303	
			Piping - 4"		34,565	
			Yard Piping - Sewer		34,565	
			Retired: U3 Sewage Lift Station, Piping, AC Panel and Sanitary Treat. Plant		(130,469)	
			U4 Replace ID Fan Expansion Joints		200,000	
			Retired: U4 ID Fan Expansion Joints and Frames (2)		(176,769)	**201,647,205**
LeSueur	Montgomery Gas Turbine	Montgomery	Cement Containment or Vault Area	Alliant Energy Corp	3,313	**3,313**
Martin	Fox Lake	Manyaska	Differential Pressure Transmitter &	Alliant Energy Corp	1,028	
			Opacity Monitoring Test Equipment		2,102	
			Waste Oil Storage System		2,393	
			Coal Crusher for Coal Sampling		4,749	
			Installation of Pump etc. for Neutralizing		6,424	
			Fox 3 CAP Oil Pollution Equipment		9,958	
			Continuous Emission Monitoring System		98,276	
			Coal Pile Runoff Settling System		135,206	
			Replace #3 SO2 Monitor		82,319	
			Environmental Monitors (CEMS)		156,832	
			Filter & Equipment to Treat Boiler Blowdown		607,288	
			Ash Silo & Associated Ash Handling Eq.		940,474	
			Electrostatic Precip on #3 Boiler		3,594,832	**5,641,881**
Otter Tail	Hoot Lake	Fergus Falls	Electrostatic Precipitators	Otter Tail Power Company	1,980,773	
			Filter System		861,632	
			Demineralizer Acid Tank Dike		1,199	
			Vehicle Fule Take Dike		6,137	
			Ash Disposal Site Cover		328,397	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page Otter Tail	Hoot Lake	Fergus Falls	Continuous Emissions Monitoring Systems	Otter Tail Power Company	663,751	
			Plant Water Collection Pond		207,052	
			Demineralizer Waste Water Collection Tank		4,514	
			Ash Disposal Site Monitoring Wells		121,318	
			Cooling Towers		569,768	
			Unit 3 Low NOX Burners		173,701	
			Double Wall Underground Fuel Tank w/Lek Detection and Cathodic Protection		70,472	
			Controls for Bottom Ash and Fly Ash Collection Systems		45,756	
			Replace Header and Flow Control valves in Cooling Tower		28,937	
			Ash Disposal Cell		952,270	
			Fly ash Unloading Tank and Leachate Dustmaster System		245,471	
			CEM DAS Polling Computer, per Environmental Regulatory Requirement		12,992	**6,274,140**
Ramsey	High Bridge	St Paul	570 STACK	Xcel Energy	7,990,403	
			ELECTROSTATIC PERCIPITATORS		376,582	
			COAL UNLOADING FACILITIES		2,727,741	
			FLY ASH HANDLING SYSTEM		275,827	
			BOILER DILUTION EQUIP		11,623	
			OIL EMERGENCY DUMP TANK		25,042	
			GAS EQUIP BOILERS 11&12		72,496	
			COAL DUST SUPPRESSION VEHICLE		22,342	
			AIR MONITORING EQUIPMENT		38,838	
			COOLING WTR OIL ANALYZER		46,806	
			COAL YARD RUNOFF		3,266,236	
			COAL DUST SUPPRESSION		939,619	
			DUST SUPPRESSION UNITS 3&4		44,585	
			OIL SPILL CONTAINMENT		31,985	
			OIL SPILL CONTAINMENT - UNITS 3,4,5,6		292,094	
			MODIFY PLANT EFFLUENT DISCHARGE		1,416,634	
			CONTINOUS EMISSION MONITOR SYSTEM		563,348	
			ASH STORAGE & TRANSFER FACILITY		193,827	**18,336,028**
Scott	Blue Lake	Shakopee	FUEL OIL DIKE & CLAY LINER	Xcel Energy	462,392	
			ENVIRONMENTAL MONITORING		140,309	**602,701**
Sherburne	Sherco	Becker	See Xcel Energy's Exempt Property	Southern MN Municipal Power	126,849,445	**126,849,445**
Sherburne	Sherco	Becker	HOLDING BASIN & CLAY LINER	Xcel Energy	467,336	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page Sherburne	Sherco	Becker	DISCHARGE MONITORING BLDG, EQUIP	Xcel Energy	81,567	
			NEUTRALIZATION FAC FOR DEMINERALIZER		261,552	
			FUEL OIL STORAGE TANK DIKE & CLAY LINER		259,529	
			FLUE GAS SCRUBBER FACILITIES		46,171,506	
			BOTTOM ASH DISPOSAL FACILITIES *25.5A		5,027,578	
			COAL DUST SUPPRESSION FACILITIES		6,292,660	
			CHIMNEY EMISSION MONITORING		268,095	
			ENVIRONMENTAL MONITORING		743,372	
			INDUCED DRAFT FAN SILENCERS		2,171,552	
			COOLING TOWERS UNIT #1		12,622,658	
			COOLING TOWERS UNIT #2		16,591,715	
			COAL DUST SUPPRESSION VEHICLE		45,053	
			SHERCO #3 APPEAL APPROVED 9-23-91		181,617,450	
			LOW NOX BURNERS		24,315,353	
			WET ELECTROSTATIC PRECIPITORS		53,680,657	
			CONTINUOUS EMISSION MONITORING SYS		1,653,373	
			UNIT 3		312,170	
			UNIT 1 & 2 VERTICAL EXPANSION POND #2		14,254,063	
			UNIT 3 COAL BARN FREEZE PROTECTION		609,825	
			COAL STORAGE CLAY LINER		1,718,174	
			BOTTOM ASH POND DIKING, LINER,		1,574,654	
			FLY ASH POND DIKING, LINER,		12,034,245	**382,774,137**
Sherburne	Elk River Steam Plant	Elk River	Waste water	Great River Energy	4,295,010	
			non-scrubber RDF Project		40,032,312	
			scrubber		8,464,275	
Sherburne	Elk River/ RDF Process Plant	Elk River	RDF Project	Great River Energy	4,892,271	**57,683,868**
St. Louis	Laskin	Hoyt Lakes	Ash Pond & Associated Piping	Allete Inc - MN Power	4,164,750	
			New Stack & Wet Scrubber System		53,359	
			Closed Cycle Scrubber System		213,813	
			Ash Discharge Pipe Extension		1,800	
			Enclosed Ash Effluent System		425,270	
			Scrubber Wet Well Pump, Recycle Pumps		64,658	
			Dike Skimmer & Sump Pump		15,706	
			Replace Scrubber Sump Pumps		9,300	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page	Laskin	Hoyt Lakes	Install Hydro Laser	Allete Inc - MN Power	14,800	
St. Louis			Paint Pollution Control Equipment		100,626	
