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Minneapolis, Minnesota 55401

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March 5, 2010

PUBLIC SERVICE COMMISSION –Via Email and US Mail–

Darrell Nitschke, Executive Director
North Dakota Public Service Commission
State Capitol Building, Dept. 408
600 East Boulevard
Bismarck, ND 58505-0480

Re: COMPLIANCE FILING
ELECTRIC RATE INCREASE APPLICATION
CASE NO. PU-07-776

Dear Mr. Nitschke:

Northern States Power Company, a Minnesota corporation operating in North Dakota (“Xcel Energy” or the “Company”) submits to the North Dakota Public Service Commission three copies of our 2010 Review of Remaining Lives depreciation study, which was recently filed in Minnesota.

We provide this information pursuant to the Commission’s December 31, 2008 ORDER ADOPTING SETTLEMENT in Case No. PU-07-776.

Please feel free to contact Dave Sederquist at (701) 241-8632 if you have any questions.

SINCERELY,

/s/

SCOTT SCHEFFER
CASE SPECIALIST

Enclosures

c: Patrick Fahn

139 PU-07-776 Filed: 3/8/2010 Pages: 136
Compliance Filing – 2010 Review of Remaining Lives
Depreciation Study

Northern States Power Company
Scott Scheffer, Case Specialist



414 Nicollet Mall
Minneapolis, Minnesota 55401

February 17, 2010

Burl W. Haar
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

—Via Electronic Filing—

RE: PETITION
2010 ANNUAL REVIEW OF REMAINING LIVES
DOCKET No. E,G002/D-10-_____

Dear Dr. Haar:

Northern States Power Company, a Minnesota corporation, (“Xcel Energy” or the “Company”) submits to the Minnesota Public Utilities Commission (the “Commission”) its 2010 Review of Remaining Lives and supporting materials. This filing is submitted to satisfy the review of depreciation rates for electric and natural gas production facilities in accordance with Minnesota Public Utilities Commission’s September 8, 1978 Order in Docket No. E002/D-77-1086A, Minn. Stat. §216B.11, and Minnesota Rules 7825.0500 through 7825.0900.

Pursuant to Minn. Stat. § 216.17, subd. 3, we have electronically filed this document with the Commission and served a copy on the Office of the Attorney General – Residential Utilities Division. A summary of the filing has been served on all parties on the attached service list. Please contact Lisa H. Perkett, Director, Capital Asset Accounting, at 612-330-6950 if there are any questions regarding this filing.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. S. Madden'.

Teresa S. Madden
Vice President and Controller

Enclosures

c: Service List

State of Minnesota
Before the
Minnesota Public Utilities Commission

David Boyd	Chair
J. Dennis O'Brien	Commissioner
Thomas Pugh	Commissioner
Phyllis Reha	Commissioner
Betsy Wergin	Commissioner

IN THE MATTER OF THE PETITION OF
NORTHERN STATES POWER COMPANY, A
MINNESOTA CORPORATION FOR
APPROVAL OF THE CERTIFICATION OF
OUR 2010 REVIEW OF REMAINING LIVES

DOCKET No. E,G002/D-10-____

PETITION

INTRODUCTION

Northern States Power Company, a Minnesota corporation ("Xcel Energy" or the "Company") submits its proposed 2010 Review of Remaining Lives to the Minnesota Public Utilities Commission (the "Commission") pursuant to Minn. Stat. § 216B.11, Minn. Rules 7825.0500 through 7825.0900, and the Commission's September 8, 1978 ORDER IN THE MATTER OF THE APPLICATION OF NORTHERN STATES POWER COMPANY FOR DEPRECIATION CERTIFICATION in Docket No. E002/D-77-1086A. This Petition provides our 2010 annual review of electric and gas production and gas storage assets lives and net salvage rates, as well as our five year review of net salvage rates. We respectfully request that upon Commission approval, the new remaining lives and net salvage rates become effective January 1, 2010.

Overview

The Commission approved our current remaining lives on July 1, 2009, effective January 1, 2009 in Docket No. E,G002/D-09-160. In addition to the assumed passage-of-time adjustment in lives of all plants, in this filing, we are requesting life changes to the Red Wing and Wilmarth refuse-derived fuel ("RDF") plants, Sherburne County ("Sherco") Unit 3 steam production plant units, Inver Hills other production plant, and the Grand Forks, Maplewood, Sibley, and Wescott gas production plants. Based on our five year review of net salvage rates, also included with this Petition, we recommend changes to all of our steam and other production plants.

In addition to our annual review of remaining lives, Ordering Paragraph Number 4 of the Commission's Order dated August 26, 2005 in Docket No. E,G002/D-05-288 required the Company to submit by February 17, 2010, "its next five-year depreciation study based on its review of the remaining lives and net salvage rates for electric, gas production, and gas storage facilities." In response to the Commission's Order, we also submit with this filing our five year review of net salvage rates. As a result of this review, we recommend changes to all the steam and other production plants.

As part of these changes, we are also requesting that a new life be established for the Nobles Wind Project ("Nobles"), which is scheduled to be placed into service in late November 2010.

We recommend an approximate *increase* of \$82,897 in 2010 annual depreciation expense for assets not presently included in rate riders. Nobles is the only new production plant expected to go into service this year. The Commission has approved the Company's investment in Nobles¹ and the Company is currently seeking recovery of costs associated with Nobles as a part of our Renewable Energy Standard Cost Recovery Rider ("RES Rider"). We note that the Company has requested recovery of the Minnesota electric jurisdictional portion of the increase resulting from depreciation of the Nobles Wind Project through the Renewable Energy Standards ("RES") rider. This request is currently pending Commission action. Our recommendation for Nobles will result in a 2010 depreciation expense of \$2,630,540.

I. Summary of Filing

A one-paragraph summary of the filing accompanies this petition pursuant to Minn. R. 7829.1300, subp. 1.

II. Service on Other Parties

Pursuant to Minn. Stat. § 216.17, subd.3, we have electronically filed this Petition and supporting materials. We also have served a copy on the Office of the Attorney General – Residential Utilities Division. A summary of the filing has been provided to all persons on attached service list.

III. General Filing Information

Pursuant to Minnesota Rules 7825.3200, 7825.3500, and 7829.1300, subp. 3. Xcel Energy provides the following required information:

¹ See Order Approving Investments And Expenditures, Finding The Nobles Project Exempt From Obtaining A Certificate Of Need, And Adding Requirements dated July 10, 2009 in Docket No. E-002/M-08-1437.

A. Name, Address, and Telephone Number of Utility

Northern States Power Company
a Minnesota Corporation
414 Nicollet Mall
Minneapolis, MN 55401
(612) 330-5500

B. Name, Address, and Telephone Number of Utility Attorney

Christopher B. Clark
Managing Attorney
Xcel Energy Services Inc.
414 Nicollet Mall – 5th Floor
Minneapolis, MN 55401

C. Date Proposed Rates Will Take Effect

Xcel Energy requests, upon Commission approval, the proposed remaining lives and net salvage rates become effective January 1, 2010. With respect to the remaining life and net salvage rate for Nobles, we request that an effective date for the new remaining life and net salvage rate coincide with the month the new units are placed in-service. We anticipate the Nobles in-service date to occur in November 2010.

D. Statute Controlling Schedule for Processing the Filing

Under Minn. R. 7829.0100, subp. 11, this request for approval of remaining lives is a “miscellaneous” filing because no determination of the Xcel Energy general revenue requirements is necessary. Comments on a miscellaneous filing are due within 30 days of filing, with replies due 10 days thereafter.

E. Utility Employee Responsible for the Filing

Lisa H. Perkett
Director, Capital Asset Accounting
Xcel Energy Services Inc.
414 Nicollet Mall – 4th Floor
Minneapolis, MN 55401
(612) 330-6950

IV. Review of Remaining Lives and Net Salvage Rates

A. Overview

Xcel Energy Services Inc. personnel have reviewed the remaining lives of the Company’s electric and natural gas production and gas storage facilities as of January 1, 2010. This review evaluated system demand, availability of fuel supplies, operating

and maintenance costs, and future technological advancements that influence the decision about retiring electric and natural gas facilities. As detailed in this Petition, we request that the current remaining lives for all electric and natural gas production and gas storage facilities be adjusted only for the passage of time, except for the specific instances outlined below. We are also requesting that a remaining life be established for Nobles, a new facility, as discussed more fully in Section C below.

The current certified remaining lives for electric and natural gas production and gas storage facilities became effective on January 1, 2009, as approved by the Commission on July 1, 2009, in Docket No. E,G002/D-09-160. We provide as Attachment A to this filing, a summary of all of our requested remaining lives and net salvage rates in our Summary of Proposed Remaining Lives.

B. Passage of Time Adjustment

The “passage of time” adjustment does not cause a change in the depreciation accrual. This adjustment merely reflects that Xcel Energy production facilities have aged one year since January 1, 2009. To begin our analysis of 2010 lives, we make a one-year passage of time adjustment to the certified remaining lives of all relevant facilities. Subtracting one year from the present certified remaining life results in the proposed remaining life as of January 1, 2010. We provide as Attachment B (Comparison of Present and Proposed Lives) to this filing, the certified remaining lives at January 1, 2009, along with our current and proposed remaining lives at January 1, 2010.

C. Change in Remaining Life

1. Electric Utility

For electric facilities, we propose a change to the remaining lives of the: Red Wing and Wilmarth RDF plants; the Sherco Unit 3 steam production plant units; and the Inver Hills other production plant. Further, we are requesting a new life be established for the Nobles other production plant. With the exception of the electric utility changes outlined in more detail below, we are not proposing any additional adjustments to remaining lives other than to account for the passage of time.

Pursuant to Minn. R. 7825.0700, subp. 1, we provide the following three attachments with this filing for our electric assets:

- Attachment C, 2009 Plant In-service
- Attachment D, 2009 Analysis of Depreciation Reserve
- Attachment E, 2009 Summary of Annual Depreciation Accruals

a) Steam Production – *Red Wing and Wilmarth RDF*

Our Red Wing Steam Plant is located in Red Wing, Minnesota and is a two-unit generating plant that burns processed municipal solid waste (called refuse-derived fuel or “RDF”). The power production capability of both units together is 20 megawatts (“MW”). Both units were originally placed in-service in 1949 and converted to burn RDF in 1986.

The Wilmarth Steam Plant is located in Mankato, Minnesota on the Minnesota River. The Wilmarth plant is a two-unit generating plant that burns RDF. The power production capability of both units together is 20 MW. The units were placed in service originally in 1948 and converted to burn RDF in 1987.

Currently, the remaining lives for both the Red Wing and Wilmarth production plants are linked directly with the remaining term of the Company’s contract with Resource Recovery Technologies (“RRT”), which is the provider of refuse for the plant’s fuel. The current contract between Xcel Energy and RRT is set to expire at the end of 2012. The contract has a built-in “follow-on” five year extension which will take effect at the end of the current contract unless one of the parties opts out. The Company intends to not opt out of the contract and, accordingly, use both plants well past the expiration of the current RRT contract’s current term. Moreover, we believe continued operations will be possible with minimum capital expenditure.

Due to our plan of continuing to operate the Red Wing and Wilmarth plants, we request that their remaining lives be extended by five years, to an eight-year remaining life as of January 1, 2010. The estimated depreciation expense impact of these changes to remaining lives, combined with the recommended changes to net salvage provided later in this document, results in an annual *increase* of \$235,464.

b) Steam Production – *Sherco Unit 3*

The Sherco plant is a three-unit coal-fired base load plant located in Becker, Minnesota. Units 1 and 2 began operation in 1976 and 1977, respectively, generating a net 700 MW each. Unit 3 began operation in 1987 generating a net 855 MW, and is jointly-owned with Southern Minnesota Municipal Power Association. Although attached by a common wall to Sherco Units 1 and 2, Unit 3 operates as a separate generating plant with its own depreciable life. The investments we show in our Attachments to this filing are representative of Xcel Energy’s ownership share, unless otherwise noted.

In our 2008 Review of Remaining Lives, the Commission approved a minor adjustment that we had requested for the remaining lives of all the Sherco units.² The life for Sherco Units 1 and 2 was extended 3 years and Unit 3 was extended 2.2 years. This resulted in all three of the units having the same remaining life.

The Sherco plant is Xcel Energy's largest coal plant and is an integral part of the Company's long-term production outlook. With continued regular maintenance, the plant remains in good condition and we believe could operate well beyond the currently established remaining life. In an effort to ensure that we do not financially over-recover for the current generating assets of an essential base load facility, it is important that we avoid using a depreciation schedule that is too rapid. We are, therefore, requesting that the remaining life for Sherco Unit 3 be lengthened by 10 years, to a 23-year remaining life as of January 1, 2010. This change would align Unit 3's overall life span (from in-service to final retirement) with that currently expected for Units 1 and 2. The estimated impact to depreciation expense of this change to remaining life is an annual *decrease* of \$8,824,979. This amount is inclusive of any change we may recommend later in this document for net salvage.

c) Nuclear Production – *Prairie Island*

We are currently in the process of renewing our operating license with the Nuclear Regulatory Commission ("NRC") for the two nuclear reactors at the Prairie Island nuclear production plant. We initiated this process in April 2008, and the renewal would extend the operating license of the two units for an additional 20 years, until 2033 and 2034, respectively. In August 2008, the Prairie Island Indian Community ("PIIC") filed eleven contentions in the NRC's license renewal proceeding, which was referred to the Atomic Safety and Licensing Board ("ASLB") for review.

The ASLB granted the PIIC hearing request and admitted seven of the eleven contentions filed. To date, all seven admitted contentions have been resolved and removed from the ASLB docket. Subsequent to the NRC issuance of the final Safety Evaluation Report and the draft supplemental environmental impact statement, the PIIC filed four additional contentions. If the contentions are not resolved, the resulting adjudicatory process is expected to add approximately eight months onto the NRC's standard 22 month review schedule, resulting in a decision on the Prairie Island license renewal in late 2010.

We filed a Certificate of Need ("CON") with the Commission on May 8, 2008 (Docket No. E002/CN-08-510) requesting to expand the spent fuel storage capacity at Prairie Island to support 20 additional years of operation. On December 18, 2009,

² ORDER APPROVING SERVICE LIVES, SALVAGE RATES, AND RESULTING DEPRECIATION RATES, WITH REQUIREMENTS, October 8, 2008, Docket No. E,G002/D-08-189.

the Commission issued its ORDER ACCEPTING ENVIRONMENTAL IMPACT STATEMENT, AND GRANTING CERTIFICATES OF NEED AND SITE PERMIT WITH CONDITIONS, approving the request. Due to a Minnesota law, Minn. Stat. § 116C.83, subd. 3, the effective date of the Commission's decision though is stayed until June 1, 2010, to provide for legislative review.

Under normal circumstances, the remaining life for a nuclear production plant is set to correspond with the remaining length of the NRC's operating license. However, during the relicensing process for the Monticello plant, a precedent was set whereby once approval becomes likely, the remaining life for depreciation purposes can be extended before the relicensing process is completed. In our 2009 Review of Remaining Lives, we did not recommend any change to the remaining lives of the Prairie Island nuclear units and the Commission approved this recommendation.

The issue was, however, considered in the Company's 2008 Electric Rate Case, Docket No. E002/GR-08-1065. In our rebuttal, we recommended adding three years to the remaining life of Prairie Island due to the perceived likelihood of receiving a license extension for the units combined with the desire to better match depreciation recovery with life extension capital improvements. In its FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER dated October 23, 2009, the Commission ultimately decided to extend the remaining life of each Prairie Island nuclear production unit by ten years. The remaining life we show in this filing reflects this additional ten year change in remaining life decided in the rate case. We do not at this time recommend any further change to the remaining life of the Prairie Island nuclear production units until the entire licensing renewal process is complete.

d) Other Production – *Inver Hills*

The Inver Hills other production plant is located in Inver Grove Heights, Minnesota, and has six units that generate a total of 360 MW of electricity using natural gas and oil as fuel. The plant became operational in 1972.

We made significant improvements to the Inver Hills units during the 2003-2006 timeframe. All six units' generators were rewound during this time, allowing for a further life-extension to be considered for the plant. Some of these improvements were most recently reviewed in the 2007 Review of Remaining Lives in Docket No. E,G002/D-07-251, where the Commission approved the lengthening of the remaining life by four years in its September 21, 2007 Order.

Expanding on the improvements completed earlier, and to further improve the operating outlook for the plant, we made several more major updates. We are in the process of replacing the turbine wheels on all six units at the plant. Currently, we

have completed replacements on four of the six units. We expect the replacements on the remaining two units to occur sometime during 2011 or 2012.

Replacing the turbine wheels is intended to significantly extend the operable life of the plant. Each of the units operates independently, so the remaining lives of the upgraded units do not depend on the replacements being completed on the final two turbines. Accordingly, we request that the remaining life for the Inver Hills plant be extended by ten years, to a 17-year remaining life as of January 1, 2010. The estimated impact to depreciation expense of this change to remaining life is a *decrease* of \$317,726. This amount includes any change we may recommend later in this document for net salvage.

e) Other Production – *Nobles Wind Project*

The Nobles Wind Project is a 201 MW wind energy generation facility consisting of 134 General Electric 1.5 MW sle wind turbines located within a project site encompassing approximately 25,000 acres in Nobles County, Minnesota. Each wind turbine is mounted on a freestanding 262.5 foot high tubular steel tower supported by a cast-in-place concrete foundation. Each turbine's rotor diameter is 252.6 feet, resulting in an overall height of 388.8 feet when one blade is in the vertical position. The equipment at each tower also includes pad mount transformers. This filing discusses only the other production costs and does not include any transmission assets associated with the wind project.

In its ORDER APPROVING INVESTMENTS AND EXPENDITURES, FINDING THE NOBLES PROJECT EXEMPT FROM OBTAINING A CERTIFICATE OF NEED, AND ADDING REQUIREMENTS dated June 10, 2009 in Docket No. E002/M-08-1437, the Commission found that the Company is exempt from the requirement to obtain a CON for Nobles under Minn. Stat. § 216B.243, subd. 9. Nobles is expected to become operational in November 2010 with an expected useful life of 25 years. We propose the life of this new wind resource be set at 25 years, effective with the in-service date that we are currently forecasting as late November 2010. Should our new investment be placed in service earlier or later than November 2010, we will align the start of the new remaining life with the in-service month.

Upon completion of Nobles, the total construction cost will be priced to all pertinent FERC accounts within other production. Although we are currently uncertain about how the asset pricing will be allocated to the relevant FERC accounts, there may be some costs assigned to wind rights in Federal Energy Regulatory Commission ("FERC") account 340.1. We request that all assets, including rights, be recovered over 25 years.

The estimated impact on the 2010 depreciation accruals for Nobles new investment is an *increase* of approximately \$2,630,540. This increase in depreciation expense assumes the investment is in-service in November 2010. We have factored in the recommended net salvage rate into the expense calculation. The depreciation adjustments resulting from the completion of this new wind generation project is shown separately in Attachment B, Comparison of Present and Proposed Lives.

f) Other Production – *West Faribault*

The Commission approved the sale of damaged equipment from the West Faribault plant to Pratt and Whitney in its ORDER IN THE MATTER OF A PETITION OF NORTHERN STATES POWER COMPANY, A MINNESOTA CORPORATION FOR APPROVAL TO SELL SALVAGED PLANT EQUIPMENT TO PRATT AND WHITNEY dated January 29, 2009 in Docket No. E002/PA-08-523. We treated the proceeds from this sale as net salvage, and credited to the reserve for depreciation of the remaining other production facilities, thus preserving the gain for customers by reducing the net book value of electric plant in service. Also, we transferred any excess reserve remaining from the West Faribault plant after all retirements were completed to the reserve for depreciation for the remaining other production facilities. We provide the amounts, recorded in FERC accounts 341 through 346, by plant in the chart below. (Please note that these amounts are not included in the financial Attachments provided with this filing).

Plant	Amount Transferred (\$)
Alliant Tech	1,392
Angus C. Anson	313,673
Black Dog	296,068
Blue Lake	251,954
Grand Meadow Wind Project	546,355
Granite City	19,885
High Bridge	676,606
Inver Hills	145,339
Key City	18,877
Riverside	736,072
United Hospital	6,048
Wind2Battery System	2,069
Total Amount Transferred	\$3,014,338

2. *Gas Utility*

For natural gas facilities, we propose adjustments to the remaining lives of the Grand Forks, Maplewood, Sibley, and Wescott production plants. We outline these changes in more detail below. With the exception of the noted changes below, we are not proposing any additional adjustments to remaining lives for gas storage assets other than to account for the passage of time. Pursuant to Minn. R. 7825.0700, subp. 1, we provide the following three Attachments with this filing for the gas assets:

- Attachment C, 2009 Plant In-service
- Attachment D, 2009 Analysis of Depreciation Reserve
- Attachment E, 2009 Summary of Annual Depreciation Accruals

a) *Gas Production – Grand Forks*

The Grand Forks propane plant located in Grand Forks, North Dakota was placed in service in 1961 with two 30,000 gallon water capacity storage tanks. In 1966, we installed a 1,000,000 gallon refrigerated storage tank, for total effective propane storage of 1,053,000 gallons or 96,500 thousand cubic feet (“MCF”). The Plant’s effective vaporization capacity, or the amount of liquid propane that can be vaporized with one vaporizer and sent into the natural gas distribution system, is 4,300 Decatherms a day.

We used this plant extensively to supplement pipeline gas supply prior to 1984 when the Company began operating the North Dakota and Minnesota areas as one integrated system. We have, however, used the plant sparingly since the late 1980’s. Due to the minimal hours of usage, a relatively small number of moving parts, and a consistent maintenance schedule the original equipment is still in sellable condition.

In the fall of 2009, the last remaining plant inventory was removed from the location. The plant is currently inoperable and there are no current plans to resume operations in the future. We are requesting the remaining life for the Grand Forks plant be shortened by two years, to a one-year remaining life as of January 1, 2010. This will allow the Company to recover the small amount of unrecovered investment over the current year. The estimated impact to depreciation expense of this change to remaining life is an *increase* of \$31,202.

b) *Gas Production – Maplewood*

The Maplewood Propane Plant located in Maplewood, Minnesota was placed in service in 1957 with twenty-four 30,000 and nine 90,000-gallon tanks, with effective propane storage of 1,355,000 gallons, or 123,900 MCF. The Plant’s effective vaporization capacity is 48,000 MCF a day with two vaporizers. Propane storage at this location must be refilled by truck.

Since 2008, we have made many plant upgrades. We installed a perimeter gas detection system and emergency shut-off valves in an effort to provide greater protection to surrounding population areas. These upgrades also improved the production outlook for the plant.

Based upon ongoing maintenance of the plant and equipment upgrades, we believe this facility can operate with normal levels of maintenance for at least ten years. We are requesting the remaining life for the Maplewood plant be lengthened by four years, to a ten-year remaining life as of January 1, 2010. This aligns Maplewood with the Sibley production plant described below. The estimated impact to depreciation expense of this change to remaining life is a *decrease* of \$75,368.

c) Gas Production – *Sibley*

The Sibley Plant, located in Mendota Heights, Minnesota, is a propane plant used to supplement natural gas supplies during peak demand periods. The plant was placed in service in 1953 with a 1.2 million-gallon storage capacity. The plant's effective vaporization capacity is 46,000 MCF per day.

Since 2008, we have completed many of the same upgrades for the Sibley plant as described above for the Maplewood plant. Specifically, we installed a perimeter gas detection system and emergency shut-off valves to provide greater protection to surrounding population areas.

Based upon ongoing maintenance of the plant and equipment upgrades, we believe this facility can operate on normal levels of maintenance for at least ten years. After the upgrades to both the Sibley plant and the Maplewood plant, both plants are in almost identical operating condition and our outlook for both plants is similar. Thus, we believe it is important to keep the remaining lives of both plants aligned. We therefore request the remaining life for the Sibley plant be lengthened by four years, to a ten-year remaining life as of January 1, 2010. The estimated impact to depreciation expense of this change to remaining life is a *decrease* of \$61,517.

d) Gas Production – *Wescott*

The Wescott Propane Plant, located in Inver Grove Heights, Minnesota has two storage tanks of 5,850,000 gallons each, with a total storage of 1,073,200 MCF, and has a pipeline connection to the Sibley Propane Plant. The tanks were put into service in 1963 and 1972. The propane plant shares its site with the Wescott liquid natural gas (“LNG”) Plant.

We have made many upgrades at the Wescott plant since 2008. We replaced the electric heating systems on a failed propane tank. We also installed upgrades to the metering equipment, air compressors, and dryers for the compressors. We completed

these projects for the primary purpose of extending the life of the plant at least two years.

Based on the recently completed upgrades, we believe the Wescott plant will be able to operate effectively past its current eight-year remaining life. Therefore, we are requesting the remaining life for the plant be lengthened by two years, to a ten-year remaining life as of January 1, 2010. The estimated impact to depreciation expense of this change to remaining life is a *decrease* of \$23,053.

D. Change in Net Salvage Rates

The Commission's August 26, 2005, ORDER CERTIFYING DEPRECIATION RATES AND METHODS in Docket No. E,G002/D-05-288 requires the Company to submit by February 17, 2010, "its next five-year depreciation study based on its review of the remaining lives and net salvage rates for electric, gas production, and gas storage facilities." We provide, as Attachment G to this filing, a Comparison of Present to Proposed Net Salvage Rates and the estimated accumulation resulting from using these net salvage rates.

We request a change to the existing net salvage rates for steam and other production assets based upon the criteria outlined in this section. We are not requesting any changes to the net salvage rates for hydro production, gas production, or gas storage assets. Additionally, we discuss the proposed net salvage rate for Nobles in section D.1.b. below. We provide, as Attachment B to this filing, the depreciation expense impact of our proposed change to net salvage rates in combination with the proposed change to remaining lives in our Comparison of Present and Proposed Lives.

1. Electric Utility

In 2009, the Company contracted with TLG Services, Inc. ("TLG") to perform a comprehensive demolition study on all steam and other production electric generating plants. We provide the TLG Dismantling Study (the "Study") as Attachment H to this filing. The main purpose of the Study was to estimate the present-day costs for retiring and demolishing the facilities, also known as final removals of existing facilities. Along with the Study we also provide a complete list of the assumptions used in the cost estimates. For hydro production, we relied on operating personnel for the net salvage review.

a) Steam and Other Production – *All Units except Nobles*

To arrive at the proposed net salvage rates, we started with the TLG Dismantling Study cost estimates for final removals. We then evaluated whether a given unit was close to the end of its useful life, and the possibility that the entire unit would then be removed. We used the cost estimate divided by the original cost for the facility as the starting point for the net salvage analysis. By taking the calculated net salvage rates

from the TLG Demolition Study and applying the logic described below, we recommend the use of modified net salvage rates for most generating facilities or units, which we believe accounts for the possibility of interim retirements and additions that may lengthen the units life in the future.

Consistent with our last filing that used an updated dismantling study, we recommend adjustments to net salvage rates.³ We calculated the proposed net salvage rates from the TLG Dismantling Study amounts based on the facilities' remaining lives and our current expectations on use in the future. The longer the remaining life of a facility, the more uncertainty there is around assuming that the future removal will be the final removal. The closer a facility comes to the end of its useful life, the greater the need for the Company to recover its full costs, especially if there are no immediate plans to rebuild or reuse the facility. Thus, we applied the following principles:

- If the unit has a remaining life less than ten years, we used 100 percent of the cost study's estimate to calculate the net salvage rate;
- If the unit has a remaining life greater than or equal to ten years, but less than twenty years, we used 75 percent of the cost study's estimate to calculate the net salvage rate; and
- If the unit has a remaining life greater than or equal to twenty years, we used 50 percent of the cost study's estimate to calculate the net salvage rate.

We recognize that these generic rules may not be applicable to all facilities. For example, we request the net salvage for Allen S. King and Nobles to be at 100 percent of the TLG Dismantling Study. We expect that King will be completely dismantled at the end of its productive life due to the plant's proximity to a national waterway. Further, the easement agreement for the land on which Nobles resides requires that complete dismantlement and land restoration must take place at the end of production for the location. The generic rules are not appropriate because there is more certainty that complete dismantlement will be required at each of these locations. In addition, the units where the TLG Dismantling Study estimate was between zero and negative five percent, we recommended using 100 percent of the TLG Dismantling Study estimate.

After applying the described criteria, we arrived at an estimated net salvage rate for each steam and other production unit. We request that the proposed net salvage rates be applied to all FERC accounts for each unit or by plant where the units are not segregated. Currently, for some production plants, the net salvage rate is applied only to the Structures and Improvement accounts. Applying a net salvage rate to all FERC accounts will better capture all costs that will ultimately be incurred for removal.

³ ORDER CERIFYING DEPRECIATION RATES AND METHODS, August 26, 2005, Docket No. E,G002/D-05-288.

b) Other Production— *Nobles*

Although we cannot currently determine with certainty when or under what conditions Nobles will be dismantled or demolished for final retirement, we must provide sufficient funding for these events. This will allow the Company to recover the cost of removal for towers, turbines, concrete footings, transformers and other accessory equipment necessary to return the land to usable green space, as we expect to lease land for the majority these large wind energy conversion systems.

Nobles was not included in the TLG Dismantling Study because it was not yet under construction at the time the Study was conducted. The construction and equipment for Nobles is similar to the Grand Meadow Wind Project, which leads us to the conclusion that the dismantling costs for each facility will be comparable. For this reason, we are requesting that the initial net salvage rate for Nobles be set at negative 8.7 percent, effective with the expected in-service date of late November 2010. This is the same net salvage rate that we are proposing for the Grand Meadow Wind Project.

c) Hydro Production – *All Units*

Our hydro production plants were not included in the TLG Dismantling Study, because we felt that our personnel were the most knowledgeable source to provide an appropriate review of the net salvage rates. There have been no recent changes in the condition or complexity at the plant sites that would necessitate a change to the net salvage rates. Thus, we determined that all current net salvage rates for the hydro production plants are reasonable, and we are not requesting any change for hydro production at this time.

2. *Gas Utility*

Company Gas Storage personnel performed an internal review of the net salvage rates for gas production and gas storage assets. Due to the minimal change in the costs of removing gas production equipment, along with relative uncertainty in the volatility of net salvage returns on equipment, we determined that the net salvage rates currently approved for all gas utility accounts continue to be appropriate. We are not requesting any change to the net salvage rates for gas utility accounts at this time.

E. Resource Plan

The Commission's July 1, 2009, ORDER IN THE MATTER OF ANNUAL REVIEW OF REMAINING LIVES, DEPRECIATION FOR ELECTRIC AND GAS PRODUCTION AND GAS STORAGE FACILITIES FOR 2009 in Docket No. E,G002/D-09-160 requires the Company to submit, as a part of future remaining life studies, "an explanation and schedule of the differences between the depreciable service lives and resource planning periods of electric production plant." We provide, as Attachment A to this filing, a Summary of Proposed Remaining Lives, which shows the estimated

remaining life of each generation asset. Our resource planning analysis assumed that most generation assets would be able to meet customer resource needs through the 15-year planning period, and we specifically discuss exceptions in the plan.

We further discuss planned upgrades of specific electric generation assets in our 2007 Resource Plan filing, submitted on December 14, 2007 in Docket E002/RP-07-1572. The next resource plan is anticipated to be filed late third quarter 2010. The primary difference between the expected lives in the 2007 Resource Plan and this filing relate to several peaking facilities. In the 2007 Resource Plan, we discuss and evaluate potential investments that could extend the remaining lives of those facilities through the end of the 15-year planning period. Since the proposed improvements to the plants have not yet been made, it would be inappropriate to update the official remaining lives of those units at this time.

We provide, as Attachment F to this filing, a Resource Plan Comparison that contains a table listing each electric production plant facility, its proposed depreciation life on current investment, the resource plan capacity planning period, and the rationale for the difference between the depreciation life and the resource plan capacity planning period.

V. Implementation of Jurisdictional Depreciation for Financial Purposes

In settlements to the 2007 North Dakota Electric Rate Case (NDPSC Case No. PUC 07-776) and the 2009 South Dakota Electric Rate Case (SDPUC Docket No. EL09-009), the Company was ordered to establish remaining lives for some production plants that were materially different from what the Commission had approved in previous Minnesota Remaining Life filings. This went against the long time precedent of the North Dakota and South Dakota retail rate jurisdictions of keeping the remaining lives consistent with what is approved by the Commission. The primary result of this change is that the total Company depreciation calculation for financial purposes must account for different approved rates in the various retail jurisdictions. We do this by calculating a depreciation expense for each jurisdiction based on its approved remaining lives and then applying a jurisdictional allocator to each amount to blend the amounts together to get a total Company financial view.

We use this blending of depreciation from each of the jurisdictions for financial purposes for the Company as a whole. When completing jurisdictional filings such as this 2010 Review of Remaining Life filing, we only use the lives as approved by the Commission. The result is that the decisions from the North Dakota and South Dakota Commissions do not affect filings we submit to the Commission. For regulatory purposes, the depreciation expense and the accumulated provision for depreciation are based solely on the remaining lives and net salvage rates approved by the Commission. However, numbers within this filing cannot be compared directly

with total Company results that may be reported in filings before the Securities and Exchange Commission or other financial filings completed by the Company.

VI. Effect of the Change in Rates

This Petition will not impact rates, the price of Xcel Energy natural gas and electric service, or the terms and conditions of service. Rather, the changes will reflect the way Xcel Energy recognizes the depreciation expenses for the relevant assets in the current year.

VII. Miscellaneous Information

Pursuant to Minn. R. 7829.0700, subp. 2, Xcel Energy requests that the following persons be placed on the Commission's official service list for this matter:

Christopher B. Clark
Managing Attorney
Xcel Energy Services Inc.
414 Nicollet Mall – 5th Floor
Minneapolis, MN 55401

SaGonna Thompson
Records Specialist
Xcel Energy Services Inc.
414 Nicollet Mall – 7th Floor
Minneapolis, MN 55401

VIII. Proprietary Information

This filing, including all attachments, does not contain any proprietary information.

IX. Supporting Attachments

The following supporting attachments have been included for filing requirement purposes and for additional support to the recommended changes:

Supporting Attachments

- A Summary of Proposed Remaining Lives
- B Comparison of Present and Proposed Lives
- C 2009 Plant In-service
- D 2009 Analysis of Depreciation Reserve
- E 2009 Summary of Annual Depreciation Accruals
- F Resource Plan Comparison
- G Comparison of Present and Proposed Net Salvage Rates
- H 2009 TLG Services, Inc. Dismantling Cost Study

CONCLUSION

Xcel Energy respectfully requests the Commission to approve our proposed 2010 Review of Remaining Lives with an effective date of January 1, 2010 for assets included in base rates, and effective with the in-service date for assets included in Riders.

Dated: February 17, 2010

Northern States Power Company,
A Minnesota Corporation

RESPECTFULLY SUBMITTED,

/s/

BY: _____

LISA H. PERKETT
DIRECTOR, CAPITAL ASSET ACCOUNTING

State of Minnesota
Before the
Minnesota Public Utilities Commission

David Boyd	Chair
J. Dennis O'Brien	Commissioner
Thomas Pugh	Commissioner
Phyllis Reha	Commissioner
Betsy Wergin	Commissioner

IN THE MATTER OF THE PETITION OF
NORTHERN STATES POWER COMPANY, A
MINNESOTA CORPORATION FOR
APPROVAL OF THE CERTIFICATION OF
OUR 2010 REVIEW OF REMAINING LIVES

DOCKET No. E,G002/D-10-___

SUMMARY

SUMMARY OF FILING

Please take notice that on February 17, 2010, Northern States Power Company, a Minnesota corporation ("Xcel Energy" or the "Company") filed with the Minnesota Public Utilities Commission (the "Commission") a Petition for approval of its 2010 Review of Remaining Lives. The Xcel Energy 2010 Review of Remaining Lives proposes that depreciation adjustments be made to the life of the Red Wing and Wilmarth refuse-derived fuel ("RDF") and Sherco Unit 3 steam production plant units, Inver Hills other production plant, and the Grand Forks, Maplewood, Sibley and Westcott gas production facilities. The Company further recommends that the remaining lives on all electric and natural gas production plant along with gas storage facilities only be adjusted to reflect the "passage of time." Xcel Energy has completed an extensive review of the electric generation, gas production, and gas storage net salvage rates. For the electric utility, the Company recommends extensive changes to the net salvage rates for steam and other production plants. The Company is not recommending any changes for the electric hydro production plants, gas production plants, and gas storage assets. Additionally, for the Nobles Wind Project, the Company is recommending certification of new remaining lives and net salvage rates. The net effect of the change in remaining lives (excluding the Nobles Wind Project) is a minimal (\$82,897) increase to annual depreciation expense. Xcel Energy requests January 1, 2010 as the effective date for all remaining life changes other than the new Nobles Wind Project.

CERTIFICATE OF SERVICE

I, Aimee Lemen, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

DOCKET No. E,G002/D-10-_____

Dated this 17th day of February 2010

/s/

Aimee Lemen
Administrative Assistant

Service List Name	First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law, LLC	Suite 100 2265 Roswell Road Marietta, GA 30062	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Andrew	Moratzka	apm@mcmlaw.com	Mackall, Crouse and Moore	1400 AT&T Tower 901 Marquette Ave Minneapolis, MN 55402	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Bob	Bridges	bob.bridges@versopaper.com	Verso Paper	100 East Sartell Street Sartell, MN 56377	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Byron E.	Starns	byron.starns@leonard.com	Leonard Street and Deinard	150 South 5th Street Suite 2300 Minneapolis, MN 55402	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Christopher	Clark	christopher.b.clark@xcelenergy.com	Xcel Energy	5th Floor 414 Nicollet Mall Minneapolis, MN 554011993	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Dave	Johnson	N/A	Community Action of Minneapolis	2104 Park Avenue, #CFD Minneapolis, MN 55404-2847	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	David W.	Niles		Avant Energy Services	Suite 300 200 South Sixth Street Minneapolis, MN 55402	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	James J.	Bertrand	james.bertrand@leonard.com	Leonard Street & Deinard	Suite 2300 150 South Fifth Street Minneapolis, MN 55402	Paper Service	No

Service List Name	First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	James M.	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered	470 U.S. Bank Plaza 200 South Sixth Street Minneapolis, MN 55402	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	James P.	Johnson	james.p.johnson@xcelenergy.com	Xcel Energy	5th Floor 414 Nicollet Mall Minneapolis, MN 554011993	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	James R.	Talcott		Northern Natural Gas Company	1111 South 103rd Street Omaha, NE 68124	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	Jeffrey A.	Daugherty	jeffrey-daugherty@centerpointenergy.com	CenterPoint Energy	800 LaSalle Ave Minneapolis, MN 55402	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	John	Lindell	agorud.ecf@state.mn.us	OAG-RUD	900 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	Joseph V.	Plumbo		Local Union 23, I.B.E.W.	932 Payne Avenue St. Paul, MN 55130	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	Karen Finstad	Hammel	Karen.Hammel@state.mn.us	MN Office Of The Attorney General	1400 BRM Tower 445 Minnesota Street St. Paul, MN 551012131	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	Kathleen D.	Sheehy	kathleen.sheehy@state.mn.us	Office Of Administrative Hearings	PO Box 64620 St. Paul, MN 551640620	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misl Electric and Gas	Lisa	Veith		City of St. Paul	400 City Hall and Courthouse 15 West Kellogg Blvd. St. Paul, MN 55102	Paper Service	No

Service List Name	First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Lloyd W.	Grooms	lgrooms@winthrop.com	Winthrop & Weinstine	Suite 3500 225 South Sixth Street Minneapolis, MN 554024629	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Lon M.	Stanton	N/A	Northern Natural Gas Company	1650 W. 82nd Street Suite 1250 Minneapolis, MN 55431	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Mark J.	Kaufman	mkaufman@ibewlocal949.org	IBEW Local Union 949	12908 Nicollet Avenue South Burnsville, MN 55337	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Megan	Hertzler	megan.hertzler@xcelenergy.com	Xcel Energy	414 Nicollet Mall 5th Floor Minneapolis, MN 554011993	Paper Service	No
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GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Michael	Bradley	bradley@moss-barnett.com	Moss & Barnett	4800 Wells Fargo Ctr 90 S 7th St Minneapolis, MN 55402-4129	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Michael	Franklin	mfranklin@mnchamber.com	Minnesota Chamber Of Commerce	400 Robert Street North Suite 1500 St. Paul, MN 55101	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Michael	Krikava	mkrikava@briggs.com	Briggs And Morgan, P.A.	2200 IDS Center 80 South 8th Street Minneapolis, MN 55402	Electronic Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Richard	Savelkoul	rsavelkoul@felhaber.com	Felhaber, Larson, Fenlon & Vogt, P.A.	444 Cedar St Ste 2100 St. Paul, MN 55101-2136	Paper Service	No

Service List Name	First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Richard	Johnson	johnsonr@moss-barnett.com	Moss & Barnett	4800 Wells Fargo Center90 South Seventh Street Minneapolis, MN 55402	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Robert S	Lee	RSL@MCMLAW.COM	Mackall Crouse & Moore Law Offices	1400 AT&T Tower 901 Marquette Ave Minneapolis, MN 554022859	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Roger	Boehner	lorenbrf@aol.com		6511 Humboldt Avenue N., #210 Brooklyn Center, MN 55430	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Ron	Spangler, Jr.	rlspangler@otpc.com	Otter Tail Power Company	215 So. Cascade St. PO Box 496 Fergus Falls, MN 565380496	Electronic Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Ron	Elwood		Legal Services Advocacy Project	2324 University Ave Ste 101 St. Paul, MN 55114	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Ronald M.	Giteck	ron.giteck@state.mn.us	Office Of Attorney General	Residential Utilities Division 445 Minnesota Street, 900 BRM Tower St. Paul, MN 55101	Electronic Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	SaGonna	Thompson	Regulatory.Records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Sandra	Hofstetter	N/A	MN Chamber of Commerce	1140 Mary Hill Cir. Hartland, WI 53029-8009	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Sharon	Ferguson	sharon.ferguson@state.mn.us	State of MN - DOC	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Steven	Bosacker		City of Minneapolis	City Hall, Room 301M 350 South Fifth Street Minneapolis, MN 554151376	Paper Service	No

Service List Name	First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Thomas G.	Koehler	N/A	Local Union #160, IBEW	2522 Marshall Street NE Minneapolis, MN 55418	Paper Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	Todd J.	Guerrero	tguerrero@fredlaw.com	Fredrikson & Byron, P.A.	Suite 4000 200 South Sixth Street Minneapolis, MN 554021425	Electronic Service	No
GEN_SL_Northern States Power Company dba Xcel Energy-Elec_Xcel Misc Electric and Gas	William	Stamets	bill.stamets@state.mn.us	Office of the Attorney General	Suite 900445 Minnesota Street St. Paul, MN 551012127	Electronic Service	No

Northern States Power Company
 Summary of Proposed Remaining Lives

Docket No. E,G002/D-10-_____

Attachment A

Page 1 of 9

Electric Utility
 Steam Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/10
Black Dog			
E311	Structures & Improvements	-8.3	22.0 yrs
E312	Boiler Plant Equipment	-18.0	3.0
E314	Turbogenerator Units	-18.0	3.0
E315	Accessory Electric Equipment	-18.0	3.0
E316	Miscellaneous Power Plant Equipment	-18.0	3.0
Allen S. King			
E311	Structures & Improvements	-5.5	27.5 yrs
E312	Boiler Plant Equipment	-5.5	27.5
E314	Turbogenerator Units	-5.5	27.5
E315	Accessory Electric Equipment	-5.5	27.5
E316	Miscellaneous Power Plant Equipment	-5.5	27.5
Minnesota Valley			
E311	Structures & Improvements	-101.9	7.5 yrs
E312	Boiler Plant Equipment	-101.9	7.5
E314	Turbogenerator Units	-101.9	7.5
E315	Accessory Electric Equipment	-101.9	7.5
E316	Miscellaneous Power Plant Equipment	-101.9	7.5
Red Wing			
E311	Structures & Improvements	-23.3	8.0 yrs
E312	Boiler Plant Equipment	-23.3	8.0
E314	Turbogenerator Units	-23.3	8.0
E315	Accessory Electric Equipment	-23.3	8.0
E316	Miscellaneous Power Plant Equipment	-23.3	8.0
Sherco Unit 1 & 2			
E311	Structures & Improvements	-5.1	13.0 yrs
E312	Boiler Plant Equipment	-5.1	13.0
E314	Turbogenerator Units	-5.1	13.0
E315	Accessory Electric Equipment	-5.1	13.0
E316	Miscellaneous Power Plant Equipment	-5.1	13.0

Northern States Power Company
 Summary of Proposed Remaining Lives

Docket No. E,G002/D-10-_____

Attachment A

Page 2 of 9

Electric Utility
 Steam Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/10
Sherco Unit 3			
E311	Structures & Improvements	-4.3	23.0 yrs
E312	Boiler Plant Equipment	-4.3	23.0
E314	Turbogenerator Units	-4.3	23.0
E315	Accessory Electric Equipment	-4.3	23.0
E316	Miscellaneous Power Plant Equipment	-4.3	23.0
Wilmarth			
E311	Structures & Improvements	-23.0	8.0 yrs
E312	Boiler Plant Equipment	-23.0	8.0
E314	Turbogenerator Units	-23.0	8.0
E315	Accessory Electric Equipment	-23.0	8.0
E316	Miscellaneous Power Plant Equipment	-23.0	8.0

Northern States Power Company
 Summary of Proposed Remaining Lives

Docket No. E,G002/D-10-_____

Attachment A

Page 3 of 9

Electric Utility
 Nuclear Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/10
Monticello			
E302	Franchises & Consents	0.0	20.8 yrs
E321	Structures & Improvements	0.0	20.8
E322	Reactor Plant Equipment	0.0	20.8
E323	Turbogenerator Units	0.0	20.8
E324	Accessory Electric Equipment	0.0	20.8
E325	Miscellaneous Power Plant Equipment	0.0	20.8
Monticello - Interim Storage Facility			
E321	Structures and Improvements	0.0	20.8 yrs
E322	Reactor Plant Equipment	0.0	20.8
Prairie Island Unit 1 & 2			
E321	Structures & Improvements	0.0	14.3 yrs
E322	Reactor Plant Equipment	0.0	14.3
E323	Turbogenerator Units	0.0	14.3
E324	Accessory Electric Equipment	0.0	14.3
E325	Miscellaneous Power Plant Equipment	0.0	14.3
Prairie Island - Interim Storage Facility			
E321	Structures and Improvements	0.0	14.3 yrs
E322	Reactor Plant Equipment	0.0	14.3

Northern States Power Company
 Summary of Proposed Remaining Lives

Docket No. E,G002/D-10-____

Attachment A

Page 4 of 9

Electric Utility
 Hydro Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/10
Hennepin Island			
E302	Franchises & Consents	0.0	24.2 yrs
E331	Structures & Improvements	-30.0	24.2
E332	Reservoirs, Dams & Waterways	-30.0	24.2
E333	Water Wheels, Turbines & Generators	-30.0	24.2
E334	Accessory Electric Equipment	-30.0	24.2
E335	Miscellaneous Power Plant Equipment	-30.0	24.2
Lower Dam			
E331	Structures & Improvements	-30.0	24.2 yrs
E332	Reservoirs, Dams & Waterways	-30.0	24.2
Upper Dam			
E332	Reservoirs, Dams & Waterways	-30.0	24.2 yrs
E335	Miscellaneous Power Plant Equipment	-30.0	24.2

Northern States Power Company
 Summary of Proposed Remaining Lives

Docket No. E,G002/D-10-_____

Attachment A

Page 5 of 9

Electric Utility
 Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/10
Alliant Tech			
E344	Generators	0.0	2.8 yrs
Angus C. Anson Unit 2 & 3			
E341	Structures & Improvements	-4.5	25.4 yrs
E342	Fuel Holders, Producers & Accessories	-4.4	9.8
E344	Generators	-4.4	9.8
E345	Accessory Electric Equipment	-4.4	9.8
E346	Miscellaneous Power Plant Equipment	-4.4	9.8
Angus C. Anson Unit 4			
E341	Structures & Improvements	-4.5	25.4 yrs
E342	Fuel Holders, Producers & Accessories	-4.5	25.4
E344	Generators	-4.5	25.4
E345	Accessory Electric Equipment	-4.5	25.4
E346	Miscellaneous Power Plant Equipment	-4.5	25.4
Black Dog Unit 5			
E341	Structures & Improvements	-8.3	22.0 yrs
E342	Fuel Holders, Producers & Accessories	-8.3	22.0
E344	Generators	-8.3	22.0
E345	Accessory Electric Equipment	-8.3	22.0
E346	Miscellaneous Power Plant Equipment	-8.3	22.0
Blue Lake Units 1 thru 4			
E341	Structures & Improvements	-5.2	25.4 yrs
E342	Fuel Holders, Producers & Accessories	-11.9	3.0
E344	Generators	-11.9	3.0
E345	Accessory Electric Equipment	-11.9	3.0
E346	Miscellaneous Power Plant Equipment	-11.9	3.0
Blue Lake Units 7 & 8			
E341	Structures & Improvements	-5.2	25.4 yrs
E342	Fuel Holders, Producers & Accessories	-5.2	25.4
E344	Generators	-5.2	25.4
E345	Accessory Electric Equipment	-5.2	25.4
E346	Miscellaneous Power Plant Equipment	-5.2	25.4

Northern States Power Company
 Summary of Proposed Remaining Lives

Docket No. E,G002/D-10-_____

Attachment A

Page 6 of 9

Electric Utility
 Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/10
Grand Meadow Wind Project			
E340.1	Wind Rights	0.0	23.9 yrs
E341	Structures & Improvements	-8.7	23.9
E342	Fuel Holders, Producers & Accessories	-8.7	23.9
E344	Generators	-8.7	23.9
E345	Accessory Electric Equipment	-8.7	23.9
E346	Miscellaneous Power Plant Equipment	-8.7	23.9
Granite City			
E341	Structures & Improvements	-38.8	3.0 yrs
E342	Fuel Holders, Producers & Accessories	-38.8	3.0
E344	Generators	-38.8	3.0
E345	Accessory Electric Equipment	-38.8	3.0
E346	Miscellaneous Power Plant Equipment	-38.8	3.0
High Bridge			
E341	Structures & Improvements	-3.1	28.4 yrs
E342	Fuel Holders, Producers & Accessories	-3.1	28.4
E344	Generators	-3.1	28.4
E345	Accessory Electric Equipment	-3.1	28.4
E346	Miscellaneous Power Plant Equipment	-3.1	28.4
Inver Hills			
E341	Structures & Improvements	-11.0	17.0 yrs
E342	Fuel Holders, Producers & Accessories	-11.0	17.0
E344	Generators	-11.0	17.0
E345	Accessory Electric Equipment	-11.0	17.0
E346	Miscellaneous Power Plant Equipment	-11.0	17.0
Key City			
E341	Structures & Improvements	-38.6	3.0 yrs
E342	Fuel Holders, Producers & Accessories	-38.6	3.0
E344	Generators	-38.6	3.0
E345	Accessory Electric Equipment	-38.6	3.0
E346	Miscellaneous Power Plant Equipment	-38.6	3.0
Nobles Wind Project (In-service date, not January 1, 2010)			
E340.1	Wind Rights	0.0	25.0 yrs
E341	Structures & Improvements	-8.7	25.0
E342	Fuel Holders, Producers & Accessories	-8.7	25.0
E344	Generators	-8.7	25.0
E345	Accessory Electric Equipment	-8.7	25.0
E346	Miscellaneous Power Plant Equipment	-8.7	25.0

Northern States Power Company
 Summary of Proposed Remaining Lives

Docket No. E,G002/D-10-_____
 Attachment A
 Page 7 of 9

Electric Utility
 Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/10
Riverside			
E341	Structures & Improvements	-5.0	29.2 yrs
E342	Fuel Holders, Producers & Accessories	-5.0	29.2
E344	Generators	-5.0	29.2
E345	Accessory Electric Equipment	-5.0	29.2
E346	Miscellaneous Power Plant Equipment	-5.0	29.2
United Hospital			
E344	Generators	0.0	7.7 yrs
Wind-to-Battery System			
E342	Fuel Holders, Producers & Accessories	0.0	14.0 yrs

Northern States Power Company
 Summary of Proposed Remaining Lives

Docket No. E,G002/D-10-____

Attachment A

Page 8 of 9

Gas Utility
 Gas Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/10
Grand Forks			
G305	Structures & Improvements	-15.0	1.0 yrs
G311	LP Gas Equipment	4.0	1.0
G320	Other Equipment	-23.0	1.0
Maplewood			
G305	Structures & Improvements	-17.0	10.0 yrs
G311	LP Gas Equipment	8.0	10.0
G320	Other Equipment	0.0	10.0
Sibley			
G305	Structures & Improvements	-1.0	10.0 yrs
G311	LP Gas Equipment	8.0	10.0
G320	Other Equipment	-1.0	10.0
Wescott			
G305	Structures & Improvements	-3.0	10.0 yrs
G311	LP Gas Equipment	1.0	10.0
G320	Other Equipment	3.0	10.0

Northern States Power Company
 Summary of Proposed Remaining Lives

Docket No. E,G002/D-10-____
 Attachment A
 Page 9 of 9

Gas Utility
 Gas Storage

Account	Description	Net Salvage (%)	Remaining Life 01/01/10
Wescott			
G361	Structures & Improvements	-10.0	8.0 yrs
G362	Gas Holders	5.0	8.0
G363	Purification Equipment	1.0	8.0
G363.1	Liquefaction Equipment	2.0	8.0
G363.2	Vaporizing Equipment	2.0	18.0
G363.3	Compressor Equipment	2.0	8.0
G363.4	Measuring & Regulating Equipment	6.0	8.0
G363.5	Other Equipment	0.0	8.0

Electric and Gas Utilities Summary

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
Total Steam Production	2,028,956,188	1,127,194,039	17.0	16.0	-4.2	61,815,812	17.2	-7.1	60,820,060	(995,752)
Total Nuclear Production	1,936,305,504	1,314,296,101	17.9	16.9	0.0	36,862,266	16.9	0.0	36,862,266	-
Total Hydro Production	12,763,469	6,321,735	25.2	24.2	-30.0	388,994	24.2	-30.0	388,994	-
Total Other Production	1,317,953,611	279,115,743	24.8	23.8	-5.0	46,490,185	23.1	-4.8	47,697,569	1,207,384
Total Gas Production	16,301,742	12,819,909	7.4	6.4	2.8	473,079	8.8	2.8	344,344	(128,736)
Total Gas Storage	33,903,530	25,252,046	12.9	11.9	0.8	702,243	11.9	0.8	702,243	-
Total Company	5,346,184,044	2,764,999,572				146,732,580			146,815,477	82,897
Total Change to Depreciation Expense										82,897

	Plant Balance 11/15/2010 (1)	Reserve Balance 11/15/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	1/2 Month Depreciation Expense (9)	
Total Nobles Wind Project	484,000,000	-	N/A	N/A	N/A	-	25.0	-8.7	2,630,540	2,630,540
Total Change to Depreciation Expense										2,713,437

Electric Steam Production

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
E311 Structures & Improvements										
Black Dog	26,812,204	25,728,508	23.0	22.0	-30.0	414,880	22.0	-8.3	150,414	(264,466)
Allen S. King	31,973,133	20,259,755	28.5	27.5	-40.0	891,005	27.5	-5.5	489,887	(401,117)
Minnesota Valley	4,105,633	5,742,718	8.5	7.5	-70.0	164,914	7.5	-101.9	339,541	174,626
Red Wing	7,115,773	7,813,322	4.0	3.0	-35.0	597,657	8.0	-23.3	120,053	(477,604)
Sherco Unit 1 & 2	81,066,226	72,471,219	14.0	13.0	-30.0	2,531,913	13.0	-5.1	979,183	(1,552,730)
Sherco Unit 3	130,707,009	97,771,275	14.0	13.0	-20.0	4,544,395	23.0	-4.3	1,676,354	(2,868,041)
Wilmarth	5,901,935	6,993,269	4.0	3.0	-35.0	324,781	8.0	-23.0	33,264	(291,517)
Total/Composite	287,681,914	236,780,066	14.7	13.7	-27.4	9,469,546	19.0	-7.3	3,788,696	(5,680,850)
E312 Boiler Plant Equipment										
Black Dog	55,013,315	46,119,854	4.0	3.0	0.0	2,964,487	3.0	-18.0	6,265,286	3,300,799
Allen S. King	439,743,344	79,526,537	28.5	27.5	0.0	13,098,793	27.5	-5.5	13,978,280	879,487
Minnesota Valley	6,440,017	8,253,384	8.5	7.5	-70.0	359,286	7.5	-101.9	633,201	273,915
Red Wing	33,559,289	30,295,151	4.0	3.0	0.0	1,088,046	8.0	-23.3	1,385,432	297,385
Sherco Unit 1 & 2	311,136,043	202,026,350	14.0	13.0	0.0	8,393,053	13.0	-5.1	9,613,664	1,220,611
Sherco Unit 3	374,821,501	229,946,345	14.0	13.0	0.0	11,144,243	23.0	-4.3	6,999,673	(4,144,570)
Wilmarth	30,953,737	29,509,661	4.0	3.0	0.0	481,359	8.0	-23.0	1,070,429	589,071
Total/Composite	1,251,667,246	625,677,282	17.8	16.8	-0.4	37,529,267	17.9	-7.0	39,945,965	2,416,698
E314 Turbogenerator Units										
Black Dog	33,841,258	31,318,171	4.0	3.0	0.0	841,029	3.0	-18.0	2,871,505	2,030,476
Allen S. King	90,573,890	19,693,198	28.5	27.5	0.0	2,577,480	27.5	-5.5	2,758,627	181,148
Minnesota Valley	2,156,244	2,760,304	8.5	7.5	-70.0	120,708	7.5	-101.9	212,420	91,712
Red Wing	1,788,810	1,579,580	4.0	3.0	0.0	69,743	8.0	-23.3	78,253	8,510
Sherco Unit 1 & 2	94,750,813	55,017,949	14.0	13.0	0.0	3,056,374	13.0	-5.1	3,428,089	371,715
Sherco Unit 3	56,756,467	36,469,039	14.0	13.0	0.0	1,560,571	23.0	-4.3	988,172	(572,399)
Wilmarth	2,305,158	2,253,126	4.0	3.0	0.0	17,344	8.0	-23.0	72,777	55,433
Total/Composite	282,172,641	149,091,367	17.3	16.3	-0.5	8,243,250	14.8	-7.6	10,409,844	2,166,594