			Lime Treatment System		386,300	
			Replace Scrubber Recycle Pumps		18,600	
			Modify Ash Pond & Scrubber System		109,800	
			Purchase Oxygen Monitors		14,600	
			Install #601 Tank Burn Cover		4,200	
			Modification to Lime System		139,100	
			SPCC For Fuel Oil Storage		7,000	
			Install S02 Continuous Emissions Monitor		27,649	
			Reline Scrubber Seal Tanks		99,040	
			Replace/Repair Wet wheel Pipeline		63,044	
			Lampella Underflow Sump & Piping		50,233	
			Replace Scrubber Inlet Ducts & Joints		12,975	
			Lampella Line/Slurry Feed Repairs		23,670	
			Install Continuous Emissions Monitoring (CEM)		412,369	
			Ash Pond Monitoring Wells		4,637	
			Initiate Ash Pond Closure		584,784	
			Wet Scrubber Recycle Pumps		27,981	
			Upgrade Wet Well System		61,485	
			Ash Pond Improvements		33,360	
			Install Opacity Monitoring System		(0)	
			Stack Elevator Monitor / Scrubber Recycle Pump		194,073	
			Ash Pond Life Extension (100006)		5,167,743	
			Replace Two #1 Scrubber Recycle Pumps		73,754	
			Wet Scrubber Under Drain Pipe Repair		104,240	
			Replace Underflow Drain Pipe		49,198	
			Replace #1 Scrubber Inlet Duct		130,947	
			Upgrade Scrubbers - Units 1 & 2		1,741,981	
			Modifications For Scrubber Upgrade		42,300	
			Wet Scrubber Stainless Steel Piping		116,377	
			Outage Capital Work -- Id Fan		196,862	
			Scrubber/Boiler Connecting Roof		22,977	
			Circulating Water Pumps		19,814	
			Fly Ash Equipment		358,317	
			Fly Ash Equipment		(9,422)	
			Fly Ash Equipment		9,422	
			Fly Ash Equipment		(9,525)	
			CEMS Replace Opacity Analyzer		22,243	
			CEMS Replace Opacity Analyzer: Stack Monitoring System		46,036	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page St. Louis	Laskin	Hoyt Lakes	CEMS Replace Opacity Analyzer: Stack Monitoring System	Allete Inc - MN Power	(225)	
			Repair Roof on Scrubber Building		8,362	
			Repair Roof on Scrubber Building		163	
			Bottom Ash Piping and Pump to City of Hoyt Lakes		85,335	
			Unit 2 Guillotine ID Fan Damper		74,775	
			AREA Unit 2			
			Actuator/Damper		93,122	
			Combustion Optimization System		94,015	
			Combustion Control System		105,794	
			Ductwork Insulation & Lagging		41,793	
			Ductwork		202,758	
			Low NOx Burner Tips		147,540	
			Low NOx Firing System		144,474	
			Low NOx Burner		133,254	
			Secondary Over-Fired Air System (SOFA Boxes)		813,299	
			Unit 2 Duty Cycle Preservation and NOx Reduction			
			VSD / ID Fan Building / Enclosure - Foundation		66,867	
			VSD / ID Fan Building / Enclosure - Structure		52,331	
			VSD / ID Fan Building / Enclosure - HVAC		52,331	
			VSD / ID Fan Building / Enclosure - Insulation		20,351	
			VSD / ID Fan Building / Enclosure - Lighting/Wiring/Cabling		58,145	
			VSD / ID Fan Building / Enclosure - Panel Board		11,629	
			VSD / ID Fan Building / Enclosure - Roof		14,536	
			VSD / ID Fan Building / Enclosure - Siding & Doors		14,536	
			Extractive Emissions Monitoring System		89,439	
			ID Fans / Motor Cabling		114,253	
			ID Fans / Motor Relay		144,720	
			ID Fans / Motor Variable Speed Drive		567,530	
			Boiler Transmitter and Thermalcouples		22,898	
			AREA Unit 1			***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page St. Louis	Laskin	Hoyt Lakes	Actuator/Damper, Combustion Optimization System, Combustion Control System, Ductwork Insulation & Lagging, Ductwork, Low NOx Burner Tips, Low NOx Firing System, Low NOx burner, Secondary Over-Fired Air System (SOFA Boxes)	Allete Inc - MN Power	1,538,072	
			Retired: In Conjunction with New Low NOx Firing System		(34,127)	
			Retired: In Conjunction with New Combustion Control System		(23,052)	
			Bottom Ash Line Piping		73,381	
			U1 ID Fan Guillotine Damper		59,811	
			Retired: U1 ID Fan Damper Unit		(6,015)	
			Unit 1 Duty Cycle Preservation and NOx Reduction			
			Extractive Emissions Monitoring Syst.		610,419	
			ID Fans / Motor Cabling		113,213	
			ID Fans / Motor Relay		158,436	
			ID Fans / Motor Variable Speed Drive		1,057,339	
			AREA Unit 2 ID Fan Replacement		226,948	
			Retired: Concrete Ash Slab		(44,954)	**22,325,745**
Washington	King	Oak Park Hts.	PRECIPITATORS	Xcel Energy	2,136,662	
			DUST SPRAY SYSTEM COAL DUST		1,846,445	
			CLAY LINER AT COAL STORAGE SITE		1,070,727	
			HOLD-UP POND		108,229	
			COOLING TOWERS, BOOSTER PUMPS		9,121,161	
			MANHOLE IN 24-INCH DRAIN LINE		84,182	
			OVERFLOW SYSTEM - AUXILIARY RETENTION		9,796	
			MONITORING EQUIP;		73,176	
			SMOKE DENSITY RECORDER		14,043	
			ENVIRONMENTAL MONITORING		147,178	
			WASTE WATER TREATMENT SYSTEM		58,806	
			DUST COLLECTION SYSTEM, CRUSHER		1,398,570	
			COAL DUST ABATEMENT EQUIPMENT		9,638	
			COAL ASH LANDFILL EXPANSION		1,352,165	
			CONTINUOUS EMISSION MONITORING		797,986	
			LOW NOX BURNERS		3,247,828	
			MERP Project		206,710,000	**228,186,591**
Wright	Monticello	Monticello	COOLING TOWERS	Xcel Energy	5,543,937	
			CONDENSATE STG BASIN		287,109	
			OFF GAS RETENTION (1)		11,755,478	
			CANAL MONITOR SHIELDING		12,437	
			ENVIRONMENTAL MONITORING		2,487,916	***Next Page>***