Electric Steam Production

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
E315 Accessory Electric Equipment										
Black Dog	13,993,470	10,691,734	4.0	3.0	0.0	1,100,579	3.0	-18.0	1,940,187	839,608
Allen S. King	40,068,646	4,449,503	28.5	27.5	0.0	1,295,242	27.5	-5.5	1,375,379	80,137
Minnesota Valley	598,206	765,790	8.5	7.5	-70.0	33,488	7.5	-101.9	58,932	25,444
Red Wing	1,417,077	1,309,479	4.0	3.0	0.0	35,866	8.0	-23.3	54,722	18,856
Sherco Unit 1 & 2	35,501,875	28,385,091	14.0	13.0	0.0	547,445	13.0	-5.1	686,721	139,277
Sherco Unit 3	68,158,471	37,023,965	14.0	13.0	0.0	2,394,962	23.0	-4.3	1,481,101	(913,861)
Wilmarth	751,501	736,289	4.0	3.0	0.0	5,071	8.0	-23.0	23,507	18,437
Total/Composite	160,489,246	83,361,851	15.3	14.3	-0.3	5,412,652	15.6	-6.6	5,620,549	207,897
E316 Miscellaneous Power Plant Equipment										
Black Dog	2,394,757	2,366,286	4.0	3.0	0.0	9,490	3.0	-18.0	153,176	143,685
Allen S. King	5,625,030	4,835,389	28.5	27.5	0.0	28,714	27.5	-5.5	39,964	11,250
Minnesota Valley	311,744	399,077	8.5	7.5	-70.0	17,452	7.5	-101.9	30,711	13,259
Red Wing	769,074	738,412	4.0	3.0	0.0	10,221	8.0	-23.3	26,232	16,011
Sherco Unit 1 & 2	8,903,246	6,430,007	14.0	13.0	0.0	190,249	13.0	-5.1	225,177	34,928
Sherco Unit 3	28,176,616	16,850,922	14.0	13.0	0.0	871,207	23.0	-4.3	545,100	(326,108)
Wilmarth	764,673	663,381	4.0	3.0	0.0	33,764	8.0	-23.0	34,646	882
Total/Composite	46,945,140	32,283,473	13.8	12.8	-0.5	1,161,097	16.8	-6.6	1,055,006	(106,092)
Total Steam Production	2,028,956,188	1,127,194,039	17.0	16.0	-4.2	61,815,812	17.2	-7.1	60,820,060	(995,752)

Electric Nuclear Production

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
E302 Franchises & Consents										
Monticello	32,257,984	3,734,040	21.8	20.8	0.0	1,371,343	20.8	0.0	1,371,343	-
Total/Composite	32,257,984	3,734,040	21.8	20.8	0.0	1,371,343	20.8	0.0	1,371,343	-
E321 Structures & Improvements										
Monticello	139,115,328	92,817,277	21.8	20.8	0.0	2,225,868	20.8	0.0	2,225,868	-
Monticello Interim Storage	22,792,183	1,303,674	21.8	20.8	0.0	1,033,101	20.8	0.0	1,033,101	-
Prairie Island Unit 1 & 2	196,019,997	167,754,664	15.3	14.3	0.0	1,976,597	14.3	0.0	1,976,597	-
PI Interim Storage	11,938,940	10,923,617	15.3	14.3	0.0	71,002	14.3	0.0	71,002	-
Total/Composite	369,866,448	272,799,232	19.3	18.3	0.0	5,306,568	18.3	0.0	5,306,568	-
E322 Reactor Plant Equipment										
Monticello	331,219,043	236,127,306	21.8	20.8	0.0	4,571,718	20.8	0.0	4,571,718	-
Monticello Interim Storage	15,443,237	882,052	21.8	20.8	0.0	700,057	20.8	0.0	700,057	-
Prairie Island Unit 1 & 2	488,800,697	325,944,650	15.3	14.3	0.0	11,388,535	14.3	0.0	11,388,535	-
PI Interim Storage	51,922,505	26,375,082	15.3	14.3	0.0	1,786,533	14.3	0.0	1,786,533	-
Total/Composite	887,385,481	589,329,091	17.2	16.2	0.0	18,446,843	16.2	0.0	18,446,843	-
E323 Turbogenerator Units										
Monticello	112,909,510	40,031,841	21.8	20.8	0.0	3,503,734	20.8	0.0	3,503,734	-
Prairie Island Unit 1 & 2	169,391,525	124,578,965	15.3	14.3	0.0	3,133,745	14.3	0.0	3,133,745	-
Total/Composite	282,301,035	164,610,807	18.7	17.7	0.0	6,637,480	17.7	0.0	6,637,480	-

Electric Nuclear Production

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
E324 Accessory Electric Equipment										
Monticello	43,053,598	32,069,912	21.8	20.8	0.0	528,062	20.8	0.0	528,062	-
Prairie Island Unit 1 & 2	195,638,298	152,965,217	15.3	14.3	0.0	2,984,132	14.3	0.0	2,984,132	-
Total/Composite	<u>238,691,896</u>	<u>185,035,129</u>	<u>16.3</u>	<u>15.3</u>	<u>0.0</u>	<u>3,512,193</u>	<u>15.3</u>	<u>0.0</u>	<u>3,512,193</u>	<u>-</u>
E325 Miscellaneous Power Plant Equipment										
Monticello	53,549,233	39,761,234	21.8	20.8	0.0	662,885	20.8	0.0	662,885	-
Prairie Island Unit 1 & 2	72,253,427	59,026,569	15.3	14.3	0.0	924,955	14.3	0.0	924,955	-
Total/Composite	<u>125,802,660</u>	<u>98,787,803</u>	<u>18.0</u>	<u>17.0</u>	<u>0.0</u>	<u>1,587,840</u>	<u>17.0</u>	<u>0.0</u>	<u>1,587,840</u>	<u>-</u>
Total Nuclear Production	<u>1,936,305,504</u>	<u>1,314,296,101</u>	<u>17.9</u>	<u>16.9</u>	<u>0.0</u>	<u>36,862,266</u>	<u>16.9</u>	<u>0.0</u>	<u>36,862,266</u>	<u>-</u>

Electric Hydro Production

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
E302 Franchises & Consents										
Hennepin Island	2,857,039	275,373	25.2	24.2	0.0	106,680	24.2	0.0	106,680	-
Total/Composite	2,857,039	275,373	0.0	24.2	0.0	106,680	24.2	0.0	106,680	-
E331 Structures & Improvements										
Hennepin Island	464,281	485,396	25.2	24.2	-30.0	4,883	24.2	-30.0	4,883	-
Lower Dam	42,016	47,659	25.2	24.2	-30.0	288	24.2	-30.0	288	-
Total/Composite	506,297	533,055	25.2	24.2	-30.0	5,171	24.2	-30.0	5,171	-
E332 Reservoirs, Dams & Waterways										
Hennepin Island	1,356,505	534,229	25.2	24.2	-30.0	50,795	24.2	-30.0	50,795	-
Lower Dam	762,902	771,928	25.2	24.2	-30.0	9,084	24.2	-30.0	9,084	-
Upper Dam	4,491,476	2,771,255	25.2	24.2	-30.0	126,763	24.2	-30.0	126,763	-
Total/Composite	6,610,884	4,077,412	25.2	24.2	-30.0	186,642	24.2	-30.0	186,642	-
E333 Water Wheels, Turbines & Generators										
Hennepin Island	2,349,525	1,109,709	25.2	24.2	-30.0	80,358	24.2	-30.0	80,358	-
Total/Composite	2,349,525	1,109,709	25.2	24.2	-30.0	80,358	24.2	-30.0	80,358	-
E334 Accessory Electric Equipment										
Hennepin Island	378,901	265,195	25.2	24.2	-30.0	9,396	24.2	-30.0	9,396	-
Total/Composite	378,901	265,195	25.2	24.2	-30.0	9,396	24.2	-30.0	9,396	-
E335 Miscellaneous Power Plant Equipment										
Hennepin Island	37,779	37,714	25.2	24.2	-30.0	471	24.2	-30.0	471	-
Upper Dam	23,046	23,276	25.2	24.2	-30.0	276	24.2	-30.0	276	-
Total/Composite	60,824	60,990	25.2	24.2	-30.0	747	24.2	-30.0	747	-
Total Hydro Production	12,763,469	6,321,735	25.2	24.2	-30.0 *	388,994	24.2	-30.0 *	388,994	-

* Composite Net Salvage % excludes E302

Electric Other Production

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	Less Present Expense (10)
E340.1 Wind Rights										
Grand Meadow Wind Project	8,686,818	389,958	24.9	23.9	0.0	347,149	23.9	0.0	347,149	-
Total/Composite	8,686,818	389,958	24.9	23.9	0.0	347,149	23.9	0.0	347,149	-
E341 Structures & Improvements										
Angus C. Anson	7,432,379	4,162,817	26.4	25.4	-10.0	157,984	25.4	-4.5	141,891	(16,094)
Black Dog Unit 5	15,361,662	3,670,525	23.0	22.0	-30.0	740,893	22.0	-8.3	589,371	(151,522)
Blue Lake	1,587,263	1,147,481	26.4	25.4	-25.0	32,937	25.4	-5.2	20,564	(12,373)
Grand Meadow Wind Project	4,750,902	235,487	24.9	23.9	-10.0	208,808	23.9	-8.7	206,224	(2,584)
Granite City	1,241,718	1,719,204	4.0	3.0	-60.0	89,182	3.0	-38.8	1,434	(87,748)
High Bridge	68,398,212	3,936,047	29.4	28.4	-10.0	2,510,633	28.4	-3.1	2,344,455	(166,179)
Inver Hills	1,248,689	1,340,340	8.0	7.0	-30.0	40,422	17.0	-11.0	2,688	(37,734)
Key City	1,002,265	1,142,687	4.0	3.0	-20.0	20,010	3.0	-38.6	82,151	62,140
Riverside	49,176,753	20,081,502	30.0 *	29.2	-10.0	1,166,024	29.2	-5.0	1,081,731	(84,293)
Total/Composite	150,199,843	37,436,089	26.6	25.6	-9.6	4,966,893	26.4	-3.5	4,470,507	(496,386)
E342 Fuel Holders, Producers & Accessories										
Angus C. Anson Unit 2 & 3	1,094,780	700,211	10.8	9.8	0.0	40,262	9.8	-4.4	45,177	4,915
Black Dog Unit 5	2,983,077	693,782	23.0	22.0	0.0	104,059	22.0	-8.3	115,313	11,254
Blue Lake Units 1 thru 4	1,311,529	1,123,154	4.0	3.0	0.0	62,792	3.0	-11.9	114,815	52,024
Granite City	416,373	409,182	4.0	3.0	0.0	2,397	3.0	-38.8	56,248	53,851
High Bridge	63,702,035	415,626	29.4	28.4	-10.0	2,452,698	28.4	-3.1	2,297,929	(154,769)
Inver Hills	2,903,525	2,177,251	8.0	7.0	0.0	103,753	17.0	-11.0	61,509	(42,244)
Key City	242,384	282,881	4.0	3.0	-20.0	2,660	3.0	-38.6	17,688	15,028
Wind2Battery System	4,217,499	12,404	15.0 *	14.0	0.0	300,364	14.0	0.0	300,364	-
Total/Composite	76,871,201	5,814,492	26.2	25.2	-8.3	3,068,985	24.6	-3.9	3,009,044	(59,941)

Electric Other Production

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
E344 Generators										
Alliant Tech	467,475	424,257	3.8	2.8	0.0	15,435	2.8	0.0	15,435	-
Angus C. Anson Unit 2 & 3	67,133,825	37,598,955	10.8	9.8	0.0	3,013,762	9.8	-4.4	3,315,179	301,417
Angus C. Anson Unit 4	32,254,162	5,049,580	26.4	25.4	0.0	1,071,047	25.4	-4.5	1,128,190	57,143
Black Dog Unit 5	93,460,378	17,094,079	23.0	22.0	0.0	3,471,195	22.0	-8.3	3,823,796	352,601
Blue Lake Units 1 thru 4	21,096,786	20,287,602	4.0	3.0	0.0	269,728	3.0	-11.9	1,106,567	836,839
Blue Lake Unit 7 & 8	59,829,027	9,345,842	26.4	25.4	0.0	1,987,527	25.4	-5.2	2,110,012	122,485
Grand Meadow Wind Project	179,115,715	8,903,234	24.9	23.9	-10.0	7,871,299	23.9	-8.7	7,773,872	(97,427)
Granite City	6,286,537	6,153,281	4.0	3.0	0.0	44,419	3.0	-38.8	857,478	813,059
High Bridge	182,528,743	24,902,639	29.4	28.4	-10.0	6,192,922	28.4	-3.1	5,749,454	(443,468)
Inver Hills	46,808,659	40,842,785	8.0	7.0	0.0	852,268	17.0	-11.0	653,813	(198,454)
Key City	5,374,748	6,287,671	4.0	3.0	-20.0	54,009	3.0	-38.6	387,243	333,234
Riverside	220,679,617	22,208,810	30.0 *	29.2	-10.0	7,560,465	29.2	-5.0	7,182,200	(378,265)
United Hospital	2,031,625	1,413,552	8.7	7.7	0.0	80,269	7.7	0.0	80,269	-
Total/Composite	917,067,297	200,512,290	24.2	23.2	-4.1	32,484,345	22.4	-5.3	34,183,509	1,699,164
E345 Accessory Electric Equipment										
Angus C. Anson Unit 2 & 3	3,144,159	1,843,053	10.8	9.8	0.0	132,766	9.8	-4.4	146,883	14,117
Angus C. Anson Unit 4	4,598,891	671,825	26.4	25.4	0.0	154,609	25.4	-4.4	162,575	7,967
Black Dog Unit 5	8,219,152	1,883,048	23.0	22.0	0.0	288,005	22.0	-8.3	319,013	31,009
Blue Lake Units 1 thru 4	1,390,203	1,284,190	4.0	3.0	0.0	35,337	3.0	-11.9	90,482	55,145
Blue Lake Unit 7 & 8	7,849,102	1,229,902	26.4	25.4	0.0	260,598	25.4	-5.2	276,667	16,069
Grand Meadow Wind Project	12,027,032	599,124	24.9	23.9	-10.0	528,477	23.9	-8.7	521,936	(6,542)
Granite City	586,508	464,445	4.0	3.0	0.0	40,688	3.0	-38.8	116,543	75,855
High Bridge	49,446,806	1,189,333	29.4	28.4	-10.0	1,873,315	28.4	-3.1	1,753,180	(120,135)
Inver Hills	2,490,543	1,799,411	8.0	7.0	0.0	98,733	17.0	-11.0	56,770	(41,963)
Key City	1,702,722	1,945,603	4.0	3.0	-20.0	32,554	3.0	-38.6	138,123	105,569
Riverside	52,296,879	14,963,660	30.0 *	29.2	-10.0	1,459,133	29.2	-5.0	1,369,491	(89,642)
Total/Composite	143,751,997	27,873,593	26.0	25.0	-4.5	4,904,216	24.5	-3.7	4,951,665	47,448

Electric Other Production

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
E346 Miscellaneous Power Plant Equipment										
Angus C. Anson Unit 2 & 3	2,469,540	564,849	10.8	9.8	0.0	194,356	9.8	-4.4	205,444	11,088
Black Dog Unit 5	1,276,475	320,570	23.0	22.0	0.0	43,450	22.0	-8.3	48,266	4,816
Blue Lake Units 1 thru 4	424,921	382,610	4.0	3.0	0.0	14,104	3.0	-11.9	30,959	16,855
Blue Lake Unit 7 & 8	29,932	146	26.4	25.4	0.0	1,173	25.4	-5.2	1,234	61
Grand Meadow Wind Project	207,761	10,298	24.9	23.9	-10.0	9,131	23.9	-8.7	9,018	(113)
Granite City	13,279	13,279	4.0	3.0	0.0	-	3.0	-38.8	-	-
High Bridge	11,096,165	53,565	29.4	28.4	-10.0	427,895	28.4	-3.1	400,936	(26,959)
Inver Hills	597,816	583,540	8.0	7.0	0.0	2,039	17.0	-11.0	4,708	2,669
Key City	277,794	319,874	4.0	3.0	-20.0	4,493	3.0	-38.6	21,716	17,223
Riverside	4,982,770	4,840,588	30.0 *	29.2	-10.0	21,956	29.2	-5.0	13,415	(8,541)
Total/Composite	21,376,455	7,089,321	22.5	21.5	-5.5	718,598	20.5	-3.8	735,696	17,099
Total Other Production	1,317,953,611	279,115,743	24.8	23.8	-5.0	46,490,185	23.1	-4.8	47,697,569	1,207,384

* Remaining Life (Yrs) from In-Service Date

Electric Other Production - Nobles Wind Project

	Plant Balance 11/15/2010 (1)	Reserve Balance 11/15/2010 (2)	Present			Proposed			Proposed Less Present Expense (10)	
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)		Depreciation Expense (9)
E340.1-346										
Nobles Wind Project	484,000,000	-	N/A	N/A	N/A	-	25.0	-8.7	2,630,540	2,630,540
Total	484,000,000	-	-	-	-	-	25.0	-8.7	2,630,540	2,630,540

Gas Production

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
G305 Structures & Improvements										
Grand Forks	197,902	222,586	4.0	3.0	-15.0	1,667	1.0	-15.0	5,001	3,334
Maplewood	952,431	781,913	7.0	6.0	-17.0	55,405	10.0	-17.0	33,243	(22,162)
Sibley	776,690	705,107	7.0	6.0	-1.0	13,225	10.0	-1.0	7,935	(5,290)
Wescott	787,866	727,364	9.0	8.0	-3.0	10,517	10.0	-3.0	8,414	(2,103)
Total/Composite	<u>2,714,889</u>	<u>2,436,970</u>	<u>7.2</u>	<u>6.2</u>	<u>-8.2</u>	<u>80,815</u>	<u>9.2</u>	<u>-8.2</u>	<u>54,593</u>	<u>(26,222)</u>
G311 LP Gas Equipment										
Grand Forks	822,226	748,100	4.0	3.0	4.0	13,745	1.0	4.0	41,236	27,491
Maplewood	3,679,802	2,598,608	7.0	6.0	8.0	131,135	10.0	8.0	78,681	(52,454)
Sibley	3,864,193	2,789,304	7.0	6.0	8.0	127,626	10.0	8.0	76,575	(51,050)
Wescott	4,480,472	3,605,188	9.0	8.0	1.0	103,810	10.0	1.0	83,048	(20,762)
Total/Composite	<u>12,846,693</u>	<u>9,741,200</u>	<u>7.4</u>	<u>6.4</u>	<u>5.3</u>	<u>376,316</u>	<u>8.7</u>	<u>5.3</u>	<u>279,541</u>	<u>(96,775)</u>
G320 Other Equipment										
Grand Forks	8,669	10,097	4.0	3.0	-23.0	189	1.0	-23.0	566	377
Maplewood	203,004	191,731	7.0	6.0	0.0	1,879	10.0	0.0	1,127	(752)
Sibley	311,131	236,597	7.0	6.0	-1.0	12,941	10.0	-1.0	7,764	(5,176)
Wescott	217,356	203,313	9.0	8.0	3.0	940	10.0	3.0	752	(188)
Total/Composite	<u>740,160</u>	<u>641,739</u>	<u>7.1</u>	<u>6.1</u>	<u>0.2</u>	<u>15,949</u>	<u>9.5</u>	<u>0.2</u>	<u>10,210</u>	<u>(5,739)</u>
Total Gas Production	<u>16,301,742</u>	<u>12,819,909</u>	<u>7.4</u>	<u>6.4</u>	<u>2.8</u>	<u>473,079</u>	<u>8.8</u>	<u>2.8</u>	<u>344,344</u>	<u>(128,736)</u>

Gas Storage

	Plant Balance 1/1/2010 (1)	Reserve Balance 1/1/2010 (2)	Present				Proposed			Proposed Less Present Expense (10)
			Approved Rem Life (Yrs) (3)	Rem. Life (Yrs) (4)	Net Salv % (5)	Depreciation Expense (6)	Rem. Life (Yrs) (7)	Net Salv % (8)	Depreciation Expense (9)	
G361 Structures & Improvements										
Wescott	4,830,641	4,580,638	9.0	8.0	-10.0	91,633	8.0	-10.0	91,633	-
G362 Gas Holders										
Wescott	8,169,167	7,036,928	9.0	8.0	5.0	90,473	8.0	5.0	90,473	-
G363 Purification Equipment										
Wescott	1,023,738	908,045	9.0	8.0	1.0	13,182	8.0	1.0	13,182	-
G363.1 Liquefaction Equipment										
Wescott	2,904,069	1,993,416	9.0	8.0	2.0	106,571	8.0	2.0	106,571	-
G363.2 Vaporizing Equipment										
Wescott	9,087,322	3,916,841	19.0	18.0	2.0	277,152	18.0	2.0	277,152	-
G363.3 Compressor Equipment										
Wescott	4,191,917	3,874,379	9.0	8.0	2.0	29,212	8.0	2.0	29,212	-
G363.4 Measuring & Regulating Equipment										
Wescott	45,363	40,555	9.0	8.0	6.0	261	8.0	6.0	261	-
G363.5 Other Equipment										
Wescott	3,651,313	2,901,244	9.0	8.0	0.0	93,759	8.0	0.0	93,759	-
Total Gas Storage	33,903,530	25,252,046	12.9	11.9	0.8	702,243	11.9	0.8	702,243	-

FERC Account	Account Description	Beginning Balance	Additions	Retirements	Transfers	Adjustments	Ending Balance
Steam							
310	Land & Land Rights - Fee	9,338,974	0	0	-450,133	0	8,888,842
310	Land & Land Rights - Other	9,856	0	0	0	0	9,856
311	Structures & Improvements	312,494,757	5,551,210	-2,484,760	-26,284,587	0	289,276,619
312	Boiler Plant Equipment	1,313,473,593	16,160,743	-52,859,910	-25,107,180	0	1,251,667,246
314	Turbogenerator Units	308,875,600	5,780,002	-31,914,964	-567,997	0	282,172,641
315	Accessory Electric Equipment	175,168,322	3,163,882	-1,824,377	-16,018,889	0	160,488,938
316	Miscellaneous Power Plant Equipment	50,648,941	2,086,242	-500,987	-5,289,056	0	46,945,140
		<u>2,170,010,044</u>	<u>32,742,079</u>	<u>-89,584,999</u>	<u>-73,717,841</u>	<u>0</u>	<u>2,039,449,283</u>
Nuclear							
302	Franchises & Consents	32,258,482	-497	0	0	0	32,257,984
320	Land & Land Rights - Fee	1,168,737	0	0	0	0	1,168,737
320	Land and Land Rights - Other	1,729	0	0	0	0	1,729
321	Structures & Improvements	366,963,462	3,077,962	-174,976	0	0	369,866,448
322	Reactor Plant Equipment	859,949,961	29,045,926	-1,610,405	0	0	887,385,481
323	Turbogenerator Units	225,747,402	56,665,901	-112,268	0	0	282,301,035
324	Accessory Electric Equipment	236,025,377	2,979,945	-313,426	0	0	238,691,896
325	Miscellaneous Power Plant Equipment	121,076,214	4,726,446	0	0	0	125,802,660
		<u>1,843,191,364</u>	<u>96,495,683</u>	<u>-2,211,075</u>	<u>0</u>	<u>0</u>	<u>1,937,475,971</u>
Hydro							
302	Franchises & Consents	2,857,039	0	0	0	0	2,857,039
330	Land & Land Rights - Fee	298,638	0	0	0	0	298,638
330	Land & Land Rights - Other	1,400,213	0	0	0	0	1,400,213
331	Structures & Improvements	544,221	0	0	0	0	544,221
332	Reservoirs, Dams & Waterways	6,731,348	125,140	0	0	0	6,856,488
333	Water Wheels, Turbines & Generators	1,105,306	1,244,219	0	0	0	2,349,525
334	Accessory Electric Equipment	349,415	29,486	0	0	0	378,901
335	Miscellaneous Power Plant Equipment	60,824	0	0	0	0	60,824
		<u>13,347,005</u>	<u>1,398,845</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>14,745,849</u>
Other							
340	Land & Land Rights - Fee	4,552,693	9,440	-46,701	450,133	0	4,965,565
340	Land & Land Rights - Other	10,368,887	0	0	0	0	10,368,887
340	Wind Rights	8,680,050	6,768	0	0	0	8,686,818
341	Structures & Improvements	43,913,462	80,405,927	-19,627	25,997,685	0	150,297,447
342	Fuel Holders, Producers & Accessories	13,261,562	63,703,906	-94,267	0	0	76,871,201
344	Generators	853,884,465	43,230,428	-3,989,521	24,248,063	0	917,373,436
345	Accessory Electric Equipment	47,834,703	78,313,081	-421,116	18,025,328	0	143,751,997
346	Miscellaneous Power Plant Equipment	4,692,766	11,880,963	-193,906	4,996,632	0	21,376,455
		<u>987,188,589</u>	<u>277,550,513</u>	<u>-4,765,138</u>	<u>73,717,841</u>	<u>0</u>	<u>1,333,691,805</u>
Utility Total		<u>5,013,737,001</u>	<u>408,187,119</u>	<u>-96,561,212</u>	<u>0</u>	<u>0</u>	<u>5,325,362,908</u>

FERC Account	Account Description	Beginning Balance	Additions	Retirements	Transfers	Adjustments	Ending Balance
Production							
304	Land & Land Rights - Fee	787,290	0	0	0	0	787,290
304	Land & Land Rights - Other	34,537	0	0	0	0	34,537
305	Structures & Improvements	2,714,889	0	0	0	0	2,714,889
311	LP Gas Equipment	12,891,663	306,396	-19,446	0	0	13,178,613
320	Other Equipment	688,192	51,968	0	0	0	740,160
		<u>17,116,572</u>	<u>358,364</u>	<u>-19,446</u>	<u>0</u>	<u>0</u>	<u>17,455,490</u>
Storage							
360	Land & Land Rights - Fee	0	0	0	0	0	0
360	Land & Land Rights - Other	11,264	0	0	0	0	11,264
361	Structures & Improvements	4,763,444	67,197	0	0	0	4,830,641
362	Gas Holders	8,169,167	0	0	0	0	8,169,167
363	Purification Equipment	1,174,275	0	-150,537	0	0	1,023,738
363.1	Liquefaction Equipment	2,911,135	11,867	-18,933	0	0	2,904,069
363.2	Vaporizing Equipment	9,097,656	-10,334	0	0	0	9,087,322
363.3	Compressor Equipment	4,191,917	0	0	0	0	4,191,917
363.4	Measuring & Regulating Equipment	45,363	0	0	0	0	45,363
363.5	Other Equipment	3,652,689	40,144	-41,519	0	0	3,651,313
		<u>34,016,911</u>	<u>108,873</u>	<u>-210,990</u>	<u>0</u>	<u>0</u>	<u>33,914,794</u>
Utility Total		<u>51,133,483</u>	<u>467,237</u>	<u>-230,436</u>	<u>0</u>	<u>0</u>	<u>51,370,284</u>

* Retirement Reconciliation:

Majority of retirements in Steam Production relate to the retirements of the Riverside Steam plant

Majority of retirements in Other Production relate to the retirement of assets for the West Faribault Plant (\$3.6 million) and the Turbine for Angus Anson (\$852 thousand).

** Plant Transfer Reconciliation

Majority of transfers in Steam Production relate to the transfers from Riverside Steam to the Riverside Other production plant under MERP.

Electric Utility

FERC Account	Account Description	Beginning Balance	Credits		Debits		Transfers Adjustment and Other Credits (Debits)	Ending Balance
			Accruals	Gross Salvage	Retirements	Cost of Removal		
Steam								
311	Structures & Improvements	249,133,684	9,483,702	0	2,484,760	696,548	-18,830,012	236,606,065
312	Boiler Plant Equipment	662,307,351	38,008,424	56,252	52,859,910	810,929	-21,012,522	625,688,666
314	Turbogenerator Units	169,004,999	8,242,492	0	31,914,964	287,670	4,046,511	149,091,367
315	Accessory Electric Equipment	93,412,033	5,396,615	0	1,824,377	196,138	-13,426,288	83,361,845
316	Miscellaneous Power Plant Equipment	36,794,053	1,128,500	0	500,987	33,206	-5,105,665	32,282,694
		<u>1,210,652,120</u>	<u>62,259,732</u>	<u>56,252</u>	<u>89,584,999</u>	<u>2,024,492</u>	<u>-54,327,976</u>	<u>1,127,030,637</u>
Nuclear								
302	Franchises & Consents	2,359,386	1,374,654					3,734,040
321	Structures & Improvements	267,804,523	5,261,009	0	174,976	91,324	0	272,799,232
322	Reactor Plant Equipment	572,752,381	18,842,615	0	1,610,405	655,500	0	589,329,091
323	Turbogenerator Units	159,359,055	5,599,088	0	112,268	235,068	0	164,610,807
324	Accessory Electric Equipment	181,919,336	3,530,316	3,759	313,426	104,856	0	185,035,129
325	Miscellaneous Power Plant Equipment	97,488,351	1,299,451	0	0	0	0	98,787,802
		<u>1,281,683,033</u>	<u>35,907,131</u>	<u>3,759</u>	<u>2,211,075</u>	<u>1,086,748</u>	<u>0</u>	<u>1,314,296,100</u>
Hydro								
302	Franchises & Consents	168,545	106,828	0	0	0	0	275,373
331	Structures & Improvements	569,594	5,178	0	0	0	0	574,772
332	Reservoirs, Dams & Waterways	4,179,388	180,468	0	0	0	0	4,359,857
333	Water Wheels, Turbines & Generators	1,093,276	16,433	0	0	0	0	1,109,709
334	Accessory Electric Equipment	256,632	8,564	0	0	0	0	265,195
335	Miscellaneous Power Plant Equipment	60,242	748	0	0	0	0	60,990
		<u>6,327,678</u>	<u>318,218</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>6,645,896</u>
Other								
340	Wind Rights	43,039	346,919	0	0	0	0	389,958
341	Structures & Improvements	15,961,447	2,620,352	19	19,627	94,699	19,113,093	37,580,586
342	Fuel Holders, Producers & Accessories	5,371,209	575,255	0	94,267	0	0	5,852,198
344	Generators	154,685,250	36,180,627	3,646	3,989,521	460,230	16,710,661	203,130,433
345	Accessory Electric Equipment	11,634,918	3,116,873	0	421,116	4,210	13,678,915	28,005,379
346	Miscellaneous Power Plant Equipment	2,356,675	194,515	77	193,906	25,285	4,825,308	7,157,383
		<u>190,052,538</u>	<u>43,034,541</u>	<u>3,742</u>	<u>4,718,437</u>	<u>584,423</u>	<u>54,327,976</u>	<u>282,115,937</u>
Utility Total		<u>2,688,715,368</u>	<u>141,519,623</u>	<u>63,752</u>	<u>96,514,511</u>	<u>3,695,662</u>	<u>0</u>	<u>2,730,088,570</u>

Gas Utility

FERC Account	Account Description	Beginning Balance	Credits		Debits		Transfers Adjustments and Other Credits (Debits)	Ending Balance
			Accruals	Gross Salvage	Retirements	Cost of Removal		
Production								
305	Structures & Improvements	2,356,155	80,815	0	0	0	0	2,436,970
311	LP Gas Equipment	9,668,787	388,879	0	19,446	24,975	0	10,013,245
320	Other Equipment	632,529	9,210	0	0	0	0	641,739
		<u>12,657,472</u>	<u>478,903</u>	<u>0</u>	<u>19,446</u>	<u>24,975</u>	<u>0</u>	<u>13,091,954</u>
Storage								
361	Structures & Improvements	4,493,406	87,232	0	0	0	0	4,580,638
362	Gas Holders	6,946,455	90,473	0	0	0	0	7,036,927.8
363	Purification Equipment	1,077,468	9,560	0	150,537	752	0	935,738
363.1	Liquefaction Equipment	1,906,797	106,469	0	18,933	917	0	1,993,416
363.2	Vaporizing Equipment	3,639,657	277,184	0	0	0	0	3,916,841
363.3	Compressor Equipment	3,845,167	29,212	0	0	0	0	3,874,379
363.4	Measuring & Regulating Equipment	40,294	261	0	0	0	0	40,555
363.5	Other Equipment	2,854,797	92,685	0	41,519	4,718	0	2,901,244
		<u>24,804,040</u>	<u>693,076</u>	<u>0</u>	<u>210,990</u>	<u>6,387</u>	<u>0</u>	<u>25,279,740</u>
Utility Total		<u>37,461,512</u>	<u>1,171,979</u>	<u>0</u>	<u>230,436</u>	<u>31,362</u>	<u>0</u>	<u>38,371,693</u>

* Retirement Reconciliation:

Majority of retirements in Steam Production relate to the retirements of the Riverside Steam plant

Majority of retirements in Other Production relate to the retirements of assets for the West Faribault Plant (\$3.6 million) and the Turbine for Angus Anson (\$852 thousand)

** Reserve Transfer Reconciliation:

Majority of transfers in Steam Production relate to the transfers from Riverside Steam to the Riverside other production plant under MERP.

Northern States Power Company
 2009 Summary of Annual Depreciation Accruals
 Electric Utility

Docket No. E,G002/D-10-____
 Attachment E
 Page 1 of 2

FERC Account	Account Description	Beginning Plant	Est. Future Net Salvage		Beginning Depreciation	Net Balance	Depr Life (Yrs)	Annual Accrual	Reserve Ratio
		Balance	%	Amount	Reserve				
Steam									
311	Structures & Improvements	312,494,757	-27.4%	-85,623,563	249,133,684	148,984,637	14.7	9,483,702	62.58%
312	Boiler Plant Equipment	1,313,473,593	-0.4%	-4,776,140	662,307,351	655,942,382	17.8	38,008,424	50.24%
314	Turbogenerator Units	308,875,600	-0.5%	-1,685,259	169,004,999	141,555,861	17.3	8,242,492	54.42%
315	Accessory Electric Equipment	175,168,322	-0.3%	-525,505	93,412,033	82,281,794	15.3	5,396,615	53.17%
316	Miscellaneous Power Plant Equipment	50,648,941	-0.5%	-253,245	36,794,053	14,108,133	13.8	1,128,500	72.28%
								62,259,732	
Nuclear									
302	Franchises & Consents	32,258,482	0%	0	2,359,386	29,899,095	21.8	1,374,654	7.31%
321	Structures & Improvements	366,963,462	0%	0	267,804,523	99,158,939	19.3	5,261,009	72.98%
322	Reactor Plant Equipment	859,949,961	0%	0	572,752,381	287,197,580	17.2	18,941,515	66.60%
323	Turbogenerator Units	225,747,402	0%	0	159,359,055	66,388,347	18.7	5,599,088	70.59%
324	Accessory Electric Equipment	236,025,377	0%	0	181,919,336	54,106,040	16.3	3,410,754	77.08%
325	Miscellaneous Power Plant Equipment	121,076,214	0%	0	97,488,351	23,587,863	18.0	1,320,113	80.52%
								35,907,132	
Hydro									
302	Franchises & Consents	2,857,039	0%	0	168,545	2,688,493	24.2	106,828	5.90%
331	Structures & Improvements	544,221	-30.0%	-163,266	569,594	137,893	24.2	5,178	80.51%
332	Reservoirs, Dams & Waterways	6,731,348	-30.0%	-2,019,404	4,179,388	4,571,364	24.2	180,468	47.76%
333	Water Wheels, Turbines & Generators	1,105,306	-30.0%	-331,592	1,093,276	343,621	24.2	16,433	76.09%
334	Accessory Electric Equipment	349,415	-30.0%	-104,825	256,632	197,608	24.2	8,564	56.50%
335	Miscellaneous Power Plant Equipment	60,824	-30.0%	-18,247	60,242	18,830	24.2	748	76.19%
								318,218	
Other									
340	Wind Rights	8,680,050	0%	0	43,039	8,637,011	24.9	86,684	N/A
341	Structures & Improvements	43,913,462	-9.6%	-4,215,692	15,961,447	32,167,707	26.6	2,620,352	33.16%
342	Fuel Holders, Producers & Accessories	13,261,562	-8.3%	-1,100,710	5,371,209	8,991,063	26.2	575,256	37.40%
344	Generators	853,884,465	-4.1%	-35,009,263	154,685,250	734,208,478	24.2	36,413,175	17.40%
345	Accessory Electric Equipment	47,834,703	-4.5%	-2,152,562	11,634,918	38,352,347	26.0	3,144,560	23.28%
346	Miscellaneous Power Plant Equipment	4,692,766	-5.5%	-258,102	2,356,675	2,594,193	22.5	194,515	47.60%
								43,034,541	
Utility Total								141,519,624	

Northern States Power Company
 2009 Summary of Annual Depreciation Accruals
 Gas Utility

Docket No. E,G002/D-10-____
 Attachment E
 Page 2 of 2

FERC Account	Account Description	Beginning Plant Balance	Est. Future Net Salvage		Beginning Depreciation Reserve	Net Balance	Depr Life (Yrs)	Annual Accrual	Reserve Ratio
			%	Amount					
Production									
305	Structures & Improvements	2,714,889	-8.2%	-222,621	2,356,155	581,355	7.2	80,815	80.21%
311	LP Gas Equipment	12,891,663	5.3%	683,258	9,668,787	2,539,617	7.4	388,879	79.20%
320	Other Equipment	688,192	0.2%	1,376	632,529	54,287	7.1	9,210	92.10%
								478,903	
Storage									
361	Structures & Improvements	4,763,444	-10%	-476,344	4,493,406	746,382	9.0	87,232	85.76%
362	Gas Holders	8,169,167	5%	408,458	6,946,455	814,254	9.0	90,473	89.51%
363	Purification Equipment	1,174,275	1%	11,743	1,077,468	85,064	9.0	9,560	92.68%
363	Liquefaction Equipment	2,911,135	2%	58,223	1,906,797	946,116	9.0	106,469	66.84%
363	Vaporizing Equipment	9,097,656	2%	181,953	3,639,657	5,276,046	19.0	277,184	40.82%
363	Compressor Equipment	4,191,917	2%	83,838	3,845,167	262,912	9.0	29,212	93.60%
363	Measuring & Regulating Equipment	45,363	6%	2,722	40,294	2,348	9.0	261	94.49%
363	Other Equipment	3,652,689	0%	0	2,854,797	797,892	9.0	92,685	78.16%
								693,076	
Utility Total								1,171,979	

Electric Utility

Electric Production Plant Facility	Proposed Depreciation Life on Current Investment	Resource Planning/Modeling End of Life	Rationale for Difference Between Depreciation Life and Resource Planning Period
Black Dog 3 & 4	3	5.25	With the possible opportunity for repowering within the 2013-2015 timeframe, current investment plus maintenance and future capital expenditures should keep these assets providing the expected capacity through the 15 year planning period. However, the repowering opportunity is still under review.
High Bridge	28.4	Beyond the end of resource planning period (2008-2022) (37yrs 2047)	In-Service date for the rebuilt plant was May 2008. Approved initial remaining book life for High Bridge was 30 years. However, the Resource Plan model uses a 39 year study period. As both the actual depreciation life and study period are beyond the 15 year Resource Planning Period, we see no need for further reconciliation at this time.
Allen S. King	27.5	Beyond the end of resource planning period (2008-2022) (37yrs 2047)	In-service date for the rebuilt plant was July 2007 with an approved remaining life of 30 years from the in-service date. The Resource Planning period is 15 years. However, the model used in Resource Planning uses a 39 year study period. As both the 30 book life and modeling process extend well beyond the Planning Period, we see no need for further reconciliation at this time.
Minnesota Valley	7.5	0	A 12.5 year -70% net salvage recovery of demolition cost was approved in Docket No. E,G002/D-05-288. While the site is still considered of value, we did not include this unit in the Resource Plan, as we are not receiving capacity from this plant and thus did not consider it a resource.
Red Wing	8	3	Depreciation life for the current investment is tied to a contract to burn refuse-derived fuel (RDF). The Company has entered into a new "Refuse Derived Fuel Supply Agreement" effective January 1, 2007 for an initial term of 6-years with a "follow-on term" of 5-years. With this new supply agreement, the depreciation recovery period will support the planning period. As options are exercised the remaining life will be re-evaluated.
Riverside MERP (Other Production)	29.2	Beyond the end of resource planning period (2008-2022) (37yrs 2047)	In-service date for the rebuilt plant was March 2009 with an approved remaining life of 30 years from the in-service date. The resource planning period is 15 years. However, the Resource Plan model uses a 39 year study period. As both the proposed depreciation life and study period are beyond the 15 year Resource Planning Period, we see no need for further reconciliation at this time.
Sherco 1 & 2	13	Beyond the end of resource planning period (2008-2022) (37yrs 2047)	Planning upgrades include capacity increases of approximately 80 MW for the 2012-2013 timeframe. For planning purposes it was anticipated that the capacity upgrades would extend the life well beyond the 15 year Resource Planning Period making the end of life close enough to the end of the 39 year Study Period to continue plant operation throughout the study time frame.
Sherco 3	23	Beyond the end of resource planning period (2008-2022) (37yrs 2047)	See Sherco 1 & 2 above.
Wilmarth	8	3	See Red Wing above.
Monticello	20.8	Beyond the end of resource planning period (2008-2022) (19yrs 2029)	Approved in 2006, a Certificate of Need for the spent fuel storage required to operate the plant an additional 20 years beyond 2010 became effective June 1, 2007. In June 2007, NSP-Minnesota filed for depreciation life extension of the plant based on previous NRC and MPUC process approvals. The 20-year depreciation life extension until September 2030 was granted by the MPUC on Sept. 21, 2007.
Prairie Island	14.3	Beyond the end of resource planning period (2008-2022) (Unit 1 23yrs 2033) (Unit 2 24yrs 2034)	Resource planning analysis was done to examine the impacts of closing the plant at end of license and operating beyond 2014. A request for license extension for an additional 20 years to the NRC is currently in process and will likely be decided sometime in 2010. A spent fuel storage Certificate of Need has also been made with the MPUC and was approved in 2009. A 10-year life extension was approved in the 2008 electric rate case (Docket No. E002/GR-08-1065). Further life extension is possible once the license extension process is complete.

Electric Utility

Electric Production Plant Facility	Proposed Depreciation Life on Current Investment	Resource Planning/Modeling End of Life	Rationale for Difference Between Depreciation Life and Resource Planning Period
Hennepin Island	24.2	Beyond the end of resource planning period (2008-2022) (37yrs 2047)	The depreciation period is tied to the FERC operating license which extends the life well beyond the planning period.
Angus C. Anson Unit 2 & 3	9.8	11	The depreciation life is shorter to assure the current investment is recovered in the event a new asset is put in place of the existing one. Either way, the capacity at this site will be maintained.
Angus C. Anson Unit 4	25.4	Beyond the end of resource planning period (2008-2022) (25yrs 2035)	Unit 4 was given a 30 year life as a new unit in 2005.
Black Dog 5	22	Beyond the end of resource planning period (2008-2022) (22yrs 2032)	Unit 5 was given a 30.4 year life as a new unit in 2002.
Blue Lake Unit 1 thru 4	3	Beyond the end of resource planning period (2008-2022) (20yrs 2030)	See Granite City below.
Blue Lake Unit 7 & 8	25.4	Beyond the end of resource planning period (2008-2022) (25yrs 2035)	Units 7 & 8 were given 30.4 year lives as new units in 2005.
Grand Meadow Wind Project	23.9	Beyond the end of resource planning period (2008-2022) (23yrs 2033)	Minnesota's Renewable Energy Standard (RES) is requiring the Company to serve 30 percent of retail electric sales through renewable energy sources by 2020, with at least 25 percent of that generated by wind energy. This large wind energy conversion system (Grand Meadow Wind Project 100 MW Project) was the first project eligible under a proposed RES Rider and had an in-service date of November 2008.
Granite City	3	8	Under operational review to decide if the current asset will supply the needed capacity through maintenance and capital expenditures or if a new asset will take its place. Either way, the capacity at this site will be maintained. The depreciation life is shorter to assure the current investment is recovered in the event a new asset is put in place of the existing one.
Inver Hills	17	Beyond the end of resource planning period (2008-2022) (37yrs 2047)	Valued as a tier one (top performing) peaking plant, current (intermediate) life and planned capital expenditures along with system reliability will keep these assets providing the expected capacity through the 15 year planning period and beyond.

Electric Steam Production

FERC Account	Plant Balance 12/31/09 (1)	Present		Proposed		Proposed Less Present (6)
		Net Salv % (2)	Estimated Net Salvage in Reserve at End-of Life (3)	Net Salv % (4)	Estimated Net Salvage in Reserve at End-of Life (5)	
<u>Allen S. King</u>						
E311	31,973,133	-40.0	12,789,253	-5.5	1,758,522	(11,030,731)
E312	439,743,344	0.0	-	-5.5	24,185,884	24,185,884
E314	90,573,890	0.0	-	-5.5	4,981,564	4,981,564
E315	40,068,646	0.0	-	-5.5	2,203,776	2,203,776
E316	5,625,030	0.0	-	-5.5	309,377	309,377
	<u>607,984,043</u>		<u>12,789,253</u>		<u>33,439,122</u>	<u>20,649,869</u>
			From 2009 Dismantling Study for King	-5.5	33,401,000	
			Proposed based on 100% because on national waterway	-5.5		
<u>Black Dog Units 2, 3, & 4</u>						
E311	26,812,204	-30.0	8,043,661	-18.0	4,826,197	(3,217,464)
E312	55,013,315	0.0	-	-18.0	9,902,397	9,902,397
E314	33,841,258	0.0	-	-18.0	6,091,426	6,091,426
E315	13,993,470	0.0	-	-18.0	2,518,825	2,518,825
E316	2,394,757	0.0	-	-18.0	431,056	431,056
	<u>132,055,004</u>		<u>8,043,661</u>		<u>23,769,901</u>	<u>15,726,240</u>
			From 2009 Dismantling Study after Allocation to Black Dog Units 2, 3, & 4	-18.0	23,786,570	
			Proposed based on 100% for Remaining Life < 10 years	-18.0		
<u>Minnesota Valley</u>						
E311	4,105,633	-70.0	2,873,943	-101.9	4,183,640	1,309,697
E312	6,440,017	-70.0	4,508,012	-101.9	6,562,377	2,054,365
E314	2,156,244	-70.0	1,509,371	-101.9	2,197,213	687,842
E315	598,206	-70.0	418,744	-101.9	609,572	190,828
E316	311,744	-70.0	218,221	-101.9	317,667	99,446
	<u>13,611,844</u>		<u>9,528,291</u>		<u>13,870,469</u>	<u>4,342,178</u>
			From 2009 Dismantling Study for Minnesota Valley	-101.9	13,875,000	
			Proposed based on 100% for Remaining Life < 10 years	-101.9		

Electric Steam Production

FERC Account	Plant Balance 12/31/09	Present		Proposed		Proposed Less Present
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	
	(1)	(2)	(3)	(4)	(5)	(6)
Red Wing						
E311	7,115,773	-35.0	2,490,521	-23.3	1,657,975	(832,545)
E312	33,559,289	0.0	-	-23.3	7,819,314	7,819,314
E314	1,788,810	0.0	-	-23.3	416,793	416,793
E315	1,417,077	0.0	-	-23.3	330,179	330,179
E316	769,074	0.0	-	-23.3	179,194	179,194
	<u>44,650,023</u>		<u>2,490,521</u>		<u>10,403,455</u>	<u>7,912,935</u>
			From 2009 Dismantling Study for Red Wing	-23.3	10,392,000	
			Proposed based on 100% for Remaining Life < 10 years	-23.3		
Sherco Units 1 & 2						
E311	81,066,226	-30.0	24,319,868	-5.1	4,134,378	(20,185,490)
E312	311,136,043	0.0	-	-5.1	15,867,938	15,867,938
E314	94,750,813	0.0	-	-5.1	4,832,291	4,832,291
E315	35,501,875	0.0	-	-5.1	1,810,596	1,810,596
E316	8,903,246	0.0	-	-5.1	454,066	454,066
	<u>531,358,203</u>		<u>24,319,868</u>		<u>27,099,268</u>	<u>2,779,401</u>
			From 2009 Dismantling Study for Sherco 1 & 2	-6.8	36,236,953	
			Proposed based on 75% for Remaining Life > 10 years but < 20 years	-5.1		
Sherco Unit 3 (*)						
E311	221,537,303	-20.0	44,307,461	-4.3	9,526,104	(34,781,357)
E312	635,290,680	0.0	-	-4.3	27,317,499	27,317,499
E314	96,197,402	0.0	-	-4.3	4,136,488	4,136,488
E315	115,522,832	0.0	-	-4.3	4,967,482	4,967,482
E316	47,756,976	0.0	-	-4.3	2,053,550	2,053,550
	<u>1,116,305,193</u>		<u>44,307,461</u>		<u>48,001,123</u>	<u>3,693,663</u>
			From 2009 Dismantling Study for Sherco 3	-4.3	47,856,384	
			Proposed based on 100% because TLG calculated rate < 5%	-4.3		

Electric Steam Production

FERC Account	Plant Balance 12/31/09	Present		Proposed		
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(2)	(3)	(4)	(5)	(6)
Wilmarth						
E311	5,901,935	-35.0	2,065,677	-23.0	1,357,445	(708,232)
E312	30,953,737	0.0	-	-23.0	7,119,360	7,119,360
E314	2,305,158	0.0	-	-23.0	530,186	530,186
E315	751,501	0.0	-	-23.0	172,845	172,845
E316	764,673	0.0	-	-23.0	175,875	175,875
	<u>40,677,004</u>		<u>2,065,677</u>		<u>9,355,711</u>	<u>7,290,034</u>
			From 2009 Dismantling Study for Wilmarth	-23.0	9,373,000	
			Proposed based on 100% for Remaining Life < 10 years	-23.0		
Total Steam Production	<u><u>2,486,641,314</u></u>		<u><u>103,544,731</u></u>		<u><u>165,939,050</u></u>	<u><u>62,394,319</u></u>

* Amounts reported in this section are for the entire unit, not just Xcel Energy's share.

Northern States Power Company
 Comparison of Present to Proposed Net Salvage Rates

Electric Nuclear Production

FERC Account	Plant Balance 12/31/09	Present		Proposed		
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
	(1)	(2)	(3)	(4)	(5)	(6)
Monticello						
E302	32,257,984	0.0	-	0.0	-	-
E321	139,115,328	0.0	-	0.0	-	-
E322	331,219,043	0.0	-	0.0	-	-
E323	112,909,510	0.0	-	0.0	-	-
E324	43,053,598	0.0	-	0.0	-	-
E325	53,549,233	0.0	-	0.0	-	-
	<u>712,104,695</u>		<u>-</u>		<u>-</u>	<u>-</u>
Monticello Interim Storage						
E321	22,792,183	0.0	-	0.0	-	-
E322	15,443,237	0.0	-	0.0	-	-
	<u>38,235,420</u>		<u>-</u>		<u>-</u>	<u>-</u>
Prairie Island Units 1 & 2						
E321	196,019,997	0.0	-	0.0	-	-
E322	488,800,697	0.0	-	0.0	-	-
E323	169,391,525	0.0	-	0.0	-	-
E324	195,638,298	0.0	-	0.0	-	-
E325	72,253,427	0.0	-	0.0	-	-
	<u>1,122,103,944</u>		<u>-</u>		<u>-</u>	<u>-</u>
Prairie Island Interim Storage						
E321	11,938,940	0.0	-	0.0	-	-
E322	51,922,505	0.0	-	0.0	-	-
	<u>63,861,445</u>		<u>-</u>		<u>-</u>	<u>-</u>
Total Nuclear Production	<u>1,936,305,504</u>		<u>-</u>		<u>-</u>	<u>-</u>

Electric Hydro Production

FERC Account	Plant Balance 12/31/09	Present		Proposed		Proposed Less Present
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	
	(1)	(2)	(3)	(4)	(5)	(6)
Hennepin Island						
E302	2,857,039	0.0	-	0.0	-	-
E331	464,281	-30.0	139,284	-30.0	139,284	-
E332	1,356,505	-30.0	406,952	-30.0	406,952	-
E333	2,349,525	-30.0	704,857	-30.0	704,857	-
E334	378,901	-30.0	113,670	-30.0	113,670	-
E335	37,779	-30.0	11,334	-30.0	11,334	-
	<u>7,444,029</u>		<u>1,376,097</u>		<u>1,376,097</u>	-
Lower Dam						
E331	42,016	-30.0	12,605	-30.0	12,605	-
E332	762,902	-30.0	228,871	-30.0	228,871	-
	<u>804,918</u>		<u>241,475</u>		<u>241,475</u>	-
Upper Dam						
E332	4,491,476	-30.0	1,347,443	-30.0	1,347,443	-
E335	23,046	-30.0	6,914	-30.0	6,914	-
	<u>4,514,522</u>		<u>1,354,357</u>		<u>1,354,357</u>	-
Total Hydro Production	<u><u>12,763,469</u></u>		<u><u>2,971,929</u></u>		<u><u>2,971,929</u></u>	-

Electric Other Production

FERC Account	Plant Balance 12/31/09	Present		Proposed		Proposed Less Present
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	
	(1)	(2)	(3)	(4)	(5)	(6)
<u>Alliant Tech</u>						
E344	467,475	0.0	-	0.0	-	-
<u>Angus C. Anson Units 2 & 3</u>						
E341	-	0.0	-	-4.4	-	-
E342	1,094,780	0.0	-	-4.4	48,170	48,170
E344	67,133,825	0.0	-	-4.4	2,953,888	2,953,888
E345	3,144,159	0.0	-	-4.4	138,343	138,343
E346	2,469,540	0.0	-	-4.4	108,660	108,660
	<u>73,842,304</u>		<u>-</u>		<u>3,249,061</u>	<u>3,249,061</u>
				From 2009 TLG Dismantling Study for Angus C. Anson Units 2 & 3	3,249,262	
				Proposed based on 100% for Remaining Life < 10 years	-4.4	
<u>Angus C. Anson Unit 4</u>						
E341	7,432,379	-10.0	743,238	-4.5	334,457	(408,781)
E342	-	0.0	-	-4.5	-	-
E344	32,254,162	0.0	-	-4.5	1,451,437	1,451,437
E345	4,598,891	0.0	-	-4.5	206,950	206,950
E346	-	0.0	-	-4.5	-	-
	<u>44,285,432</u>		<u>743,238</u>		<u>1,992,844</u>	<u>1,249,607</u>
				From 2009 TLG Dismantling Study for Angus C. Anson Unit 4	1,989,208	
				Proposed based on 100% because TLG calculated rate < 5%	-4.5	

Electric Other Production

FERC Account	Plant Balance 12/31/09	Present		Proposed		Proposed Less Present
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	
	(1)	(2)	(3)	(4)	(5)	(6)
Grand Meadow Wind Project						
E341	4,750,902	-10.0	475,090	-8.7	413,329	(61,762)
E342	-	-10.0	-	-8.7	-	-
E344	179,115,715	-10.0	17,911,571	-8.7	15,583,067	(2,328,504)
E345	12,027,032	-10.0	1,202,703	-8.7	1,046,352	(156,351)
E346	207,761	-10.0	20,776	-8.7	18,075	(2,701)
	<u>196,101,410</u>		<u>19,610,141</u>		<u>17,060,823</u>	<u>(2,549,318)</u>
				From 2009 TLG Dismantling Study for Grand Meadow Wind Project	-8.7	17,146,000
				Proposed based on 100% due to Leased Land	-8.7	
Granite City						
E341	1,241,718	-20.0	248,344	-38.8	481,787	233,443
E342	416,373	-20.0	83,275	-38.8	161,553	78,278
E344	6,286,537	-20.0	1,257,307	-38.8	2,439,176	1,181,869
E345	586,508	-20.0	117,302	-38.8	227,565	110,264
E346	13,279	-20.0	2,656	-38.8	5,152	2,496
	<u>8,544,415</u>		<u>1,708,883</u>		<u>3,315,233</u>	<u>1,606,350</u>
				From 2009 TLG Dismantling Study for Key City	-38.8	3,319,000
				Proposed based on 100% for Remaining Life < 10 years	-38.8	
High Bridge						
E341	68,398,212	-10.0	6,839,821	-3.1	2,120,345	(4,719,477)
E342	63,702,035	-10.0	6,370,204	-3.1	1,974,763	(4,395,440)
E344	182,528,743	-10.0	18,252,874	-3.1	5,658,391	(12,594,483)
E345	49,446,806	-10.0	4,944,681	-3.1	1,532,851	(3,411,830)
E346	11,096,165	-10.0	1,109,617	-3.1	343,981	(765,635)
	<u>375,171,961</u>		<u>37,517,196</u>		<u>11,630,331</u>	<u>(25,886,865)</u>
				From 2009 TLG Dismantling Study for High Bridge	-3.1	11,536,000
				Proposed based on 100% because TLG calculated rate < 5%	-3.1	

Electric Other Production

FERC Account	Plant Balance 12/31/09	Present		Proposed		Proposed Less Present
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	
	(1)	(2)	(3)	(4)	(5)	(6)
Inver Hills						
E341	1,248,689	-30.0	374,607	-11.0	137,668	(236,939)
E342	2,903,525	0.0	-	-11.0	320,114	320,114
E344	46,808,659	0.0	-	-11.0	5,160,655	5,160,655
E345	2,490,543	0.0	-	-11.0	274,582	274,582
E346	597,816	0.0	-	-11.0	65,909	65,909
	<u>54,049,232</u>		<u>374,607</u>		<u>5,958,928</u>	<u>5,584,321</u>
				From 2009 TLG Dismantling Study for Inver Hills	-14.7	7,944,000
				Proposed based on 75% for Remaining Life > 10 years but < 20 years	-11.0	
Key City						
E341	1,002,265	-20.0	200,453	-38.6	386,874	186,421
E342	242,384	-20.0	48,477	-38.6	93,560	45,083
E344	5,374,748	-20.0	1,074,950	-38.6	2,074,653	999,703
E345	1,702,722	-20.0	340,544	-38.6	657,251	316,706
E346	277,794	-20.0	55,559	-38.6	107,228	51,670
	<u>8,599,913</u>		<u>1,719,983</u>		<u>3,319,566</u>	<u>1,599,584</u>
				From 2009 TLG Dismantling Study for Key City	-38.6	3,319,000
				Proposed based on 100% for Remaining Life < 10 years	-38.6	
Riverside						
E341	49,176,753	-10.0	4,917,675	-5.0	2,434,249	(2,483,426)
E342	-	0.0	-	-5.0	-	-
E344	220,679,617	0.0	-	-5.0	10,923,641	10,923,641
E345	52,296,879	0.0	-	-5.0	2,588,696	2,588,696
E346	4,982,770	0.0	-	-5.0	246,647	246,647
	<u>327,136,018</u>		<u>4,917,675</u>		<u>16,193,233</u>	<u>11,275,558</u>
				From 2009 TLG Dismantling Study for Riverside	-9.9	32,501,168
				Proposed based on 50% for Remaining Life > 20 years	-5.0	

Northern States Power Company
 Comparison of Present to Proposed Net Salvage Rates

Electric Other Production

FERC Account	Plant Balance 12/31/09	Present		Proposed		Proposed Less Present
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	
	(1)	(2)	(3)	(4)	(5)	(6)
United Hospital						
E344	2,031,625	0.0	-	0.0	1,280,000	1,280,000
Wind2Battery System						
E342	4,217,499	0.0	-	0.0	1,280,000	1,280,000
Total Other Production	1,309,266,792		71,597,037		81,864,253	10,267,215

Gas Production

FERC Account	Plant Balance 12/31/09	Present		Proposed		Proposed Less Present
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	
		(2)	(3)	(4)	(5)	
Grand Forks						
G305	197,902	-15.0	29,685	-15.0	29,685	-
G311	822,226	4.0	(32,889)	4.0	(32,889)	-
G320	8,669	-23.0	1,994	-23.0	1,994	-
	<u>1,028,796</u>		<u>(1,210)</u>		<u>(1,210)</u>	-
Maplewood						
G305	952,431	-17.0	161,913	-17.0	161,913	-
G311	3,679,802	8.0	(294,384)	8.0	(294,384)	-
G320	203,004	0.0	-	0.0	-	-
	<u>4,835,238</u>		<u>(132,471)</u>		<u>(132,471)</u>	-
Sibley						
G305	776,690	-1.0	7,767	-1.0	7,767	-
G311	3,864,193	8.0	(309,135)	8.0	(309,135)	-
G320	311,131	-1.0	3,111	-1.0	3,111	-
	<u>4,952,014</u>		<u>(298,257)</u>		<u>(298,257)</u>	-
Wescott						
G305	787,866	-3.0	23,636	-3.0	23,636	-
G311	4,480,472	1.0	(44,805)	1.0	(44,805)	-
G320	217,356	3.0	(6,521)	3.0	(6,521)	-
	<u>5,485,694</u>		<u>(27,689)</u>		<u>(27,689)</u>	-
Total Gas Production	<u>16,301,742</u>		<u>(459,627)</u>		<u>(459,627)</u>	-

Northern States Power Company
 Comparison of Present to Proposed Net Salvage Rates

Gas Storage

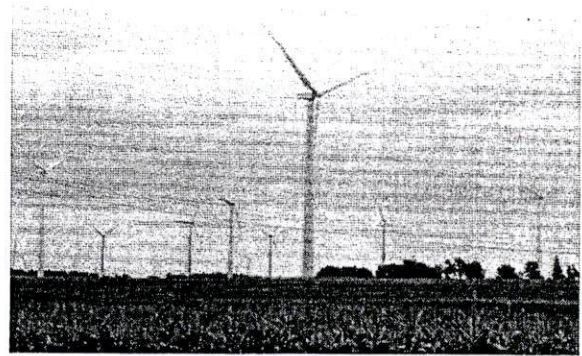
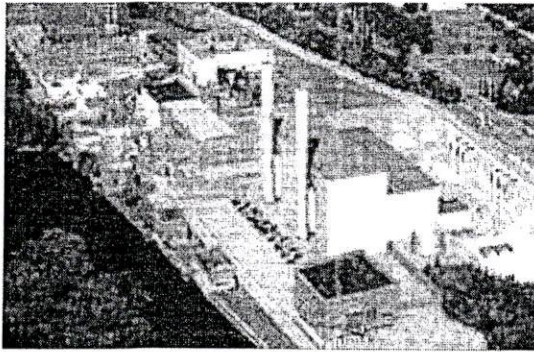
FERC Account	Plant Balance 12/31/09	Present		Proposed		Proposed Less Present
		Net Salv %	Estimated Net Salvage in Reserve at End-of Life	Net Salv %	Estimated Net Salvage in Reserve at End-of Life	
	(1)	(2)	(3)	(4)	(5)	(6)
Wescott						
G361	4,830,641	-10.0	483,064	-10.0	483,064	-
G362	8,169,167	5.0	(408,458)	5.0	(408,458)	-
G363	1,023,738	1.0	(10,237)	1.0	(10,237)	-
G363.1	2,904,069	2.0	(58,081)	2.0	(58,081)	-
G363.2	9,087,322	2.0	(181,746)	2.0	(181,746)	-
G363.3	4,191,917	2.0	(83,838)	2.0	(83,838)	-
G363.4	45,363	6.0	(2,722)	6.0	(2,722)	-
G363.5	3,651,313	0.0	-	0.0	-	-
	<u>33,903,530</u>		<u>64,368</u>		<u>64,368</u>	<u>-</u>
Total Gas Storage	<u>33,903,530</u>		<u>64,368</u>		<u>64,368</u>	<u>-</u>

ATTACHMENT H

DISMANTLING COST STUDY

Prepared by TLG Services, Inc.