County	Plant Name	Host Community	Equipment	Company Name	Cost of PC Equipment *	Total Cost by Plant
<Prev. Page	Monticello	Monticello	NUCLEAR	Xcel Energy		
Wright			• Liquid radwaste system		591,276	
			• Solid radwaste solidification		1,150,664	
			• Reactor building closed cooling water syst.		247,226	
			• Radwaste building structure		2,613,841	
			• Reactor core cooling equipment		2,219,742	
			• Residual heat removal syst.		0	
			• Residual heat removal service water syst.		0	
			• High-pressure coolant injection syst.		351,631	
			• Process radiation monitoring syst.		959,212	
			• Reactor projection syst.		0	
			• Primary containment syst.		11,446,465	
			• Reactor core isolation cooling syst.		363,509	
			• Reactor building structure		0	
			• High-pressure coolant injection building		99,928	
			• Secondary containment/standby gas treatment		5,087,761	
			• Off-gas stack base		448,151	
			• Fuel pool cooling and cleanup syst.		0	
			DISCHARGE CANAL MODIFICATION		762,204	
			ELECTRICAL SAFEGUARDS SYSTEM		903,350	
			UNDERGROUND STORAGE TANK MONITORING SYS		157,229	**47,489,064**
Statewide Total						**$1,476,383,341**