Document X01-1617-002, Rev. 0

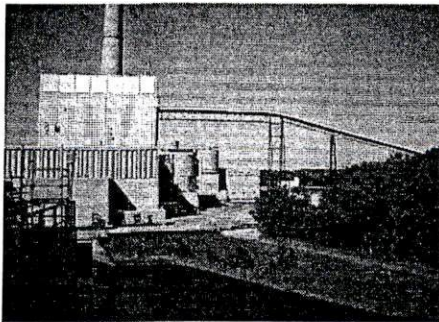
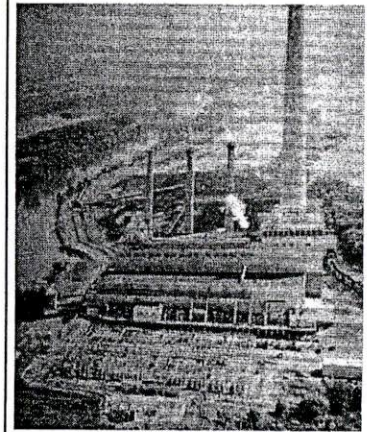
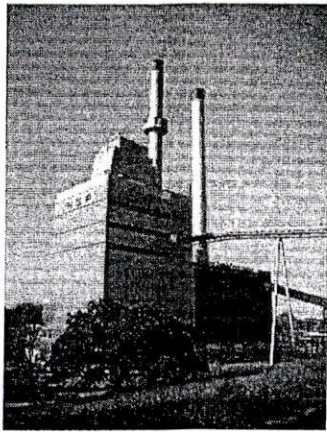


DISMANTLING COST STUDY

for

Allen S. King Unit 1
Angus Anson Units 1-3
Black Dog Units 2-5
Blue Lake Units 1-4, 7 and 8
Grand Meadow Wind Farm
Granite City Units 1-4
High Bridge Units 1-3
Inver Hills Units 1- 6
Key City Units 1-4
Minnesota Valley 1-3
Red Wing 1 & 2
Riverside Units 7, 8, 9 and 10
Sherburne County Units 1-3
Wilmarth 1 & 2

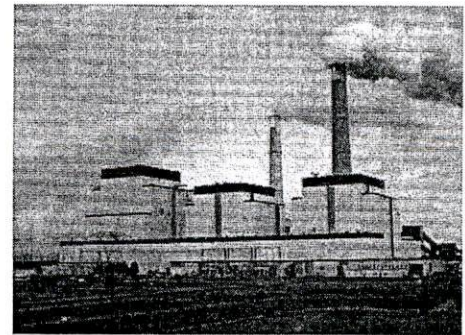
Generating
Stations



prepared for

Xcel Energy

prepared by



TLG Services, Inc.
An Entergy Company
148 New Milford Road East
Bridgewater, CT

February 2010

APPROVALS

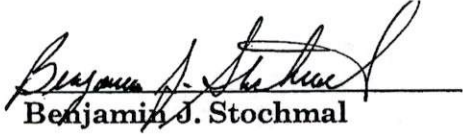
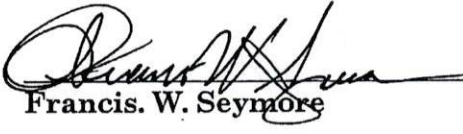
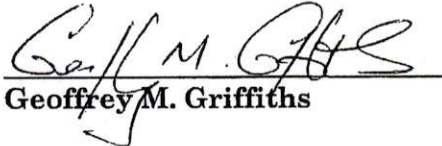
Project Engineer	 Benjamin J. Stochmal	<u>2/4/10</u> Date
Project Manager	 Francis W. Seymore	<u>2/4/10</u> Date
Technical Manager	 Geoffrey M. Griffiths	<u>2/4/10</u> Date

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
EXECUTIVE SUMMARY	vii
1.0 INTRODUCTION.....	1-1
1.1 Objective of Study	1-1
1.2 Station Descriptions.....	1-1
1.3 Scope.....	1-3
1.4 General Approach	1-4
2.0 DISMANTLING OPERATIONS	2-1
2.1 Project Organization	2-1
2.2 Post-Shutdown Activities	2-1
2.3 Dismantling Program	2-2
2.3.1 Period 1 - Engineering/Planning and Asbestos Abatement	2-3
2.3.2 Period 2 - Dismantling Operations.....	2-5
2.3.3 Period 3 - Site Restoration	2-6
3.0 COST ESTIMATE.....	3-1
3.1 Basis of Estimate	3-1
3.2 Methodology.....	3-2
3.3 Assumptions	3-3
3.4 Station-Specific Notes.....	3-6
3.4.1 Allen S. King	3-6
3.4.2 Angus Anson	3-6
3.4.3 Black Dog.....	3-7
3.4.4 Blue Lake.....	3-7
3.4.5 Grand Meadow Wind Farm	3-7
3.4.6 Granite City.....	3-7
3.4.7 High Bridge	3-7
3.4.8 Inver Hills.....	3-8
3.4.9 Key City	3-8
3.4.10 Minnesota Valley	3-8
3.4.11 Red Wing	3-8
3.4.12 Riverside.....	3-8
3.4.13 Sherburne County.....	3-9
3.4.14 Wilmarth	3-9

TABLE OF CONTENTS
(continued)

<u>SECTION</u>	<u>PAGE</u>
4.0 SCRAP METAL CREDITS	4-1
5.0 RESULTS	5-1
6.0 REFERENCES	6-1

TABLES

Summary of Dismantling Costs	x
4.1 Basis for Scrap Metal Value	4-2
4.2 Quantity of Scrap Metals by Station	4-3
4.3 Scrap Metal Credits by Station	4-4
5.1 Summary of Activity Costs	5-3
5.2a Allen S. King Station Summary of Activity Costs	5-4
5.2b Angus Anson Station Summary of Activity Costs	5-5
5.2c Black Dog Station Summary of Activity Costs	5-6
5.2d Blue Lake Station Summary of Activity Costs	5-7
5.2e Grand Meadow Station Summary of Activity Costs	5-8
5.2f Granite City Station Summary of Activity Costs	5-9
5.2g High Bridge Station Summary of Activity Costs	5-10
5.2h Inver Hills Station Summary of Activity Costs	5-11
5.2i Key City Station Summary of Activity Costs	5-12
5.2j Minnesota Valley Station Summary of Activity Costs	5-13
5.2k Red Wing Station Summary of Activity Costs	5-14
5.2l Riverside Station Summary of Activity Costs	5-15
5.2m Sherburne County Station Summary of Activity Costs	5-16
5.2n Wilmarth Station Summary of Activity Costs	5-17

FIGURES

2.1 Dismantling Project Organization Utility Staff	2-7
2.2 Dismantling Project Organization Decommissioning Contractor Staff	2-8

APPENDICES

A. Summary of Station System and Structures Inventories A-1
B. Unit Cost Factor Development..... B-1
C. Unit Cost Factor Listing C-1

REVISION LOG

Rev. No.	CRA No.	Date	Item Revised	Reason for Revision
0		02/05/2010		Original Issue

EXECUTIVE SUMMARY

This report, prepared by TLG Services, Inc. (TLG), provides estimated costs for the complete dismantling of the following electric generating stations, owned and operated by Xcel Energy:

Stations Located In Minnesota:

- Allen S. King
- Black Dog
- Blue Lake
- Grand Meadow Wind Farm
- Granite City
- High Bridge
- Inver Hills
- Key City
- Minnesota Valley
- Red Wing
- Riverside
- Sherburne County (Sherco)
- Wilmarth

Station Located In South Dakota:

- Angus Anson

Xcel Energy either owns or has a share in ownership in each of these stations. All of the stations are located in Minnesota or South Dakota.

The dismantling estimate includes the cost of removing the power generating equipment such as boilers, turbine generators, fuel handling equipment, system equipment, and structures for each of the above-referenced stations. The electrical switchyards are assumed to remain in place and are not included in the estimate.

The scope of the dismantling estimate includes the following significant cost elements:

- Isolation of the units in preparation for safe dismantling (ensuring systems are de-energized to ensure a safe dismantling environment)
- Abatement of asbestos containing materials prior to dismantling (where applicable)
- Labor, equipment, and material costs associated with the removal and disposition of all installed equipment

- Labor, equipment, and material costs associated with the demolition and disposition of buildings and foundations (to a depth of 3 feet below grade)
- Removal of all subsurface utilities and below grade foundations (Grand Meadow Wind Farm only)
- Demolition contractor's on-site management, engineering, safety, and administrative staff
- Demolition contractor's expenses, including profit, insurance, permits, and fees
- Owner's on-site management, oversight, and security staff
- A cost credit associated with the disposition of scrap metals
- Cost contingency
- Ongoing environmental monitoring after the completion of the dismantling and demolition (where applicable)

The general approach in assembling the estimate was to develop a site-specific cost for each generating unit located at the station, based on a unit-specific equipment and building materials inventory. The inventory of components designated to be removed as part of the dismantling program was established using site walk-downs (including discussions with the Operations & Maintenance staff), station-provided equipment databases, and plant drawings. A similar estimate was developed for dismantling systems and structures common to multiple generating units.

This cost estimate is prepared by applying unit cost factors (developed for each inventory item from prior dismantling experience or similar related experience) against the station specific inventory. Costs for project management, shared equipment and consumables, and similar types of costs are estimated on a period-dependent basis (i.e., the magnitude of the expense depends, in part, on the duration of the project and the types of activities taking place). While equipment salvage is not included, the potential value of scrap from materials generated in dismantling the boilers, plant components, and building structural steel is included as a credit in the dismantling cost estimate. Contingency is provided within this estimate to account for unpredictable project events.

This estimate includes the costs to remove all structures on the site to a nominal level of three feet below grade. Concerns for worker safety reinforce the need for a controlled approach. The cost estimates reflect demolition by controlled/engineered dismantling.

Limited site landscaping includes grading and seeding for drainage and erosion control.

The total dismantling costs, expressed in thousands of 2009 dollars, are provided at the end of this section.

SUMMARY OF DISMANTLING COSTS
(All costs are in thousands of 2009 dollars)

Station	Unit	MWe rating	Fuel	In Service	Station Cost
Allen S. King	1	588	Coal	1968	33,401
Angus Anson	1	106	Natural Gas/Oil	1994	5,239
	2	110	Natural Gas/Oil	1994	
	3	165	Natural Gas/Oil	2005	
Black Dog	2	98	Coal/Natural Gas	1987	37,280
	3	108	Coal/Natural Gas	1955	
	4	170	Coal/Natural Gas	1960	
	5	162	Coal/Natural Gas	2002	
Blue Lake	1	45	Natural Gas/Oil	1974	10,115
	2	45	Natural Gas/Oil	1974	
	3	45	Natural Gas/Oil	1974	
	4	45	Natural Gas/Oil	1974	
	7	165	Natural Gas/Oil	2005	
	8	165	Natural Gas/Oil	2005	
Grand Meadow	1-67	101	Wind	2008	17,146
Granite City	1	18	Natural Gas/Oil	1969	3,319
	2	18	Natural Gas/Oil	1969	
	3	18	Natural Gas/Oil	1969	
	4	18	Natural Gas/Oil	1969	
High Bridge	1	160	Natural Gas/Oil	2008	11,536
	2	160	Natural Gas/Oil	2008	
	3	250	(note 1)	2008	
Inver Hills	1	60	Natural Gas/Oil	1972	7,944
	2	60	Natural Gas/Oil	1972	
	3	60	Natural Gas/Oil	1972	
	4	60	Natural Gas/Oil	1972	
	5	60	Natural Gas/Oil	1972	
	6	60	Natural Gas/Oil	1972	

SUMMARY OF DISMANTLING COSTS
(continued)
(All costs are in thousands of 2009 dollars)

Station	Unit	MWe rating	Fuel	In Service	Station Cost
Key City	1	18	Natural Gas/Oil	1970	3,319
	2	18	Natural Gas/Oil	1970	
	3	18	Natural Gas/Oil	1970	
	4	18	Natural Gas/Oil	1970	
Minnesota Valley	1	10	Coal	1949	13,875
	2	10	Coal	1949	
	3	44	Coal	1953	
Red Wing	1	10	Refuse Derived Fuel	1949	10,392
	2	10	Refuse Derived Fuel	1949	
Riverside	7	165	(note 2)	1964	29,820
	8	231	Coal	2009	
	9	173	Natural Gas/Oil	2009	
	10	173	Natural Gas/Oil	2009	
Sherco	1	750	Coal	1976	84,093
	2	750	Coal	1977	
	3	900	Coal	1987	
Wilmarth	1	10	Refuse Derived Fuel	1948	9,373
	2	10	Refuse Derived Fuel	1951	
Fleet Totals		6,438			\$276,851

NOTES:

- 1 Unit 3 receives steam from Units 1 and 2 HRSGs
- 2 Unit 7 receives steam from Units 9 and 10 HRSGs

1. INTRODUCTION

1.1 OBJECTIVE OF STUDY

The objective of this dismantling cost study prepared by TLG Services is to present an estimate of the costs to dismantle Xcel Energy's fossil-fuel and wind farm generating stations in Minnesota and South Dakota. This study is not intended to be a dismantling plan for each of the stations, but a cost estimate prepared to support current financial planning for future dismantling.

1.2 STATION DESCRIPTIONS

Allen S. King is a single unit coal fired generating facility with a cyclone-fired boiler. It has a generating capacity of 588 MWe while burning low sulfur Wyoming coal. The plant is located in Oak Park Heights, Minn., on the St. Croix River. The unit was installed in 1968. From 2004 to 2007 the unit was completely refurbished as part of an Emissions Reduction Project.

Angus Anson is a three unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity is 381 megawatts. Unit 1, 2 and 3 are rated at 106, 110 and 165 MWe, respectively. The station is located in Sioux Falls, South Dakota adjacent to the decommissioned Pathfinder nuclear facility. Units 1 and 2 were placed in service in 1994. Unit 3 was placed in service in 2005.

Black Dog is a coal and gas fired generating station located on the Minnesota River just south of the Twin Cities. Unit 5, which is a natural gas fired combined cycle combustion gas turbine, replaced the original Unit 1 boiler and steam turbine. The exhaust heat from Unit 5 gas turbine generates steam in the HRSG (heat recovery steam generator) and powers the original Unit 2 steam turbine that was installed in the 1950's. Units 3 and 4 are dual fuel boilers with steam turbines. They use coal as a primary fuel and natural gas for back up. The station generating capacity is 538 megawatts. Unit 2, 3, 4 and 5 are rated a 98, 108, 170, and 162 MWe, respectively. Units 2, 3 and 4 were installed during the 1950's. Unit 5 was placed in service in 2002.

Blue Lake is a six unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity is 510 megawatts. Units 1-4 are rated at 45 MWe each. Units 7 and 8 are rated at 165 MWe each. The station is located in Shakopee, Minnesota along the Minnesota

River. Units 1-4 were placed in service in 1974. Units 7 and 8 were placed in service in 2005.

Grand Meadow is a 67 unit wind turbine complex located in a stretch of farm fields six miles long and four miles wide. The farm is spread out over roughly 10,000 acres southeast of Interstate 90 in Grand Meadow, Clayton, and Dexter Townships, Mower County, Minnesota. Each wind turbine / generator set has a rated capacity of 1.5 MWe, for a complex total of 100.5 MWe. The units were placed in service in 2008.

Granite City is a four unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity is 72 megawatts with each of the four units rated at 18 MWe. The station is located in St. Cloud, Minnesota. The units were installed in 1970.

High Bridge is a three unit facility consisting of two combined cycle combustion gas turbines and one steam turbine. The combustion turbines are each direct coupled to a 160 MWe electric generator. The exhaust gas of each combustion turbine is ducted through its own HRSG. The steam from the HRSG is piped to a 250 MWe steam turbine. The station has a net dependable capacity of 570 MWe. The station was placed in service in 2008. It is located in downtown St. Paul, Minnesota, on the Mississippi River.

Inver Hills is a six unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity is 360 megawatts. Units 1-6 are rated at 60 MWe each. The station is located in Inver Grove Heights, Minnesota. The units were placed in service in 1972.

Key City is a four unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity is 72 megawatts with Units 1-4 at 18 MWe each. The station is located in Mankato, Minnesota. The units were installed in 1970.

Minnesota Valley is a three unit facility abandoned in place. The station consists of two 10 MWe and one 46 MWe coal fired units. The station is located in Chippewa County, Granite Falls, Minnesota. The two 10 MWe units were installed in the late 1940's. The third unit was installed in 1953. The station was retired from service in 2003.

Red Wing is a two unit generating facility that burns processed municipal solid waste, referred to as refuse-derived fuel (RDF). The station employs a combination duct scrubber with a baghouse to effectively cut emissions from

burning RDF. The scrubber treats flue gas with a water spray and dry lime. The baghouse traps particulate by forcing gas streams through large filter bags. The generating capacity of each unit is 10 MWe. The station is located in Red Wing, Minnesota. The units were installed in the early 1950's (coal fired units) and later modified to burn RDF.

Riverside is a three unit facility consisting of two combined cycle combustion gas turbine generators (Units 9 and 10) and one steam turbine (refurbished Unit 7 steam turbine). The combustion turbines are each direct coupled to a 173 MWe electric generator. The exhaust gas of each combustion turbine is ducted through its own HRSG. The steam from the HRSG is piped to the Unit 7 165 MWe steam turbine. Abandoned in place, and included in this estimate, are the retired Units 6, 7 and 8 boilers, and the Unit 8 steam turbine with all its associated piping and system components. The three operational units went into service in 2009. The station is located northeast of Minneapolis on the Mississippi River

Sherburne County (Sherco) is a three unit 2,400 MWe coal-fired facility. The station is located in Becker, Minnesota, 45 miles northeast of the Twin Cities, on the Mississippi River. Units 1, 2 and 3 have a net dependable capacity of 750, 750 and 900 MWe each, respectively. The units were installed between 1976 and 1987.

Wilmarth is an electric generating facility that burns RDF. The station employs a combination duct scrubber with a baghouse to effectively cut emissions from burning RDF. The scrubber treats flue gas with a water spray and dry lime. The baghouse traps particulate by forcing gas streams through large filter bags. The generating capacity of Unit 1 and 2 is 10 MWe each. The station is located in Mankato, Minnesota. The units was installed in the early 1950's and modified in 1987 to burn RDF.

1.3 SCOPE

The scope of the dismantling estimate includes the following significant cost elements:

- Preparation for safe dismantling; including hazardous materials characterization for such items as ACM (asbestos-containing materials), lead, mercury, PCBs, hydrocarbons in soil, etc. Isolation of the units in preparation for safe dismantling (e.g. ensuring systems are de-energized, fuel and chemical storage tanks are drained and cleaned, etc. (where applicable).

- Abatement of ACM prior to dismantling (where applicable)
- Labor, equipment, and material costs associated with the removal and disposition of all installed equipment
- Labor, equipment, and material costs associated with the demolition and disposition of buildings and foundations
- Demolition contractor's on-site management, engineering, safety, and administrative staff
- Demolition contractor's expenses, including insurance, permits, and fees.
- Owner's on-site management, oversight, and security staff
- A cost credit associated with the disposition of scrap metals
- Cost contingency
- Ongoing environmental monitoring of the facilities after the completion of the dismantling and demolition

Costs are provided for each station, identified by significant cost element. The cost per station includes the costs for dismantling the generating unit and the common station facilities. Costs are provided in 2009 dollars.

1.4 GENERAL APPROACH

The general approach in assembling the estimate was to develop a site-specific cost for each generating unit located at the station, based on a unit-specific equipment and building materials inventory. The inventory of components designated to be removed as part of the dismantling program was established using site walk-downs (including discussions with the Operations & Maintenance staff), station-provided equipment databases, and plant drawings. A similar estimate was developed for dismantling systems and structures common to all units on site.

This cost estimate was prepared by applying unit cost factors (developed for each inventory item from prior dismantling experience or similar related experience) against the station specific inventory. Costs for project management, shared equipment and consumables, and similar types of costs are estimated on a period-dependent basis (i.e., the magnitude of the expense depends, in part, on the duration of the project and the types of activities taking place). While equipment salvage is not included, the potential value of scrap from materials generated in dismantling the boilers, plant components, and building structural steel is included as a credit in the dismantling cost estimate.

Contingency is provided within this estimate to account for unpredictable project events.

This estimate includes the costs to remove all structures on the site to a nominal level of three feet below grade. Concerns for worker safety reinforce the need for a controlled approach. The cost estimates reflect demolition by controlled/engineered dismantling.

Limited site landscaping includes grading and seeding for drainage and erosion control.

Section 2 of this report identifies the activities and sequence of activities necessary to dismantle a generating station. Section 3 provides the specific bases for the estimate. Section 4 discusses scrap metal and associated credits to the dismantling costs. Section 5 provides the results. Appendices, noted throughout this report, provide additional information important to understanding this estimate.

2.0 DISMANTLING OPERATIONS

The estimate for dismantling the stations is based on the complete removal of the units and common station facilities (except where noted). The following sections describe the project organization, basic activities, and special equipment necessary for accomplishing the dismantling project.

2.1 PROJECT ORGANIZATION

For the purposes of this study, the dismantling project for each station is assumed to be managed by Xcel Energy's Project Director, who would have the primary responsibility for dismantling the station. A Dismantling Contractor, experienced in dismantling similar facilities, would be hired as the prime contractor for the removal of plant components and site facilities. The Dismantling Contractor's Project Manager would report to the Project Director. The Dismantling Contractor would manage and supervise the dismantling activities of the station and be responsible for completing the work in an expeditious and safe manner. Contractor personnel would manage and direct the labor force in accordance with approved procedures and in accordance with a health and safety program. The owner's staff would maintain and/or provide the engineering, safety, and environmental compliance oversight, and the security services necessary to support dismantling operations. Figures 2.1 and 2.2 identify typical organizations for the plant/utility staff and the associated contractor personnel during the dismantling phase of the project. The smaller facilities included within this estimate would have a commensurately smaller project organization (Angus Anson, Blue Lake, Grand Meadow, Granite City, Inver Hills, Key City).

2.2 POST-SHUTDOWN ACTIVITIES

The estimate is based on each station being shut down and placed into a post-shutdown configuration by the plant staff. The length of time that the facility is in this configuration is indeterminate and the costs for maintaining the facility in this configuration is not included within the scope of this dismantling effort. The activities to be completed post-shutdown, but prior to station dismantling, include:

- Removal of consumables and supplies not needed in the post-shutdown configuration
- Removal of residual fuels (including oil/coal)

- Removal of acids and caustics; flushing and cleaning of storage tanks
- Cleaning of fly-ash handling equipment, e.g., filters and holding tanks
- Removal of hazardous waste and combustible materials
- If the unit is to be maintained in a condition where lighting, electricity, heating, water, sanitary, and similar services are to remain active, reconfigure these systems to minimize maintenance requirements
- Disposition of surplus bulk chemicals and gas storage containers
- Completion of a hazardous materials survey of the station
- De-watering and removal of residual ash from settling ponds and/or basins
- Installation of any appropriate physical barriers (sealing circulating water system) and/or security barriers
- Maintenance of the facility (maintaining roofs and windows, drain systems, and electrical systems to preclude creating hazardous working conditions in the future)

Except for the hazardous materials survey, costs to conduct these activities have not been included in this estimate. The plant operations and maintenance staff would be expected to perform these activities in the interval of time between final plant shutdown, and the onset of the dismantling program.

2.3 DISMANTLING PROGRAM

The actual dismantling program begins once the station owner has decided to dismantle the site, either immediately following final shutdown, or after a period of storage following final shutdown. The dismantling program has been organized into three distinct periods: Period 1 - Engineering/Planning and Asbestos and Other Hazardous Material Abatement (if necessary); Period 2 - Dismantling Operations; and Period 3 - Site Restoration. This section summarizes the activities performed under each Period of the program.

For the purposes of this estimate it is assumed that once the decision to dismantle has been made and a project start date established, the work in each of these periods will be completed successively (no delay between periods). This report does not attempt to describe all of the activities necessary to dismantle a station, but identifies representative activities appropriate to this type of project.

2.3.1 Period 1- Engineering/Planning and Asbestos Abatement

Engineering/Planning:

A preliminary planning phase of the program begins once it is has been determined that a station will be dismantled and the project has been authorized to proceed. During this phase, the owner assembles its dismantling management organization, makes appropriate decisions regarding the extent of dismantling and the approach to managing the activities, and accomplishes those site preparation activities necessary to transition from a plant shutdown configuration to site dismantling. For purposes of this estimate it is assumed that the intent is to dismantle the entire station as a single project. Costs incurred during this preliminary phase of the program are included in the dismantling costs presented in this study.

The Owner prepares the stations for dismantling by performing the following activities:

- Prepare specifications that identify and describe the objectives and major work activities to be accomplished (establishing the final site configuration)
- Assemble plant documentation that may be relevant to dismantling (drawings, hazardous material reports, environmental studies, etc.)
- Select an asbestos abatement contractor (if required) and Dismantling Contractor
- Assemble and mobilize the management and oversight team responsible for the project

Asbestos Abatement (if applicable)

The asbestos abatement contractor prepares for this work by thoroughly understanding the scope of the asbestos remediation work and obtaining the permits necessary to initiate the work. Abatement of asbestos is considered an important prerequisite to dismantling the station's systems and structures. The method by which asbestos is abated is strictly controlled by federal and/or state regulations and includes the following requirements:

- Work will be done inside enclosures designed to capture any asbestos-containing particles. With the exception of removal of small quantities of asbestos in local areas, it would be expected that most work will be

done in large enclosures (containment tents). The enclosures will have a filtered exhaust and be maintained under negative air pressure (air will leak into the enclosure rather than leak out).

- The air outside of the enclosures will be monitored to ensure barriers are effective.
- Workers, while working inside enclosures, will wear respiratory protective equipment as well as protective clothing.
- All materials removed from the enclosure will be packaged in accordance with regulations (minimum double-bag), and will be removed via a materials handling access area.
- Workers will enter and exit the enclosures through a personnel decontamination chamber in a controlled manner (ensuring asbestos contamination does not spread beyond the containment).
- After the asbestos abatement is complete, the effectiveness of the process will be established via regulatory-specified processes (generally verifying that there is no asbestos containing material capable of becoming airborne).
- Asbestos containing materials will be disposed of at a properly licensed disposal facility.
- After ensuring that all asbestos has been removed, the enclosures will be taken down in accordance with regulatory requirements and disposed of at a licensed facility.

Dismantling Preparations

The dismantling contractor prepares the station for dismantling by performing the following activities:

- Installing environmental barriers and monitoring equipment
- Reviewing plant drawings and specifications that may be useful for the dismantling project
- Identifying the processes to achieve the final desired station configuration
- Identifying the major work sequence
- Preparing dismantling activity specifications and work orders/forms
- Preparing detailed dismantling procedures

- Preparing a dismantling plan
- Preparing permit application(s) for plant demolition
- Mobilizing site staff
- Configuring temporary services/facilities to support dismantling operations
- Arranging for heavy lift and dismantling equipment, rigging, and tooling
- Hiring and training the labor force

2.3.2 Period 2 - Dismantling Operations

Dismantling activities are initiated after completing the engineering and planning process, and after asbestos abatement is complete. The sequence of activities will be determined at the time of dismantling, but typically a sequence would include the following items (not all activities will be required for each station, particularly those with Combustion Gas Turbines and the Wind Farm):

- Removing coal yard equipment, including unloading structures, conveyors, transfer towers, and reclaim systems
- Removing above-ground storage tanks
- Removing large equipment from rooftops or at higher elevations
- Removing equipment that must be removed prior to start of boiler structure removal, including fly-ash handling, coal handling, burner fuel supply, scrubbers, air and flue gas ducts, etc.
- Removing electrostatic precipitator and bag houses by cutting casings and connecting gas ducts
- Removing the top of the boiler enclosure to allow access to the platens
- Removing the boiler waterwalls
- Removing steam drum and deaerator by severing all connections and lowering to grade
- Removing boiler structural steel
- Disassembling the turbine/generator and condenser
- Removing all other equipment and components required prior to structures demolition

- Removing the turbine building superstructure and interior floors
- Blasting/dismantling the concrete turbine-generator pedestal(s)
- Removing siding from buildings
- Dismantling steel framing
- Demolishing structural concrete
- Removing the stack(s)
- Removing cooling tower(s) and / or cooling water intake and discharge structures
- Removing all other site structures within the scope of the dismantling program
- Sorting and organizing materials for pickup by the scrap dealer(s)
- Size reducing concrete rubble to enhance its suitability for backfill
- Removing any temporary services used to support the dismantling effort (lighting / ventilation / electrical / groundwater management)

2.3.3 Period 3 - Site Restoration

Site restoration activities are initiated following completion of the dismantling operations. The objective of site restoration in this estimate is to restore the station grounds to a configuration that does not pose a safety hazard; and plant vegetation for erosion control. As such, landscaping will be limited to grading, placement of top soil, and seeding. Site restoration as used in this estimate is not intended to re-configure the station for redevelopment, e.g. use as a recreational or industrial facility.

A typical site restoration sequence would be:

- Backfill below grade voids with recycled concrete rubble (reinforcing steel removed from concrete) or with additional fill, if necessary
- General grading of the station
- Placement of top soil or other suitable surface material necessary to maintain erosion control
- Landscaping to the extent necessary to re-vegetate the station (grass or similar plant materials), and
- Demobilizing personnel and equipment

FIGURE 2.1
DISMANTLING PROJECT ORGANIZATION
UTILITY STAFF

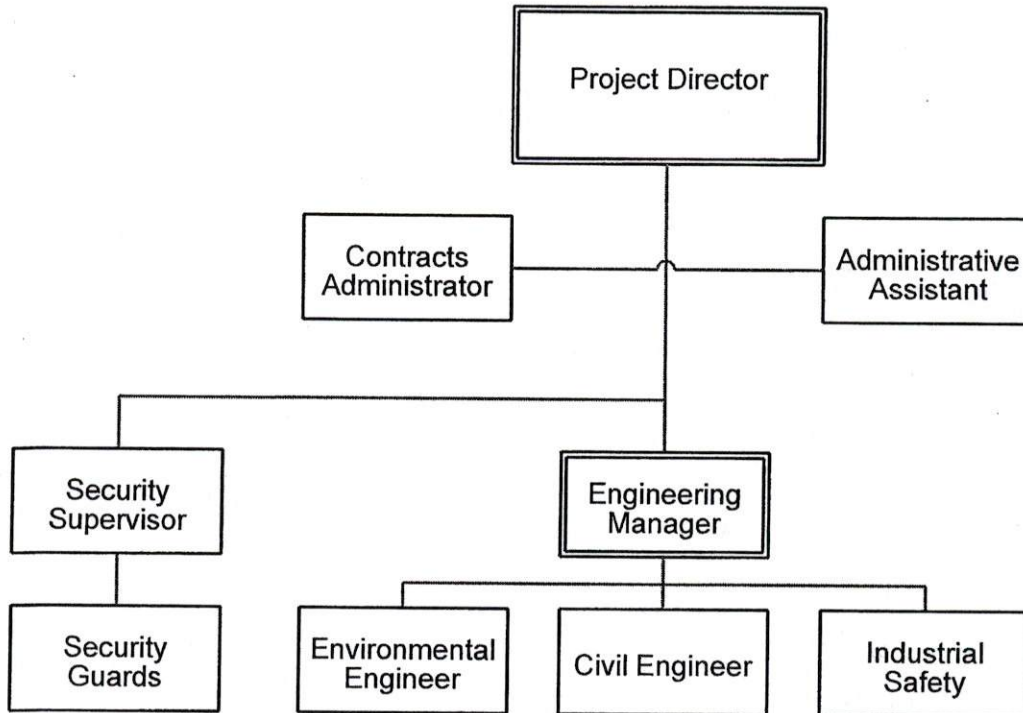
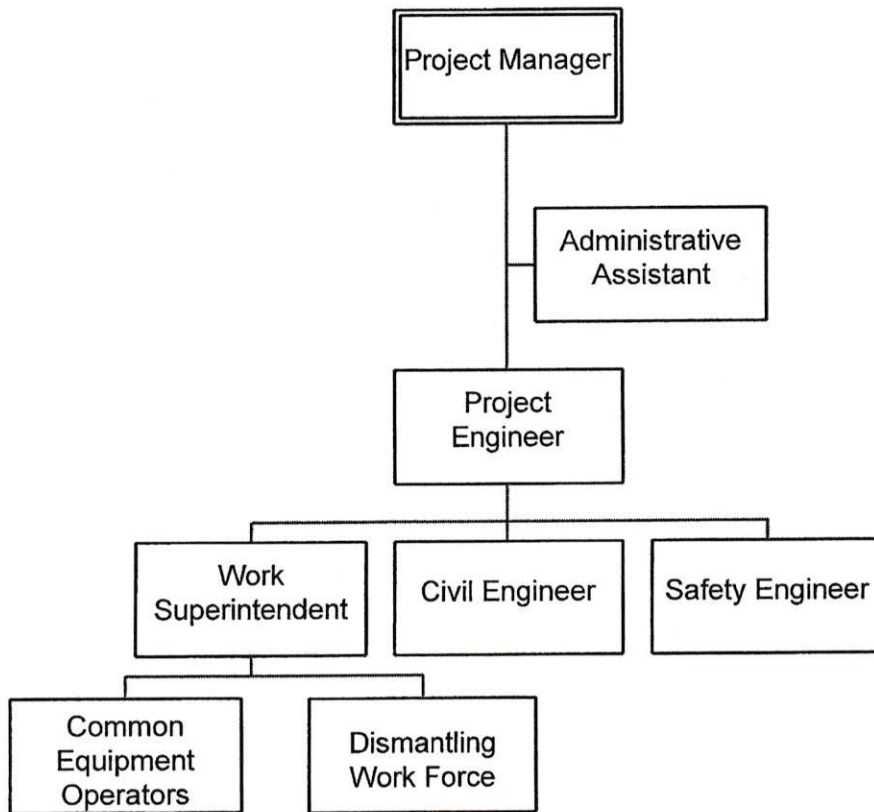


FIGURE 2.2
DISMANTLING PROJECT ORGANIZATION
DECOMMISSIONING CONTRACTOR STAFF



3.0 COST ESTIMATE

The basis, methodology, and assumptions for the site-specific cost estimate are described in the following paragraphs.

3.1 BASIS OF ESTIMATE

Inventory of Materials to be Removed

The inventory is an essential element of the estimate, since dismantling costs are determined by applying unit cost factors against the corresponding inventory quantities. For each of these estimates a site-specific inventory of materials to be removed was developed using a combination of methods. The inventory used in developing the estimate for each station is provided in Appendix A.

Comparable Boiler / Turbine Unit Information Available to TLG Where TLG had previously developed inventory information for a boiler and turbine of similar size, fuel type and vintage, referred to as "reference unit", this information was used to represent the boiler / turbine systems inventory for the comparable Xcel Energy unit. The inventory was adjusted to reflect the difference between the rating of the Xcel Energy unit boiler / turbine and the rating of the reference unit.

There are expected differences in other facilities, even if the boiler and turbine are similar between comparable units. These include systems and structures associated with cooling water intake and discharge, fuel handling, exhaust gas, maintenance buildings and shops, pollution-control, and the quantity and extent of asbestos containing material (if applicable). For these systems and structures TLG developed the inventory by conducting a walk-down of the station, and extracting information from station-specific drawings and photos.

Comparable Plant Information Not Available to TLG Where the Xcel Energy unit(s) had no comparable match in the TLG database, the site specific inventory was developed "from scratch", by completing a physical walk-down of each such unit, discussions with the stations' Operations & Maintenance staff, and extracting data from station-specific maintenance databases (lists of equipment), drawings, and photos.

Economic Cost Drivers

In developing an estimate, the cost of labor, equipment and material, credit for scrap, and similar costs will influence the results of the estimate. The basis for the significant cost drivers are:

1. Craft labor rates are based on existing contracts with craft labor contractors. These rates were provided by Xcel Energy (Ref. 1).
2. Utility labor rates are based on current labor costs for positions likely to be employed during the dismantling project. These rates were provided by Xcel Energy (Ref. 2).
3. Material and equipment costs for conventional demolition and/or construction activities, Contractors Insurance, Small Tools Allowance, Permit / Fees, and Contractor's Fee are based on R.S. Means Construction Cost Data (Ref. 3).
4. Scrap metal prices are based on published indices (Ref. 4).
5. Contingency, contractor fee, contractor insurance, environmental sampling, and permits & fees are based upon R.S. Means Construction Cost Data.
6. Costs in this estimate are in 2009 dollars.
7. Property taxes (or payments in lieu of taxes) are not included within the estimate.
8. The estimate to dismantle the stations does not address credit associated with the residual value of the land.

3.2 METHODOLOGY

The methodology used to develop the cost estimate follows the basic approach presented in the AIF/NESP-036, "Guidelines for Producing Commercial Nuclear Power Plant Decommissioning Cost Estimates" (Ref. 5) and the US DOE "Decommissioning Handbook" (Ref. 6). These publications utilize a unit factor method for estimating decommissioning activity costs to simplify the estimating calculations. Unit cost factors for concrete removal (\$/cubic yard), steel removal (\$/ton), and cutting costs (\$/in) are developed from the labor cost information from R. S. Means. The activity-dependent costs are estimated using item quantities (cubic yards, tons, inches, etc.) developed from plant drawings and inventory documents. The unit factors used in this study reflect the latest available information on worker productivity in plant dismantling. A sample unit cost factor is provided in Appendix B. A list of unit cost factors is provided in Appendix C.

An activity duration critical path is developed to determine the total dismantling program schedule. This program schedule is then used to determine the period-dependent costs for program management, administration, field engineering, equipment rental, quality assurance, and security. TLG estimated typical salary and hourly rates for personnel associated with period-dependent costs. The costs for conventional demolition of structures, materials, backfill, landscaping, and equipment rental are obtained from R.S. Means. Examples of such unit factor development are presented in AIF/NESP-036.

The unit cost factor method provides a demonstrable basis for establishing reliable cost estimates. The detail of activities for labor costs, equipment and consumables costs provide assurance that cost elements have not been omitted. Detailed unit cost factors, coupled with the site-specific inventory of piping, components and structures provide confidence in the cost estimates.

The activity-dependent and period-dependent costs are combined with applicable collateral costs to yield the direct decommissioning cost. A contingency is then applied. "Contingencies" are defined in the American Association of Cost Engineers "Project and Cost Engineers' Handbook" (Ref. 7) as "specific provision for unforeseeable elements of cost within the defined project scope; particularly important where previous experience relating estimates and actual costs has shown that unforeseeable events which will increase costs are likely to occur." The cost elements in this estimate are based on ideal conditions; therefore, a contingency factor has been applied.

Examples of items that could occur but have not otherwise been accounted for in this estimate include: labor work stoppages, bad weather delays, equipment/tool breakage, changes in the anticipated plant shutdown conditions, etc. These types of unforeseeable events are discussed in the AIF/NESP-036 study. Guidelines are also provided for applying contingency.

3.3 ASSUMPTIONS

The following assumptions were used in developing the dismantling estimate.

Pre-requisite Activities

1. Dismantling of the station will not commence until all units are retired (cost estimate is not based on independent dismantling of units while adjacent units are operating).

2. The arrangements of the unit facilities as they exist in 2009 based upon walk-downs conducted by TLG, and databases and drawings provided by owner.
3. The dismantling process will be an engineered process with substantial consideration for industrial (worker) safety.
4. The demolition will be performed by a Dismantling Contractor who is responsible to provide adequate staff and equipment to complete the dismantling in a safe manner.
5. Site security costs to restrict access to the demolition project by unauthorized personnel are included.
6. The estimates are based on industrial safety and environmental regulations effective in 2009.
7. Ash ponds will be dewatered and closed after shutdown by the stations' owner.
8. On-site fuel inventories will be used and/or removed prior to start of dismantling.
9. Silos, precipitators, hoppers, tanks, etc., will be emptied by operations and maintenance staff after shutdown.
10. Acids, caustics, and similar hazardous materials will be removed by operations and maintenance staff after shutdown.
11. Consumables, such as ion exchange materials and filters, will also be removed by operations and maintenance staff after shutdown.
12. Stores, spare parts, gas storage containers, laboratory equipment, office furniture, etc., will be removed by the owner after shutdown.
13. Oils used in station transformers are PCB-free. Lubricating and transformer oils are drained and removed by operations and maintenance staff after shutdown.
14. Asbestos (if present) will be removed prior to the start of dismantling. Asbestos insulation and PACM (presumed asbestos containing materials) will be disposed of at licensed facilities. Quantities of asbestos are based on owner-provided information where available. Where such information was not available, the quantities of asbestos were estimated.
15. Prior to initiating dismantling, essentially all live circuits will have been de-energized (to preclude creating an industrial hazard). If required, temporary services systems (air, water, electrical, fire water, etc.) will be

used to support dismantling operations and will remain in service throughout the project until no longer required.

Economic Assumptions

16. Post-shutdown "dormancy" costs (i.e., security and maintenance on any of the units retired prematurely) are not included in the study.
17. Escalation/inflation of the costs over the remaining operating life is not included.
18. A 12.5% fee is added to the Demolition Contractor's cost to account for its overhead and profit.
19. A 25% contingency is applied to asbestos remediation activities.
20. A 15% contingency is applied to all remaining dismantling-related costs.
21. An allowance has been included for post-dismantling environmental monitoring costs (where applicable)
22. A credit for scrap metal cost recovery is included in the estimates. Retired plant equipment is assumed to have no value as salvage (sold for re-use).

Physical Work Assumptions

23. The costs for disposition (if required) of contaminated soil (e.g., PCBs, hydrocarbons, lead, asbestos, mercury, acids or caustics) are outside the scope of this estimate.
24. Large equipment and components will be removed prior to structures demolition.
25. An environmental hazards crew will be maintained throughout the demolition period to address such items as lead paint and asbestos that was inaccessible during the asbestos remediation period (where applicable).
26. Turbine pedestals and powerhouse building foundations will be removed by controlled blasting and back-filled to grade.
27. Structures and foundations will be removed to a depth of three feet below grade, with any resulting voids back-filled to grade level.
28. Chimney stacks will be blasted to the ground and broken into rubble, the steel liners cut and removed, and the foundations control-blasted to break the concrete in place so that groundwater drainage is provided.

29. The dismantling of the electrical equipment terminates at the switch yard boundary. The switch yard is left intact.
30. Concrete rubble generated during dismantling will be used as fill where needed.
31. The site will be graded; however, no effort was included in this estimate to restore the original contour of the land. Ground cover will be established for erosion control.
32. Roads, parking lots, etc., are removed after the facility is dismantled (with the exception of the immediate area around the switchyard).

Scheduling Assumptions

33. All work is performed during an eight-hour workday, five days per week, with no overtime.
34. Multiple crews work parallel activities to the maximum extent possible, consistent with efficiency (adequate access for cutting, removal, and laydown space) and with industrial safety appropriate for demolition of heavy components and structures.
35. Scheduling was calculated without constraints on availability of labor, equipment, or materials.

3.4 STATION-SPECIFIC NOTES

3.4.1 Allen S. King

- All currently operational coal handling equipment, and the abandoned in place coal barge unloader facility with the twenty-two dolphin type barge piers are included in the estimate.
- A cofferdam will be installed to allow removal of the condenser cooling water discharge structure and the discharge structure from the cooling tower.

3.4.2 Angus Anson

- The control room, administration offices and maintenance facilities housed in the Pathfinder Plant are not included in the estimate.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- Two large oil storage tanks are included in the estimate.

3.4.3 Black Dog

- The abandoned-in-place Unit 2 boiler and chimney, and the original Unit 3 chimney are included in the estimate.
- All currently operational coal handling equipment e.g. conveyors, rail car unloader, transfer towers, stacker conveyor etc. are included in the estimate
- A cofferdam will be installed to remove the intake condenser cooling water structure.

3.4.4 Blue Lake

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- Two large oil storage tanks are included in the estimate.

3.4.5 Grand Meadow Wind Farm

- All underground power and control cables will be excavated and removed.
- Tower foundations are completely removed.
- All access roads surfaces will be excavated and removed. The excavated areas will be back-filled with soil.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.6 Granite City

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- Two large oil storage tanks are included in the estimate.

3.4.7 High Bridge

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- A cofferdam will be installed to remove the river intake and discharge structure.

3.4.8 Inver Hills

- The oil storage facilities which include 3-ten million gallon oil storage tanks are included in this estimate.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.9 Key City

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- Two large oil storage tanks are included in the estimate.

3.4.10 Minnesota Valley

- All three of the abandoned in place units are included in the estimate.
- The asbestos quantities were calculated considering unit three to be all asbestos and Units 1 and 2 to only have small amounts on the partially dismantled boilers.
- A cofferdam will be installed to remove the river intake and discharge structure.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.11 Red Wing

- The RDF unloading facility and the conveyor transport system are included in the estimate.
- A cofferdam will be installed to remove the cooling water intake and discharge structure.
- The barge unloading facility is not included in the estimate.

3.4.12 Riverside

- Included in this estimate are the following abandoned in place facilities and equipment:
 - Unit 6, 7 and 8 building structure.
 - Unit 6 and 7 boilers

- Unit 8 boiler, turbine and associated equipment
- Cofferdams will be installed to remove the four cooling water intake and discharge structures.

3.4.13 Sherburne County

- All coal handling facilities e.g. coal barn, rail car dumper building, coal yard control and maintenance facility, earthen storage berms, conveyor systems, transfer towers etc. are included in this estimate.
- All warehouse/storage type buildings on the site are included in the estimate.
- A cofferdam will be installed to remove the cooling water intake and discharge structure.

3.4.14 Wilmarth

- The RDF bulk storage facility is not included in the estimate. Only the transport section of the facility with conveyor systems and transfer towers.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

4.0 SCRAP METAL CREDITS

The dismantling of a typical fossil plant occurs after a lengthy plant operating life. The existing plant equipment is considered obsolete and suitable for scrap as deadweight quantities only. Xcel Energy will make economically reasonable efforts to salvage equipment following final plant shutdown. However, dismantling techniques assumed by TLG for equipment in this analysis are not consistent with removal techniques required for salvage (resale) of equipment. Experience has indicated that buyers prefer equipment stripped down to very specific requirements before they would consider purchase. This can require expensive work to remove the equipment from its installed location, which is inconsistent with the rapid dismantling approach assumed in this estimate. Since placing a salvage value on this machinery and equipment would be speculative, and the value would be small in comparison to the overall cost of dismantling, this analysis does not attempt to quantify the value that an owner may realize based upon those efforts.

Furniture, tools, mobile equipment such as forklifts, trucks, bulldozers, and other property is removed at no cost or credit to the decommissioning project. Disposition may include relocation to other facilities. Spare parts are made available for alternative use.

The materials used in the equipment and buildings are suitable for recycle as scrap metals. As such, an estimated value of the scrap metal credit has been developed and applied to each station's cost estimate. The value of scrap was estimated using current market values extracted from published sources and applying this value to the estimated quantities of materials generated from the dismantling project. There were four basic types of metals used in the scrap estimates; carbon steel (the most common material used at the station), copper, stainless steel (high alloy steel) and aluminum. The scrap credit, in addition to considering the quantity and types of materials, also considered the cost of handling and transporting these materials to a major scrap processing location in the Twin Cities area where scrap is used or sold. The value of the scrap is reduced by the transportation costs.

The basis for scrap metal value is summarized in Table 4.1. A summary of the basis for the scrap credit is provided in Tables 4.2 which details the scrap quantities by material type from each unit, and Table 4.3 lists the dollar value of these quantities.

**TABLE 4.1
BASIS FOR SCRAP METAL VALUE
(2009 dollars)**

Type of Material	Scrap Category ¹	Market Value ²	Units	Transport Cost ³	Scrap Metal Credit ⁴ (per ton)
Carbon Steel	Cast Iron	224.00	Per Ton	37.14	186.86
	No. 1	280.00	Per Ton	37.14	242.86
	Mixed Scrap	224.00	Per Ton	37.14	186.86
	Galvanized	56.00	Per Ton	37.14	18.86
Stainless Steel	SS-1	1.07	Per Pound	0.02	2,102.86
Copper	Insulated Cable	1.47	Per Pound	0.02	2,902.86
	No. 2 Copper	2.34	Per Pound	0.02	4,642.86
	Copper-Nickel	5.03	Per Pound	0.02	10,022.86
	Large Motor	0.35	Per Pound	0.02	662.86
Non-Ferrous	Aluminum	0.30	Per Pound	0.02	562.86

Note 1: Scrap categories are consistent with information provided in Recycler's World

Note 2: The market value for scrap metal used in this estimate is based on Recycler's World U.S. Scrap Metal Index Spot Market Prices (October 29, 2009).

Note 3: The estimated cost for handling and transporting the materials to a major scrap processing center in the Twin Cities area is \$ 37.14 / ton or \$0.018 / pound.

Note 4: The scrap metal credit reflects the market value of scrap adjusted for handling and transport cost to local scrap metal recycler.

TABLE 4.2
QUANTITY OF SCRAP METALS BY STATION
(pounds)

Station Name	Carbon Steel			Stainless Steel	Galvanized Steel	Copper			Copper	Aluminum	Total
	Cast Iron	No. 1	Mixed Scrap	SS-1	Insul Cbl	No. 2 Cu	Large Mtr	Nickel			
Allen S. King	2,880,765	38,053,144	63,317,912	486,000	1,177,279	323,802	504,315	1,806,321	531,325	-	109,080,861
Angus Anson	277,176	2,491,905	7,967,002	582,280	95,345	39,562	449,708	86,724	-	-	11,989,703
Black Dog	2,434,233	26,199,328	52,586,654	876,020	1,025,647	270,288	750,714	2,591,567	266,264	-	87,000,714
Blue Lake	562,895	4,330,526	17,158,390	1,116,834	151,311	66,137	487,509	167,052	-	-	24,040,654
Grand Meadow	-	3,819,000	25,238,012	-	-	-	398,519	-	-	1,562,880	31,018,411
Granite City	415,622	941,747	3,857,045	44,291	123,454	19,672	117,956	37,557	-	-	5,557,344
High Bridge	844,602	9,997,839	18,406,483	551,661	572,357	113,539	633,164	1,016,734	-	-	32,136,381
Inver Hills	203,824	2,657,966	17,562,247	911,580	66,005	-	523,234	6,408	-	-	21,931,263
Key City	415,622	941,747	3,857,045	44,291	123,454	19,672	117,956	37,557	-	-	5,557,344
Minnesota Valley	638,559	9,986,690	22,491,124	1,041,334	398,029	69,741	557,138	1,395,489	292,722	-	36,870,826
Red Wing	269,371	4,295,858	5,893,649	450,383	251,269	37,995	104,217	235,896	34,301	-	11,572,939
Riverside	622,666	24,239,240	49,739,760	294,509	472,834	96,175	766,986	1,421,870	-	-	77,654,039
Sherco	3,767,319	120,191,550	188,517,998	3,749,288	4,376,539	1,495,123	701,745	5,385,053	-	-	328,184,616
Wilmarth	303,646	3,592,824	5,653,044	175,503	177,499	37,995	104,217	235,896	80,000	-	10,360,624
Total	13,636,301	251,739,362	482,246,363	10,323,976	9,011,023	2,589,700	6,217,378	14,424,124	1,204,612	1,562,880	792,955,719

TABLE 4.3
SCRAP METAL CREDITS BY STATION
(thousands of 2009 dollars)

Station Name	Carbon Steel			Stainless	Galvanized Steel	Copper			Copper Nickel	Aluminum	Total
	Cast Iron	No. 1	Mixed Scrap	Steel SS-1		Insul Cbl	No. 2 Cu	Large Mtr			
Allen S. King	269	4,621	5,916	511	11	470	1,171	599	2,663	-	16,230
Angus Anson	26	303	744	612	1	57	1,044	29	-	-	2,816
Black Dog	227	3,181	4,913	921	10	392	1,743	859	1,334	-	13,581
Blue Lake	53	526	1,603	1,174	1	96	1,132	55	-	-	4,640
Grand Meadow	-	464	2,358	-	-	-	925	-	-	440	4,187
Granite City	39	114	360	47	1	29	274	12	-	-	876
High Bridge	79	1,214	1,720	580	5	165	1,470	337	-	-	5,570
Inver Hills	19	323	1,641	958	1	-	1,215	2	-	-	4,158
Key City	39	114	360	47	1	29	274	12	-	-	876
Minnesota Valley	60	1,213	2,101	1,095	4	101	1,293	463	1,467	-	7,796
Red Wing	25	522	551	474	2	55	242	78	172	-	2,121
Riverside	58	2,943	4,647	310	4	140	1,781	471	-	-	10,354
Sherco	352	14,595	17,613	3,942	41	2,170	1,629	1,785	-	-	42,127
Wilmarth	28	436	528	185	2	55	242	78	401	-	1,955
Total	1,274	30,569	45,056	10,855	85	3,759	14,433	4,781	6,037	440	117,288

5.0 RESULTS

An estimate for dismantling each of the Xcel Energy fossil-fuel and wind farm generating stations in Minnesota and South Dakota was developed by applying the system and structures inventories against the associated unit cost factors and accounting for program support costs. A summary of each station's major cost categories is presented in Table 5.1. Breakdowns of the major cost categories by unit and common facilities are provided in Tables 5.2a through n.

The following is an explanation of the contents of each line item in these tables:

Station Unit Rating (MWe) – This is the nominal electrical rating of each unit at the station. In Table 5.1 this represents the sum of all units on site.

Demolition Preparations / Temporary Services – The cost associated with ensuring that all energized systems have been isolated from the buildings scheduled for dismantling and the cost for installing temporary services to support the dismantling.

Scaffolding / Worker Access – The cost associated with providing safe access to areas of the station being dismantled.

Asbestos Remediation – The cost associated with remediating asbestos from the station prior to initiating dismantling activities. It should be noted that dismantling can proceed much more efficiently if asbestos containing materials have been removed.

Equipment Removal – The cost associated with removing all station equipment (piping, valves, heat exchangers, tanks, electrical equipment, etc.).

Boiler(s) – The cost associated with removing the boiler.

Structures Demolition – The cost associated with demolishing the buildings and concrete foundations (to three feet below grade, Grand Meadow removes all below-grade materials).

Backfill / Grade / Landscaping – The cost associated with backfilling below grade voids, and grading and landscaping the grounds to preclude erosion of soils.

Ongoing Environmental Monitoring (quarterly for 5 years) – The cost associated with monitoring the environment around the station after the completion of dismantling activities.

Utility Management / Oversight – The staff directly assigned to manage the dismantling project, including planning, execution, oversight, and restoration.

Demolition Contractor Staff – The contractor's staff assigned to manage, engineer, and supervise the dismantling project.

Security – Personnel assigned to control access to the dismantling site.

Property Taxes – Not included in this estimate.

Shared Heavy Equipment / Operating Engineers – The cost for renting / operating equipment in general use throughout the dismantling project (cranes, trucks, forklifts, front-end loaders, etc.).

Small Tool Allowance – The cost for procuring small tools.

Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.) – The cost for procuring utility services and office supplies.

Permits – The cost of obtaining permits.

Demolition Contractors Insurance – The cost of the demolition contractors insurance.

Demolition Contractors Fee – A fee applied to contractor activities.

Contingency – The cost to cover expenses for unforeseen events that are likely to occur.

Scrap Credit – A credit to the project for the recovery of scrap metals.

Unit (Table 5.2) – Costs directly attributed to the physical work associated with dismantling a generating unit.

Common (Table 5.2) – Costs directly attributed to the physical work associated with dismantling facilities shared by more than one unit.

Station (Table 5.2) – Costs associated with supporting the physical dismantling work for a station.

This study provides an estimate for dismantling under current requirements, based on present-day costs and available technology. As inputs to the cost model change over time, such as labor rates, equipment costs, scrap metal value, etc., this cost estimate should be reviewed and updated to reflect these changes.