* Note that reductions occur when part of the previously exempted property is retired.

Source: Annual returns from utility companies

MPCA Air Quality Permit/Pollution Control Equipment Example

The following is extracted from a permit showing required language that MPCA must find in a permit during its review for the equipment to be considered eligible for a pollution control tax exemption.

TABLE A: LIMITS AND OTHER REQUIREMENTS 08/12/09
06100004 - 004
Facility Name:
Permit Number: **A-10**

Subject Item: GP 005 Low Temperature Fabric Filters
Associated Items:
CE 007 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
CE 008 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
CE 010 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
CE 015 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
CE 016 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
CE 017 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
CE 018 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

What to do Why to do it
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 99 percent control efficiency.
(Minn. R. 7007.0800, subp. 2 and 14)

The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment. (Minn. R. 7007.0800, subp. 2 and 14)

Visible Emissions: The Permittee shall check the fabric filter stacks for any visible emissions once each day of operation during daylight hours. (Minn. R. 7007.0800, subp. 4 and 5)

The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff. (Minn. R. 7007.0800, subp. 14)

Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:

- visible emissions are observed; or
- the fabric filter or any of its components are found during the inspections to need repair.

Corrective actions shall eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter. (Minn. R. 7007.0800, subp. 4, 5, and 14)

Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections. (Minn. R. 7007.0800, subp. 4, 5 and 14)

OPERATIONAL REQUIREMENTS
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted. (Minn. R. 7011.0020)

Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.
(Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16[J])

Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.
(Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16[J])