TABLE 5.1
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Allen S. King	Angus Anson	Black Dog	Blue Lake	Grand Meadow	Granite City	High Bridge	Inver Hills	Key City	Minnesota Valley	Red Wing	Riverside	Sherco	Wilmarth	Fleet Totals
Station Rating (MWe)	588	381	538	510	101	72	570	360	72	54	20	830	2400	20	6526
Characterization / Temporary Services	288,529	226,000	742,588	277,000	248,900	189,000	382,000	212,000	189,000	434,058	392,000	864,588	930,588	392,000	5,786,250
Scaffolding / Worker Access	485,260	-	1,002,686	-	-	-	-	-	-	143,924	94,921	-	1,529,590	94,921	3,351,303
Asbestos Remediation	1,912,000	-	4,401,048	-	-	-	-	-	-	2,479,459	952,166	2,198,041	500,000	952,166	13,394,881
Equipment Removal	7,845,455	2,249,884	7,380,138	4,611,978	1,384,950	683,539	3,851,236	3,526,080	683,539	2,275,070	1,592,706	3,191,079	24,960,190	1,372,321	65,608,187
Boiler(s)	2,780,446	-	3,642,778	-	-	-	-	-	-	1,202,936	668,289	2,106,526	10,368,708	668,289	21,437,973
Structures Demolition	13,430,200	1,034,374	8,001,928	2,125,132	5,492,448	876,319	4,120,099	2,472,565	876,319	3,415,043	2,084,796	9,559,475	36,343,325	1,577,403	91,409,426
Backfill / Grade / Landscaping	1,615,937	379,988	1,263,789	514,988	4,807,655	94,400	657,302	309,076	94,400	1,208,795	650,373	1,039,181	4,350,068	534,594	17,520,502
Ongoing environ. monitoring (quarterly for 5 years)	381,000	90,000	169,000	172,000	-	68,000	130,000	192,000	68,000	167,000	149,000	196,000	1,543,000	119,000	3,444,000
Utility Management / Oversight	1,850,502	418,168	2,351,455	758,703	729,333	282,879	814,172	570,961	282,879	1,114,430	569,605	2,359,092	2,612,451	569,605	15,284,235
Demolition Contractor Mgmt / Super. / Safety Staff	2,726,504	671,982	3,810,997	1,163,312	1,310,808	394,231	1,271,715	798,407	394,231	1,603,026	840,171	3,702,417	4,558,283	840,171	24,084,257
Security	909,671	229,176	1,181,565	229,176	433,217	140,463	248,397	164,120	140,463	344,503	313,454	1,181,565	1,329,261	313,454	7,158,482
Property Taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Expenses															
Shared Heavy Equipment / Operating Engineers	2,882,232	795,020	4,109,758	1,290,425	1,576,138	455,403	1,413,744	873,037	455,403	1,773,542	1,051,838	3,980,496	4,993,999	1,051,838	26,682,871
Small Tool Allowance	352,429	46,578	324,305	92,826	146,649	21,116	110,583	79,447	21,116	135,403	76,341	230,854	981,148	65,796	2,684,689
Utilities Allowance	43,073	24,836	55,947	24,836	46,569	15,099	26,702	17,642	15,099	37,033	33,695	55,947	62,940	33,695	492,714
Permits	347,431	55,185	349,050	102,724	150,121	28,071	119,834	84,783	28,071	148,763	85,863	271,046	911,218	77,022	2,758,970
Demolition Contractors Insurance	1,015,870	161,357	1,020,604	300,359	438,947	82,078	349,803	247,900	82,078	434,946	251,059	792,525	2,664,357	225,208	8,067,091
Demolition Contractors Fee	4,124,857	621,627	4,036,827	1,167,518	1,786,297	306,878	1,378,888	977,816	306,878	1,711,120	981,756	3,033,717	11,074,516	880,657	32,399,355
Sub-Total	42,991,394	7,003,972	43,844,460	12,830,856	18,550,033	3,647,478	14,874,276	10,523,833	3,647,478	18,629,041	10,788,034	34,742,530	109,713,641	9,768,142	341,565,166
Contingency	6,839,909	1,050,598	7,016,774	1,924,628	2,782,505	547,122	2,231,141	1,578,575	547,122	3,042,302	1,714,922	5,431,184	16,507,046	1,560,438	52,574,283
Project Total (before scrap credit)	49,831,303	8,054,568	50,861,233	14,755,485	21,332,538	4,194,599	17,105,417	12,102,408	4,194,599	21,671,343	12,512,955	40,173,713	126,220,687	11,328,580	394,139,430
Scrap Credit	(16,229,903)	(2,816,102)	(13,581,052)	(4,640,332)	(4,186,705)	(876,111)	(5,569,713)	(4,158,500)	(876,111)	(7,796,379)	(2,120,531)	(10,354,193)	(42,127,350)	(1,855,181)	(117,288,172)
Project Total	33,401,400	5,238,466	37,280,182	10,115,153	17,145,833	3,318,488	11,535,704	7,943,909	3,318,488	13,874,965	10,392,425	29,819,520	84,093,338	9,373,399	276,851,257

TABLE 5.2a
ALLEN S. KING STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Common	Station	Station Total
Allen S. King Unit Rating (MWe)	588	588		
Characterization / Temporary Services	125,000	-	163,529	288,529
Scaffolding / Worker Access	485,260	-		485,260
Asbestos Remediation	1,912,000	-		1,912,000
Equipment Removal	6,366,713	1,478,741		7,845,455
Boiler(s)	2,780,446	-		2,780,446
Structures Demolition	10,252,849	3,177,351		13,430,200
Backfill / Grade / Landscaping	1,045,614	570,323	-	1,615,937
Ongoing environmental monitoring (quarterly for 5 years)			381,000	381,000
Utility Management / Oversight			1,850,502	1,850,502
Demolition Contractor Management / Supervisory / Safety Staff			2,726,504	2,726,504
Security			909,671	909,671
Property Taxes	-	-	-	0
Project Expenses				
Shared Heavy Equipment / Operating Engineers			2,882,232	2,882,232
Small Tool Allowance	287,099	65,330	n/a	352,429
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)			43,073	43,073
Permits			347,431	347,431
Demolition Contractors Insurance			1,015,870	1,015,870
Demolition Contractors Fee			4,124,857	4,124,857
Sub-Total				42,991,394
Contingency (excluding activities currently under contract)				6,639,909
Project Total (before scrap credit)				49,631,303
Scrap Credit	(13,660,586)	(2,569,317)	-	(16,229,903)
Project Total				33,401,400

TABLE 5.2b
ANGUS ANSON STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Unit 3	Common	Station	Station Total
Angus Anson Unit Rating (MWe)	106	110	165	381		
Characterization / Temporary Services	19,333	19,667	23,000	-	164,000	226,000
Scaffolding / Worker Access	-	-	-	-		0
Asbestos Remediation	-	-	-	-		0
Equipment Removal	459,737	462,011	1,065,168	262,969		2,249,884
Boiler(s)	-	-	-	-		0
Structures Demolition	219,815	223,924	484,447	106,188		1,034,374
Backfill / Grade / Landscaping	51,590	52,554	134,156	141,686	-	379,986
Ongoing environmental monitoring (quarterly for 5 years)					90,000	90,000
Utility Management / Oversight					418,168	418,168
Demolition Contractor Management / Supervisory / Safety Staff					671,982	671,982
Security					229,176	229,176
Property Taxes	-	-	-	-	-	0
Project Expenses						
Shared Heavy Equipment / Operating Engineers					795,020	795,020
Small Tool Allowance	9,381	9,477	21,335	6,386	n/a	46,578
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)					24,636	24,636
Permits					55,185	55,185
Demolition Contractors Insurance					161,357	161,357
Demolition Contractors Fee					621,627	621,627
Sub-Total						7,003,972
Contingency (excluding activities currently under contract)						1,050,596
Project Total (before scrap credit)						8,054,568
Scrap Credit	(648,857)	(664,360)	(1,120,910)	(381,974)	-	(2,816,102)
Project Total						5,238,466

TABLE 5.2c
BLACK DOG STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 2	Unit 3	Unit 4	Unit 5	Common	Station	Station Total
Black Dog Unit Rating (MWe)	98	108	170	162	538		
Characterization / Temporary Services	56,000	58,000	70,000	68,000	-	490,588	742,588
Scaffolding / Worker Access	297,811	312,636	392,240	-	-		1,002,686
Asbestos Remediation	1,440,691	1,447,589	1,483,051	-	29,718		4,401,048
Equipment Removal	1,721,353	1,781,820	2,120,662	1,059,660	696,643		7,380,138
Boiler(s)	1,099,468	1,129,038	1,289,321	-	124,950		3,642,778
Structures Demolition	1,448,283	1,520,380	2,354,422	1,008,181	1,670,663		8,001,928
Backfill / Grade / Landscaping	180,971	189,980	304,366	146,767	441,705	-	1,263,789
Ongoing environmental monitoring (quarterly for 5 years)						169,000	169,000
Utility Management / Oversight						2,351,455	2,351,455
Demolition Contractor Management / Supervisory / Safety Staff						3,810,997	3,810,997
Security						1,181,565	1,181,565
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						4,109,756	4,109,756
Small Tool Allowance	78,057	80,493	100,176	28,533	37,046	n/a	324,305
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						55,947	55,947
Permits						349,050	349,050
Demolition Contractors Insurance						1,020,604	1,020,604
Demolition Contractors Fee						4,036,827	4,036,827
Sub-Total							43,844,460
Contingency (excluding activities currently under contract)							7,016,774
Project Total (before scrap credit)							50,861,233
Scrap Credit	(2,856,720)	(3,604,561)	(4,683,026)	(1,653,540)	(783,205)	-	(13,581,052)
Project Total							37,280,182

TABLE 5.2d
BLUE LAKE STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Unit 3	Unit 4	Unit 7	Unit 8	Common	Station	Station Total
Blue Lake Unit Rating (MWe)	45	45	45	45	165	165	510		
Characterization / Temporary Services	11,000	11,000	11,000	11,000	34,500	34,500	-	164,000	277,000
Scaffolding / Worker Access	-	-	-	-	-	-	-	-	0
Asbestos Remediation	-	-	-	-	-	-	-	-	0
Equipment Removal	443,684	443,684	443,684	443,684	1,140,421	1,140,421	556,400		4,611,978
Boiler(s)	-	-	-	-	-	-	-	-	0
Structures Demolition	222,763	195,339	195,339	195,339	413,137	413,137	490,078		2,125,132
Backfill / Grade / Landscaping	24,098	24,098	24,098	24,098	137,628	137,628	143,320	-	514,968
Ongoing environmental monitoring (quarterly for 5 years)								172,000	172,000
Utility Management / Oversight								758,703	758,703
Demolition Contractor Management / Supervisory / Safety Staff								1,163,312	1,163,312
Security								229,176	229,176
Property Taxes	-	-	-	-	-	-	-	-	0
Project Expenses									
Shared Heavy Equipment / Operating Engineers								1,290,425	1,290,425
Small Tool Allowance	8,769	8,427	8,427	8,427	22,002	22,002	14,872	n/a	92,926
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)								24,636	24,636
Permits								102,724	102,724
Demolition Contractors Insurance								300,359	300,359
Demolition Contractors Fee								1,167,518	1,167,518
Sub-Total									12,830,856
Contingency (excluding activities currently under contract)									1,924,628
Project Total (before scrap credit)									14,755,485
Scrap Credit	(517,334)	(448,015)	(448,015)	(448,015)	(972,416)	(972,416)	(834,121)	-	(4,640,332)
Project Total									10,115,153

TABLE 5.2e
GRAND MEADOW STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit, each (typ. of 67)	Common	Station	Station Total
Grand Meadow Unit Rating (MWWe)	1.5	101		
Characterization / Temporary Services	700	-	200,000	246,900
Scaffolding / Worker Access	-	-		0
Asbestos Remediation	-	-		0
Equipment Removal	20,671	-		1,384,950
Boiler(s)	-	-		0
Structures Demolition	81,977	-		5,492,448
Backfill / Grade / Landscaping	20,334	3,445,282	-	4,807,655
Ongoing environmental monitoring (quarterly for 5 years)			0	0
Utility Management / Oversight			729,333	729,333
Demolition Contractor Management / Supervisory / Safety Staff			1,310,808	1,310,808
Security			433,217	433,217
Property Taxes	-	-	-	0
Project Expenses				
Shared Heavy Equipment / Operating Engineers			1,576,138	1,576,138
Small Tool Allowance	1,546	43,066	n/a	146,649
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)			46,569	46,569
Permits			150,121	150,121
Demolition Contractors Insurance			438,947	438,947
Demolition Contractors Fee			1,786,297	1,786,297
Sub-Total				18,550,033
Contingency (excluding activities currently under contract)				2,782,505
Project Total (before scrap credit)				21,332,538
Scrap Credit	(42,386)	(1,346,870)	-	(4,186,705)
Project Total				17,145,833

TABLE 5.2f
GRANITE CITY STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Unit 3	Unit 4	Common	Station	Station Total
Granite City Unit Rating (MWe)	18	18	18	18	72		
Characterization / Temporary Services	8,750	8,750	8,750	8,750	-	164,000	199,000
Scaffolding / Worker Access	-	-	-	-	-	-	0
Asbestos Remediation	-	-	-	-	-	-	0
Equipment Removal	170,885	170,885	170,885	170,885	-	-	683,539
Boiler(s)	-	-	-	-	-	-	0
Structures Demolition	143,165	143,165	143,165	143,165	303,660	-	876,319
Backfill / Grade / Landscaping	14,755	14,755	14,755	14,755	35,381	-	94,400
Ongoing environmental monitoring (quarterly for 5 years)						68,000	68,000
Utility Management / Oversight						282,879	282,879
Demolition Contractor Management / Supervisory / Safety Staff						394,231	394,231
Security						140,463	140,463
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						455,403	455,403
Small Tool Allowance	4,219	4,219	4,219	4,219	4,238	n/a	21,116
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						15,099	15,099
Permits						28,071	28,071
Demolition Contractors Insurance						82,078	82,078
Demolition Contractors Fee						306,878	306,878
Sub-Total							3,647,478
Contingency (excluding activities currently under contract)							547,122
Project Total (before scrap credit)							4,194,599
Scrap Credit	(182,248)	(182,248)	(182,248)	(182,248)	(147,121)	-	(876,111)
Project Total							3,318,488

TABLE 5.2g
HIGH BRIDGE STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Unit 3	Common	Station	Station Total
High Bridge Unit Rating (MWe)	160	160	250	570		
Characterization / Temporary Services	68,000	68,000	82,000	-	164,000	382,000
Scaffolding / Worker Access	-	-	-	-		0
Asbestos Remediation	-	-	-	-		0
Equipment Removal	1,078,991	1,078,991	1,409,278	283,977		3,851,236
Boiler(s)	-	-	-	-		0
Structures Demolition	986,487	986,487	1,990,417	156,708		4,120,099
Backfill / Grade / Landscaping	149,146	149,146	226,390	132,621	-	657,302
Ongoing environmental monitoring (quarterly for 5 years)					130,000	130,000
Utility Management / Oversight					814,172	814,172
Demolition Contractor Management / Supervisory / Safety Staff					1,271,715	1,271,715
Security					248,397	248,397
Property Taxes	-	-	-	-	-	0
Project Expenses						
Shared Heavy Equipment / Operating Engineers					1,413,744	1,413,744
Small Tool Allowance	28,533	28,533	46,351	7,166	n/a	110,583
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)					26,702	26,702
Permits					119,634	119,634
Demolition Contractors Insurance					349,803	349,803
Demolition Contractors Fee					1,378,888	1,378,888
Sub-Total						14,874,276
Contingency (excluding activities currently under contract)						2,231,141
Project Total (before scrap credit)						17,105,417
Scrap Credit	(1,571,791)	(1,571,791)	(2,099,101)	(327,030)	-	(5,569,713)
Project Total						11,535,704

TABLE 5.2h
INVER HILLS STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Common	Station	Station Total
Inver Hills Unit Rating (MWe)	60	60	60	60	60	60	360		
Characterization / Temporary Services	8,000	8,000	8,000	8,000	8,000	8,000	-	164,000	212,000
Scaffolding / Worker Access	-	-	-	-	-	-	-	-	0
Asbestos Remediation	-	-	-	-	-	-	-	-	0
Equipment Removal	545,454	545,454	545,454	545,454	545,454	545,454	253,355		3,526,080
Boiler(s)	-	-	-	-	-	-	-	-	0
Structures Demolition	223,780	223,780	223,780	223,780	223,780	223,780	1,129,885		2,472,565
Backfill / Grade / Landscaping	31,639	31,639	31,639	31,639	31,639	31,639	119,240	-	309,076
Ongoing environmental monitoring (quarterly for 5 years)								192,000	192,000
Utility Management / Oversight								570,961	570,961
Demolition Contractor Management / Supervisory / Safety Staff								796,407	796,407
Security								164,120	164,120
Property Taxes	-	-	-	-	-	-	-	-	0
Project Expenses									
Shared Heavy Equipment / Operating Engineers								873,037	873,037
Small Tool Allowance	10,111	10,111	10,111	10,111	10,111	10,111	18,781	n/a	79,447
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)								17,642	17,642
Permits								84,783	84,783
Demolition Contractors Insurance								247,900	247,900
Demolition Contractors Fee								977,816	977,816
Sub-Total									10,523,833
Contingency (excluding activities currently under contract)									1,578,575
Project Total (before scrap credit)									12,102,408
Scrap Credit	(595,723)	(595,723)	(595,723)	(595,723)	(595,723)	(595,723)	(584,161)	-	(4,158,500)
Project Total									7,943,909

TABLE 5.2i
KEY CITY STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Unit 3	Unit 4	Common	Station	Station Total
Key City Unit Rating (MWe)	18	18	18	18	72		
Characterization / Temporary Services	8,750	8,750	8,750	8,750	-	164,000	199,000
Scaffolding / Worker Access	-	-	-	-	-		0
Asbestos Remediation	-	-	-	-	-		0
Equipment Removal	170,885	170,885	170,885	170,885	-		683,539
Boiler(s)	-	-	-	-	-		0
Structures Demolition	143,165	143,165	143,165	143,165	303,660		876,319
Backfill / Grade / Landscaping	14,755	14,755	14,755	14,755	35,381		94,400
Ongoing environmental monitoring (quarterly for 5 years)						68,000	68,000
Utility Management / Oversight						282,879	282,879
Demolition Contractor Management / Supervisory / Safety Staff						394,231	394,231
Security						140,463	140,463
Property Taxes	-	-	-	-	-		0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						455,403	455,403
Small Tool Allowance	4,219	4,219	4,219	4,219	4,238	n/a	21,116
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						15,099	15,099
Permits						28,071	28,071
Demolition Contractors Insurance						82,078	82,078
Demolition Contractors Fee						306,878	306,878
Sub-Total							3,647,478
Contingency (excluding activities currently under contract)							547,122
Project Total (before scrap credit)							4,194,599
Scrap Credit	(182,248)	(182,248)	(182,248)	(182,248)	(147,121)		(876,111)
Project Total							3,318,488

TABLE 5.2j
MINNESOTA VALLEY STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Unit 3	Common	Station	Station Total
Minnesota Valley Unit Rating (MWe)	10	10	44	64		
Characterization / Temporary Services	32,000	32,000	43,000		327,058	434,058
Scaffolding / Worker Access	-	-	143,924	-		143,924
Asbestos Remediation	-	-	2,479,459	-		2,479,459
Equipment Removal	275,306	275,306	1,682,717	41,741		2,275,070
Boiler(s)	191,441	191,441	820,054	-		1,202,936
Structures Demolition	839,635	839,635	1,400,245	335,528		3,415,043
Backfill / Grade / Landscaping	274,091	274,091	413,189	247,424	-	1,208,795
Ongoing environmental monitoring (quarterly for 5 years)					167,000	167,000
Utility Management / Oversight					1,114,430	1,114,430
Demolition Contractor Management / Supervisory / Safety Staff					1,603,026	1,603,026
Security					344,503	344,503
Property Taxes	-	-	-	-	-	0
Project Expenses						
Shared Heavy Equipment / Operating Engineers					1,773,542	1,773,542
Small Tool Allowance	20,156	20,156	87,282	7,809	n/a	135,403
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)					37,033	37,033
Permits					148,753	148,753
Demolition Contractors Insurance					434,946	434,946
Demolition Contractors Fee					1,711,120	1,711,120
Sub-Total						18,629,041
Contingency (excluding activities currently under contract)						3,042,302
Project Total (before scrap credit)						21,671,343
Scrap Credit	(1,626,412)	(1,626,412)	(4,377,526)	(166,030)	-	(7,796,379)
Project Total						13,874,965

TABLE 5.2k
RED WING STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Common	Station	Station Total
Red Wing Unit Rating (MWe)	10	10	20		
Characterization / Temporary Services	32,000	32,000	-	328,000	392,000
Scaffolding / Worker Access	47,461	47,461	-		94,921
Asbestos Remediation	476,083	476,083	-		952,166
Equipment Removal	613,929	613,929	364,849		1,592,706
Boiler(s)	334,145	334,145	-		668,289
Structures Demolition	393,348	393,348	1,298,100		2,084,796
Backfill / Grade / Landscaping	201,210	201,210	247,952	-	650,373
Ongoing environmental monitoring (quarterly for 5 years)				149,000	149,000
Utility Management / Oversight				569,605	569,605
Demolition Contractor Management / Supervisory / Safety Staff				840,171	840,171
Security				313,454	313,454
Property Taxes	-	-	-	-	0
Project Expenses					
Shared Heavy Equipment / Operating Engineers				1,051,838	1,051,838
Small Tool Allowance	26,227	26,227	23,886	n/a	76,341
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)				33,695	33,695
Permits				85,863	85,863
Demolition Contractors Insurance				251,059	251,059
Demolition Contractors Fee				991,756	991,756
Sub-Total					10,798,034
Contingency (excluding activities currently under contract)					1,714,922
Project Total (before scrap credit)					12,512,955
Scrap Credit	(741,538)	(741,538)	(637,455)	-	(2,120,531)
Project Total					10,392,425

TABLE 5.21
RIVERSIDE STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 6 Boiler	Unit 7 Boiler	Unit 7 Turbine	Unit 8	Unit 9	Unit 10	Common	Station	Station Total
Riverside Unit Rating (MWe)	44	44	165	231	173	173	830		
Characterization / Temporary Services	43,000	43,000	69,000	79,000	70,000	70,000	-	490,588	864,588
Scaffolding / Worker Access	-	-	-	-	-	-	-	-	0
Asbestos Remediation	707,639	707,639	-	782,763	-	-	-	-	2,198,041
Equipment Removal	-	-	767,840	224,211	1,099,514	1,099,514	-	-	3,191,079
Boiler(s)	699,076	699,076	-	708,374	-	-	-	-	2,106,526
Structures Demolition	1,071,259	1,071,259	599,125	2,901,075	902,350	902,350	2,112,057	-	9,559,475
Backfill / Grade / Landscaping	57,169	57,169	151,147	170,755	150,256	150,256	302,410	-	1,039,161
Ongoing environmental monitoring (quarterly for 5 years)								196,000	196,000
Utility Management / Oversight								2,359,092	2,359,092
Demolition Contractor Management / Supervisory / Safety Staff								3,702,417	3,702,417
Security								1,181,565	1,181,565
Property Taxes	-	-	-	-	-	-	-	-	0
Project Expenses									
Shared Heavy Equipment / Operating Engineers								3,960,496	3,960,496
Small Tool Allowance	32,227	32,227	19,839	60,827	27,777	27,777	30,181	n/a	230,854
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)								55,947	55,947
Permits								271,046	271,046
Demolition Contractors Insurance								792,525	792,525
Demolition Contractors Fee								3,033,717	3,033,717
Sub-Total									34,742,530
Contingency (excluding activities currently under contract)									5,431,184
Project Total (before scrap credit)									40,173,713
Scrap Credit	(1,396,257)	(1,396,257)	(1,168,270)	(2,929,480)	(1,681,798)	(1,681,798)	(100,335)	-	(10,354,193)
Project Total									29,819,520

TABLE 5.2m
SHERBURNE COUNTY STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Unit 3	Common	Station	Station Total
Sherco Unit Rating (MWe)	750	750	900	2,400		
Characterization / Temporary Services	142,000	142,000	156,000	-	490,588	930,588
Scaffolding / Worker Access	494,142	494,142	541,306	-		1,529,590
Asbestos Remediation	-	-	-	500,000		500,000
Equipment Removal	7,065,591	7,065,591	7,358,207	3,470,802		24,960,190
Boiler(s)	3,340,536	3,340,536	3,687,636	-		10,368,708
Structures Demolition	9,325,532	9,325,532	10,207,507	7,484,754		36,343,325
Backfill / Grade / Landscaping	470,825	470,825	515,763	2,892,652	-	4,350,066
Ongoing environmental monitoring (quarterly for 5 years)					1,543,000	1,543,000
Utility Management / Oversight					2,612,451	2,612,451
Demolition Contractor Management / Supervisory / Safety Staff					4,558,283	4,558,283
Security					1,329,261	1,329,261
Project Expenses						
Shared Heavy Equipment / Operating Engineers					4,993,999	4,993,999
Small Tool Allowance					n/a	981,148
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)	260,483	260,483	280,830	179,353	62,940	62,940
Permits					911,218	911,218
Demolition Contractors Insurance					2,664,357	2,664,357
Demolition Contractors Fee					11,074,516	11,074,516
Sub-Total						109,713,641
Contingency (excluding activities currently under contract)						16,507,046
Project Total (before scrap credit)						126,220,687
Scrap Credit	(12,112,401)	(12,369,521)	(13,800,033)	(3,845,395)	-	(42,127,350)
Project Total						84,093,338

TABLE 5.2n
WILMARTH STATION
SUMMARY OF ACTIVITY COSTS
(2009 Dollars)

Activities (Costs)	Unit 1	Unit 2	Common	Station	Station Total
Wilmarth Unit Rating (MWe)	10	10	20		
Characterization / Temporary Services	32,000	32,000	-	328,000	392,000
Scaffolding / Worker Access	47,461	47,461	-		94,921
Asbestos Remediation	476,083	476,083	-		952,166
Equipment Removal	613,929	613,929	144,464		1,372,321
Boiler(s)	334,145	334,145	-		668,289
Structures Demolition	393,348	393,348	790,707		1,577,403
Backfill / Grade / Landscaping	202,209	202,209	130,176	-	534,594
Ongoing environmental monitoring (quarterly for 5 years)				119,000	119,000
Utility Management / Oversight				569,605	569,605
Demolition Contractor Management / Supervisory / Safety Staff				840,171	840,171
Security				313,454	313,454
Property Taxes	-	-	-	-	0
Project Expenses					
Shared Heavy Equipment / Operating Engineers				1,051,838	1,051,838
Small Tool Allowance	26,240	26,240	13,317	n/a	65,796
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)				33,695	33,695
Permits				77,022	77,022
Demolition Contractors Insurance				225,208	225,208
Demolition Contractors Fee				880,657	880,657
Sub-Total					9,768,142
Contingency (excluding activities currently under contract)					1,560,438
Project Total (before scrap credit)					11,328,580
Scrap Credit	(859,250)	(859,250)	(236,692)	-	(1,955,191)
Project Total					9,373,389

6.0 REFERENCES

1. E-mail dated September 11, 2009 from Roger Schuessel of Xcel Energy to Ben Stochmal at TLG Services; subject "Special Construction Labor Rates".
2. E-mail dated October 16, 2009 from Brandon Kirschner of Xcel Energy to Fran Seymore at TLG Services; subject "Professional Staffing Information".
3. "Building Construction Cost Data 2009," Robert Snow Means Company, Inc., Kingston, Massachusetts.
4. Recycler's World, Iron and Steel Recycling Section and Scrap Copper Recycling Section, U.S. Scrap Metal Index, Spot Prices October 29, 2009.
5. T.S. LaGuardia et al., "Guidelines for Producing Commercial Nuclear Power Plant Decommissioning Cost Estimates," AIF/NESP-036, May 1986.
6. W.J. Manion and T.S. LaGuardia, "Decommissioning Handbook," U.S. Department of Energy, DOE/EV/10128-1, November 1980.
7. AACE International, Skills and Knowledge of Cost Engineering, 4th Edition, 1999.

APPENDIX A
SUMMARY OF STATION SYSTEM AND STRUCTURES INVENTORIES

TABLE A
SUMMARY OF STATION SYSTEMS AND STRUCTURES INVENTORIES

Index	System/Structure Inventory Data Point	Allen S. King	Angus Anson	Black Dog	Blue Lake	Grand Meadow	Granite City	High Bridge	Inver Hills	Key City	Minnesota Valley	Red Wing	Riverside	Sherco	Wilmarth
	Station Rating (Mwe)	588	381	538	510	101	72	570	360	72	64	20	830	2400	20
2	Piping >2 to 4 inches diameter, linear foot	79,850	13,521	10,719	20,178	-	1,501	24,690	3,268	1,501	492	4,919	24,046	233,790	4,919
3	Piping >4 to 8 inches diameter, linear foot	52,700	9,014	55,395	13,452	-	1,001	16,460	2,579	1,001	12,745	3,279	16,031	155,860	3,279
4	Piping >8 to 14 inches diameter, linear foot	35,133	6,009	36,285	10,357	-	3,138	11,173	9,964	3,138	6,427	2,186	10,687	103,907	2,186
5	Piping >14 to 20 inches diameter, linear foot	30,862	4,006	24,552	6,229	-	445	8,015	1,348	445	4,978	1,457	7,125	89,271	1,457
6	Piping >20 to 36 inches diameter, linear foot	7,208	1,814	9,315	4,259	-	148	5,377	1,139	148	2,484	794	4,750	26,401	794
7	Piping >36 inches diameter, linear foot	9,734	1,486	5,418	2,419	-	-	3,971	-	-	1,803	289	3,716	37,053	289
8	Valves <2 inches	5,335	898	4,188	1,796	-	-	2,420	-	-	17	173	2,126	15,991	173
9	Valves >2 to 4 inches	1,373	108	99	144	-	108	-	216	108	54	540	-	4,118	540
10	Valves >4 to 8 inches	915	360	2,633	672	-	72	698	174	72	402	360	698	2,745	360
11	Valves >8 to 14 inches	810	192	1,228	464	-	80	381	264	80	207	240	369	1,830	240
12	Valves >14 to 20 inches	1,519	72	771	142	-	24	159	62	24	134	120	123	1,115	120
13	Valves >20 to 36 inches	158	44	132	48	-	-	78	-	-	29	50	66	587	50
14	Valves >36 inches	128	12	36	24	-	-	36	-	-	14	16	36	476	16
15	Pipe hangers for small bore piping, each	56	6	27	-	-	-	26	-	-	1	14	18	104	14
24	Pipe hangers for large bore piping, each	5,018	941	4,375	1,449	-	81	1,742	246	81	847	909	1,742	14,959	909
25	Pump and motor set < 300 pounds	3,351	595	2,156	1,089	-	121	1,249	511	121	401	543	1,237	9,618	543
26	Pumps, 300-1000 pound pump	77	2	89	72	-	16	13	108	16	32	38	13	507	38
27	Pumps, >1000-10,000 pound pump	23	6	15	12	-	-	13	-	-	4	8	13	73	8
28	Pumps, >10,000 pound pump	14	-	21	-	-	-	2	-	-	4	11	2	44	11
29	Pump motors, 300-1000 pound pump	13	2	17	4	-	-	8	-	-	5	8	4	9	8
32	Pump motors, >1000-10,000 pound pump	23	22	15	12	-	-	13	-	-	4	8	13	28	8
33	Pump motors, >10,000 pound pump	13	-	21	-	-	-	3	-	-	4	11	3	68	11
34	Turbine-driven pumps > 10,000 pounds	13	2	17	4	-	-	8	-	-	5	4	4	18	4
37	Main turbine-generator (pounds per MW(e) input)	1	-	3	-	-	-	1	-	-	-	-	-	6	-
38	Heat exchanger <3000 pound	16	2	41	101	-	-	6	210	-	3	2	2	3	2
39	Heat exchanger >3000 pound	-	22	14	48	-	-	5	96	-	15	12	6	60	12
40	Feedwater heater/deaerator	9	1	25	2	-	-	2	-	-	7	14	5	21	14
41	Main condenser (pounds per MW(e) input)	1	-	3	-	-	-	1	-	-	7	12	2	31	12
49	Tanks, <300 gallons, filters, and ion exchangers	38	18	59	20	-	16	10	34	16	39	12	10	66	12
51	Tanks, 300-3000 gallons	12	22	33	4	-	12	11	8	12	7	2	6	132	2
52	Tanks, >3000 gallons, square foot surface	24,827	32,772	14,482	62,690	-	2,847	23,259	7,069	2,847	67,790	33,585	1,859	157,274	6,871
53	Electrical equipment, <300 pound	740	486	1,207	647	-	420	150	846	420	232	322	128	6,680	322
54	Electrical equipment, 300-1000 pound	143	196	501	350	-	40	289	184	40	53	18	280	933	18
55	Electrical equipment, 1000-10,000 pound	122	140	148	280	67	80	207	175	80	39	56	201	122	56
56	Electrical equipment, >10,000 pound	19	74	10	128	-	28	16	168	28	4	16	16	30	16
57	Electrical transformers < 30 tons	3	3	31	14	-	2	4	18	2	10	-	4	6	-
58	Electrical transformers > 30 tons	3	4	5	12	-	2	5	12	2	4	2	5	3	2
59	Standby diesel-generator, <100 kW	-	-	1	-	-	-	-	-	-	-	-	-	-	-
60	Standby diesel-generator, 100 kW to 1 MW	-	-	-	-	-	-	8	-	8	-	-	-	-	-
61	Standby diesel-generator, >1 MW	-	-	-	-	-	-	4	-	4	-	-	-	-	-
62	Fluorescent light fixture	-	50	896	180	-	80	200	-	80	163	38	150	-	38
63	Incandescent light fixture	1,564	188	1,500	180	-	120	200	170	120	327	258	150	4,060	258
64	Electrical cable tray, linear foot	27,803	4,012	6,834	5,651	-	1,730	10,276	-	1,730	1,122	1,384	8,548	166,291	1,384
65	Electrical conduit, linear foot	41,992	3,922	67,220	8,631	781,440	2,471	13,688	-	2,471	18,605	8,658	11,905	119,404	8,658
66	Mechanical equipment, <300 pound	786	138	1,055	52	-	44	31	78	44	258	380	21	2,331	380
67	Mechanical equipment, 300-1000 pound	196	212	219	812	-	64	274	30	64	77	14	274	451	14
68	Mechanical equipment, 1000-10,000 pound	204	10	53	127	-	-	59	1,000	-	29	60	44	516	60
69	Mechanical equipment, >10,000 pound	104	135	89	238	603	60	141	219	60	12	45	103	90	45

TABLE A
SUMMARY OF SYSTEMS AND STRUCTURES INVENTORIES
(Continued)

Index	System/Structure Inventory Data Point	Allen S. King	Angus Anson	Black Dog	Blue Lake	Grand Meadow	Granite City	High Bridge	Inver Hills	Key City	Minnesota Valley	Red Wing	Riverside	Sherco	Wilmarth
	Station Rating (Mw)	588	381	538	510	101	72	570	360	72	64	20	830	2400	20
76	HVAC equipment, <300 pound	108	4	-	16	-	-	-	24	-	4	10	-	328	10
77	HVAC equipment, 300-1000 pound	-	12	6	-	-	-	36	-	-	-	-	24	107	-
78	HVAC equipment, 1000-10,000 pound	-	-	-	-	-	-	14	-	-	2	4	10	6	4
79	HVAC equipment, >10,000 pound	-	-	-	-	-	-	-	-	-	-	-	-	15	-
82	HVAC ductwork, pound	119,977	-	483,253	-	-	-	142,100	-	-	96,406	18,295	38,202	439,440	18,295
201	Standard reinforced concrete, cubic yard	22,692	2,662	17,108	8,366	18,626	1,903	10,465	7,567	1,903	4,294	6,487	15,771	83,961	2,597
202	Grade slab concrete, cubic yard	10,800	1,329	6,937	1,176	-	906	372	1,384	906	676	474	3,551	-	474
206	Heavily rein concrete w/#9 rebar, cubic yard	3,869	-	2,456	-	-	-	-	-	-	988	489	2,117	10,087	489
222	Hollow masonry block wall, cubic yard	-	103	614	58	-	-	425	-	-	-	-	2,219	-	109
224	Solid masonry block wall, cubic yard	3,788	-	6,981	-	-	-	-	-	-	8,911	663	3,011	14,335	663
229	Backfill of below grade voids, cubic yard	19,324	7,074	13,058	8,510	92,624	267	12,825	-	267	27,979	14,581	12,325	-	14,581
230	Excavation of clean material, cubic yard	-	-	-	-	219,531	-	-	-	-	-	-	-	-	-
235	Building by volume, cubic foot	5,117,058	113,993	970,141	970,228	-	189,562	318,816	247,411	189,562	164,740	321,500	597,793	7,784,100	321,500
236	Building metal siding, square foot	217,256	12,789	80,425	19,901	-	37,278	108,748	15,564	37,278	73,964	32,488	93,813	669,467	32,488
242	Standard asphalt roofing, square foot	47,897	-	53,455	-	-	-	110,000	-	-	23,588	9,129	119,469	237,268	9,129
243	Asbestos panels, square foot	-	-	8,000	-	-	-	-	-	-	-	-	-	-	-
245	Placement of cofferdam, linear foot	200	-	-	-	-	-	-	-	-	-	-	-	-	-
253	Overhead cranes/monorails < 10 ton capacity, each	14	-	2	-	-	-	-	-	-	-	1	-	136	1
255	Overhead cranes/monorails > 10 - 50 ton capacity, each	6	-	-	4	-	-	5	-	-	2	2	7	2	2
258	Gantry cranes > 50 ton capacity, each	1	-	1	-	-	-	1	-	-	-	-	5	6	-
260	Structural steel, pounds	25,041,699	1,231,615	16,388,568	1,748,139	-	310,648	6,981,323	662,931	310,648	6,612,141	2,429,526	17,879,987	83,653,565	2,429,526
262	Steel floor grating, square foot	161,222	6,242	62,591	7,410	-	2,673	18,797	-	2,673	12,083	30,386	56,169	578,353	30,386
268	Placement of scaffolding in clean areas, square foot	66,680	-	137,779	-	-	-	-	-	-	19,777	13,043	-	210,811	13,043
270	Landscaping with topsoil, acre	3	3	4	1	46	0.5	2	2	0.5	1	4	3	33	2
271	Landscaping w/o topsoil, acre	29	-	5	8	3	2	4	8	2	7	3	8	239	4
272	Chain link fencing, linear foot	3,372	1,800	3,000	2,880	-	995	3,144	2,800	995	3,859	8,372	5,016	20,000	995
273	Railroad track, linear foot	3,000	-	3,800	-	-	-	-	-	-	6,664	-	-	24,000	-
274	Asphalt pavement, square foot	220,880	52,000	122,500	78,300	-	12,000	75,171	51,000	12,000	38,225	-	128,241	801,500	52,000
294	Carbon steel plate 1/2 inch thick, square foot	66,630	7,388	42,598	14,776	798,797	75,398	14,550	261,891	75,398	6,959	17,695	78,517	219,533	17,695
359	Steam drum removal (fossil)	1	-	6	-	-	-	6	-	-	3	2	9	6	2
360	Water drum removal (fossil)	-	-	-	-	-	-	-	-	-	4	4	-	12	4
361	Upper/lower waterwall headers (fossil)	26	-	33	-	-	-	-	-	-	14	6	27	72	6
362	Top sup boiler waterwall (8'x8' section), inches cut	138,902	-	128,619	-	-	-	-	-	-	45,627	13,392	128,711	470,566	13,392
369	Boiler convective superheater platens	307	-	534	-	-	-	-	-	-	256	116	459	1,344	116
370	Boiler radiant superheater platens	-	-	-	-	-	-	-	-	-	-	-	-	156	-
371	Boiler reheat platens	140	-	270	-	-	-	-	-	-	-	-	90	666	-
372	Boiler economizer platens	420	-	254	-	-	-	-	-	-	39	-	163	1,344	-
374	Stationary soot blowers	98	-	96	-	-	-	-	-	-	21	-	32	315	-
375	Retractable soot blowers	70	-	54	-	-	-	-	-	-	7	16	18	144	16
376	Process ductwork (8'x8' section), inches cut	757,268	321,019	1,013,359	625,433	-	54,416	446,315	307,817	54,416	470,306	61,481	1,008,280	3,392,767	61,481
378	Non-asbestos insulated regenerative air preheaters	4	-	12	-	-	-	-	-	-	8	8	4	13	8
380	Non-asbestos insulated recuperative air preheaters	-	-	-	-	-	-	-	-	-	4	-	8	-	-
382	Induced, forced, primary draft fans	9	-	12	-	-	-	-	-	-	4	4	-	42	4
383	Coal car dumpers	1	-	2	-	-	-	-	-	-	-	-	-	4	-
384	Conveyors	16,700	-	1,400	-	-	-	-	-	-	900	625	-	5,000	625
385	Transfer Towers	3	-	80,400	-	-	-	-	-	-	-	-	-	201,000	-
386	Stacker-reclaimers	1	-	2	-	-	-	-	-	-	-	-	-	2	-
387	Coal crushers	-	-	4	-	-	-	-	-	-	-	-	-	-	-
389	Ball mills	12	-	-	-	-	-	-	-	-	-	-	-	43	-
390	Coal feeders	120	-	180	-	-	-	-	-	-	40	86	-	1,019	86

**APPENDIX B
UNIT COST FACTOR DEVELOPMENT**

APPENDIX B

**UNIT COST FACTOR DEVELOPMENT
(Using Minnesota-based labor rates)**

Example: Unit Factor for Removal of Heat Exchanger < 3,000 pounds

1. SCOPE

Heat exchangers weighing < 3,000 lb. will be removed in one piece using a crane or small hoist. They will be disconnected from the inlet and outlet piping. The heat exchanger will be sent to the laydown area.

2. CALCULATIONS

Act ID	Activity Description	Activity Duration	Critical Duration
a	Remove insulation	20	(b)
b	Mount pipe cutters	60	60
c	Disconnect inlet and outlet lines	60	60
d	Rig for removal	30	30
e	Unbolt from mounts	30	30
f	Remove, send to packing area	<u>60</u>	<u>60</u>
Totals (Activity/Critical)		260	240

Duration adjustment(s):
 + Work break adjustment (8.33 % of productive duration) 20
 Total work duration (minutes) 260

***** Total duration = 4.333 hr *****

3. LABOR REQUIRED

Crew	Number	Duration (hr)	Rate (\$/hr)	Cost
Laborers	3.0	4.333	\$46.12	\$599.51
Craftsmen	2.0	4.333	\$56.78	\$492.06
Foreman	1.0	4.333	\$59.78	\$259.03
General Foreman	0.25	4.333	\$62.78	\$ 68.01
Fire Watch	0.05	4.333	\$46.12	<u>\$ 9.99</u>
Total labor cost				\$1,428.60

4. EQUIPMENT & CONSUMABLES COSTS

Equipment Costs	none
Consumables/Materials Costs	
Gas torch consumables 1 @ \$9.00/hr x 1 hr {1}	<u>9.00</u>
Subtotal cost of equipment and materials	9.00
Overhead & profit on equipment and materials @ 16.50%	<u>1.49</u>
Total costs, equipment & material	\$10.49
TOTAL COST Removal of heat exchanger <3000 pound:	\$1,439.09
Total labor cost:	\$1,428.60
Total equipment/material costs:	\$10.49
Total craft labor man-hours required per unit:	27.298

5. NOTES AND REFERENCES

- Durations are shown in minutes. The integrated duration accounts for those activities that can be performed in conjunction with other activities, indicated by the alpha designator of the concurrent activity. This results in an overall decrease in the sequenced duration.
- Work difficulty factors were developed in conjunction with the AIF program to standardize decommissioning cost studies and are delineated in the "Guidelines" study (Reference 2, Vol. 1, Chapter 5).
- References for equipment and consumables costs:
 1. R.S. Means (2009) Division 01 54 33, Section 40-6360 Page 658

**APPENDIX C
UNIT COST FACTOR LISTING**

Table C-1, Minnesota Stations Unit Cost Factors C-2
Table C-2, South Dakota Station Unit Cost Factors..... C-4

TABLE C-1
UNIT COST FACTOR LISTING
Minnesota Stations
(Costs are in 2009 dollars/Scrap Weights in pounds)

Unit Cost Factors					Scrap Weight							
UCF #	Description	Total Cost	Labor Cost	Labor Hours	Carbon Steel No.							
					Cast Iron	1	Mixed Scrap	SS-1	Galv. Steel.	Insul Cable	No. 2 Copper	Large Motor
2	Piping 0.25 to 2 inches diameter, linear foot	5.33	5.30	0.1	-	4	-	0.5	-	-	-	-
3	Piping >2 to 4 inches diameter, linear foot	7.55	7.50	0.2	-	7	-	0.9	-	-	0.4	-
4	Piping >4 to 8 inches diameter, linear foot	14.57	14.50	0.3	-	22	-	-	-	-	-	-
5	Piping >8 to 14 inches diameter, linear foot	28.31	28.22	0.6	-	57	-	-	-	-	-	-
6	Piping >14 to 20 inches diameter, linear foot	36.71	36.45	0.7	-	-	120	-	-	-	-	-
7	Piping >20 to 36 inches diameter, linear foot	54.04	53.69	1.1	-	-	221	-	-	-	-	-
8	Piping >36 inches diameter, linear foot	64.25	63.90	1.3	-	-	417	-	-	-	-	-
9	Valves <2 inches	104.34	103.99	2.0	-	-	-	-	-	-	-	-
10	Valves >2 to 4 inches	96.93	96.41	1.9	75	-	-	8.8	-	-	4.4	-
11	Valves >4 to 8 inches	145.72	145.02	2.8	510	-	-	-	-	-	-	-
12	Valves >8 to 14 inches	283.10	282.23	5.6	1,066	-	-	-	-	-	-	-
13	Valves >14 to 20 inches	367.15	364.53	7.3	-	-	2,040	-	-	-	-	-
14	Valves >20 to 36 inches	540.43	536.93	10.7	-	-	3,334	-	-	-	-	-
15	Valves >36 inches	642.49	638.99	12.7	-	-	11,535	-	-	-	-	-
24	Pipe hangers for small bore piping, each	31.76	29.14	0.6	-	10	-	-	-	-	-	-
25	Pipe hangers for large bore piping, each	116.73	111.49	2.3	-	50	-	-	-	-	-	-
26	Pump and motor set < 300 pounds	243.91	239.54	4.7	-	-	50	12.5	-	-	-	62.3
27	Pumps, 300-1000 pound pump	674.95	667.96	12.7	293	-	49	48.9	-	-	-	-
28	Pumps, >1000-10,000 pound pump	2,685.26	2,674.77	51.3	2,834	-	472	472.3	-	-	-	-
29	Pumps, >10,000 pound pump	5,186.77	5,155.31	98.9	43,693	-	7,282	7,282.1	-	-	-	-
32	Pump motors, 300-1000 pound pump	284.20	284.20	5.4	-	-	-	-	-	-	-	307.8
33	Pump motors, >1000-10,000 pound pump	1,118.77	1,118.77	21.5	-	-	-	-	-	-	-	3,531.6
34	Pump motors, >10,000 pound pump	2,517.23	2,517.23	48.3	-	-	-	-	-	-	-	42,324.5
37	Turbine-driven pumps > 10,000 pounds	6,949.20	6,914.25	132.7	20,000	-	20,000	-	-	-	-	-
38	Main turbine-generator (pounds per MW(e) input)	163,776.69	163,105.64	3,042.0	-	-	851,500	-	-	-	-	851,500.0
39	Heat exchanger <3000 pound	1,439.09	1,428.60	27.3	-	-	416	623.4	-	-	-	-
40	Heat exchanger >3000 pound	3,613.59	3,571.65	68.3	-	-	5,599	8,397.9	-	-	-	-
41	Feedwater heater/deaerator	10,206.74	10,122.86	194.2	-	-	12,000	18,000.0	-	-	-	-
49	Main condenser (pounds per MW(e) input)	454,544.47	434,452.41	8,243.6	149,400	-	149,400	199,200.0	-	-	-	-
51	Tanks, <300 gallons, filters, and ion exchangers	313.98	308.74	6.0	-	-	401	401.2	-	-	-	-
52	Tanks, 300-3000 gallons	993.63	983.14	19.1	-	-	2,700	300.0	-	-	-	-
53	Tanks, >3000 gallons, square foot surface	8.25	8.12	0.2	-	-	10	10.3	-	-	-	-

TABLE C-1 (continued)
UNIT COST FACTOR LISTING
Minnesota Stations
(Costs are in 2009 dollars/Scrap Weights in pounds)

UCF #	Description	Unit Cost Factors			Scrap Weight							
		Total Cost	Labor Cost	Labor Hours	Cast Iron	Carbon Steel No. 1	Mixed Scrap	SS-1	Galv. Steel.	Insul Cable	No. 2 Copper	Large Motor
54	Electrical equipment, <300 pound	133.91	133.91	2.6	-	-	56	-	-	-	2.9	-
55	Electrical equipment, 300-1000 pound	462.72	462.72	8.8	-	-	624	-	-	-	32.8	-
56	Electrical equipment, 1000-10,000 pound	925.44	925.44	17.6	-	-	2,212	-	-	-	116.4	-
57	Electrical equipment, >10,000 pound	2,193.94	2,193.94	41.0	-	-	19,950	-	-	-	1,050.0	-
59	Electrical transformers < 30 tons	1,523.66	1,523.66	28.4	-	-	11,250	-	-	-	3,750.0	-
60	Electrical transformers > 30 tons	4,387.89	4,387.89	81.9	-	-	375,000	-	-	-	125,000.0	-
61	Standby diesel-generator, <100 kW	1,556.29	1,556.29	29.1	2,340	-	-	-	-	-	-	260.0
62	Standby diesel-generator, 100 kW to 1 MW	3,473.74	3,473.74	64.8	9,450	-	-	-	-	-	-	1,050.0
63	Standby diesel-generator, >1 MW	7,191.36	7,191.36	134.2	47,250	-	-	-	-	-	-	5,250.0
64	Fluorescent light fixture	55.92	55.92	1.1	-	-	-	-	-	-	-	-
65	Incandescent light fixture	27.90	27.90	0.6	-	-	-	-	-	-	-	-
66	Electrical cable tray, linear foot	12.46	12.29	0.2	-	-	-	-	6.6	6.6	-	-
67	Electrical conduit, linear foot	5.44	5.35	0.1	-	-	-	-	3.4	3.4	-	-
69	Mechanical equipment, <300 pound	133.91	133.91	2.6	-	-	127	-	-	-	-	-
70	Mechanical equipment, 300-1000 pound	462.72	462.72	8.8	-	-	641	-	-	-	-	-
71	Mechanical equipment, 1000-10,000 pound	925.44	925.44	17.6	-	-	4,184	-	-	-	-	-
72	Mechanical equipment, >10,000 pound	2,193.94	2,193.94	41.0	-	-	11,938	-	-	-	-	-
76	HVAC equipment, <300 pound	133.91	133.91	2.6	-	-	184	-	-	-	-	-
77	HVAC equipment, 300-1000 pound	462.72	462.72	8.8	-	-	643	-	-	-	-	-
78	HVAC equipment, 1000-10,000 pound	925.44	925.44	17.6	-	-	3,813	-	-	-	-	-
79	HVAC equipment, >10,000 pound	2,193.94	2,193.94	41.0	-	-	19,391	-	-	-	-	-
82	HVAC ductwork, pound	0.53	0.53	0.0	-	-	-	-	1.0	-	-	-
201	Standard reinforced concrete, cubic yard	133.20	93.76	1.8	-	183	-	-	-	-	-	-
202	Grade slab concrete, cubic yard	179.21	137.69	2.6	-	183	-	-	-	-	-	-
206	Heavily rein concrete w/#9 rebar, cubic yard	229.61	127.97	2.4	-	730	-	-	-	-	-	-
222	Hollow masonry block wall, cubic yard	98.86	66.36	1.4	-	66	-	-	-	-	-	-
224	Solid masonry block wall, cubic yard	98.86	66.36	1.4	-	66	-	-	-	-	-	-
229	Backfill of below grade voids, cubic yard	24.53	3.34	0.1	-	-	-	-	-	-	-	-
230	Excavation of clean material, cubic yard	2.72	1.07	0.0	-	-	-	-	-	-	-	-
235	Building by volume, cubic foot	0.29	0.17	-	-	-	1	-	-	-	-	-
236	Building metal siding, square foot	1.18	0.97	0.0	-	-	-	-	2.4	-	-	-

TABLE C-1 (continued)
UNIT COST FACTOR LISTING
Minnesota Stations
(Costs are in 2009 dollars/Scrap Weights in pounds)

UCF #	Description	Unit Cost Factors			Scrap Weight							
		Total Cost	Labor Cost	Labor Hours	Cast Iron	Carbon Steel No. 1	Mixed Scrap	SS-1	Galv. Steel.	Insul Cable	No. 2 Copper	Large Motor
242	Standard asphalt roofing, square foot	2.34	2.34	0.1	-	-	-	-	-	-	-	-
243	Galbestos panels, square foot	2.15	1.61	0.0	-	-	-	-	-	-	-	-
245	Placement of cofferdam, linear foot	-	-	-	-	-	-	-	-	-	-	-
253	Overhead cranes/monorails < 10 ton capacity, each	641.60	641.60	11.8	-	3,700	-	-	-	-	-	-
255	Overhead cranes/monorails >10 - 50 ton capacity, each	1,539.86	1,539.86	28.3	-	-	298,832	-	-	-	3,018.5	-
258	Gantry cranes > 50 ton capacity, each	27,424.31	27,424.31	511.9	-	-	712,800	-	-	-	7,200.0	-
260	Structural steel, pounds	0.21	0.16	-	-	1	-	-	-	-	-	-
262	Steel floor grating, square foot	4.46	4.28	0.1	-	-	6	-	1.1	-	-	-
268	Placement of scaffolding in clean areas, square foot	15.52	4.53	0.1	-	-	-	-	-	-	-	-
270	Landscaping with topsoil, acre	22,449.42	2,799.75	52.6	-	-	-	-	-	-	-	-
271	Landscaping w/o topsoil, acre	1,099.65	302.81	5.3	-	-	-	-	-	-	-	-
272	Chain link fencing, linear foot	3.29	2.68	0.1	-	-	-	-	10.0	-	-	-
273	Railroad track, linear foot	22.59	11.28	0.2	-	91	-	-	-	-	-	-
274	Asphalt pavement, square foot	0.85	0.60	0.0	-	-	-	-	-	-	-	-
294	Carbon steel plate 1/2 inch thick, square foot	3.77	3.11	0.1	-	-	20	-	-	-	-	-
359	Steam drum removal (fossil)	20,062.95	19,993.05	411.6	-	-	480,000	-	-	-	-	-
360	Water drum removal (fossil)	7,456.04	7,442.93	153.2	-	-	320,000	-	-	-	-	-
361	Upper/lower waterwall headers (fossil)	5,624.63	5,611.52	115.5	-	-	120,000	-	-	-	-	-
362	Top sup boiler waterwall (8'x8' section), inches cut	0.66	0.65	0.0	-	-	11	-	-	-	-	-
369	Boiler convective superheater platens	1,555.19	1,464.33	29.6	-	-	19,501	-	-	-	-	-
370	Boiler radiant superheater platens	657.91	619.48	12.5	-	-	51,652	-	-	-	-	-
371	Boiler reheat platens	657.91	619.48	12.5	-	-	19,501	-	-	-	-	-
372	Boiler economizer platens	837.36	788.44	15.9	-	-	11,703	-	-	-	-	-
374	Stationary soot blowers	35.75	35.75	0.7	-	-	500	-	-	-	-	50.0
375	Retractable soot blowers	337.93	337.93	6.8	-	-	11,150	-	-	-	-	100.0
376	Process ductwork (8'x8' section), inches cut	0.33	0.31	0.0	-	-	0	-	-	-	-	-
378	Non-asbestos insulated regenerative air preheaters	9,974.90	9,157.07	188.5	-	-	1,376,000	-	-	-	-	-
380	Non-asbestos insulated recuperative air preheaters	5,484.85	4,973.71	101.6	-	-	1,376,000	-	-	-	-	-
382	Induced, forced, primary draft fans	1,598.12	1,577.15	31.9	-	-	30,000	-	-	-	-	3,531.6
383	Coal car dumpers	13,606.06	12,347.86	249.4	-	-	125,000	-	-	-	-	500.0
384	Conveyors	13.30	12.78	0.3	-	-	820	-	-	-	-	-
385	Transfer Towers	0.18	0.13	-	-	-	5	-	-	-	-	-
386	Stacker-reclaimers	147,324.00	147,324.00	3,008.3	-	-	300,000	-	-	-	-	2,000.0
387	Coal crushers	978.19	972.95	19.3	-	-	36,000	-	-	-	-	250.0
389	Ball mills	1,414.94	1,414.94	28.1	-	-	360,000	-	-	-	-	7,063.1
390	Coal feeders	348.63	343.39	7.1	-	-	1,194	-	-	-	-	-

TABLE C-2
UNIT COST FACTOR LISTING
South Dakota Station
(Costs are in 2009 dollars/Scrap Weights in pounds)

UCF #	Description	Unit Cost Factors			Scrap Weight							
		Total Cost	Labor Cost	Labor Hours	Cast Iron	Carbon Steel No. 1	Mixed Scrap	SS-1	Galv. Steel	Insul Cable	No. 2 Copper	Large Motor
2	Piping 0.25 to 2 inches diameter, linear foot	5.33	5.30	0.1	-	4	-	0.5	-	-	-	-
3	Piping >2 to 4 inches diameter, linear foot	7.55	7.50	0.2	-	7	-	0.9	-	-	0.4	-
4	Piping >4 to 8 inches diameter, linear foot	14.57	14.50	0.3	-	22	-	-	-	-	-	-
5	Piping >8 to 14 inches diameter, linear foot	28.31	28.22	0.6	-	57	-	-	-	-	-	-
6	Piping >14 to 20 inches diameter, linear foot	36.71	36.45	0.7	-	-	120	-	-	-	-	-
7	Piping >20 to 36 inches diameter, linear foot	54.03	53.69	1.1	-	-	221	-	-	-	-	-
8	Piping >36 inches diameter, linear foot	64.24	63.90	1.3	-	-	417	-	-	-	-	-
9	Valves <2 inches	104.33	103.99	2.0	-	-	-	-	-	-	-	-
10	Valves >2 to 4 inches	96.92	96.41	1.9	75	-	-	8.8	-	-	4.4	-
11	Valves >4 to 8 inches	145.70	145.02	2.8	510	-	-	-	-	-	-	-
12	Valves >8 to 14 inches	283.09	282.23	5.6	1,066	-	-	-	-	-	-	-
13	Valves >14 to 20 inches	367.10	364.53	7.3	-	-	2,040	-	-	-	-	-
14	Valves >20 to 36 inches	540.35	536.93	10.7	-	-	3,334	-	-	-	-	-
15	Valves >36 inches	642.41	638.99	12.7	-	-	11,535	-	-	-	-	-
24	Pipe hangers for small bore piping, each	31.71	29.14	0.6	-	10	-	-	-	-	-	-
25	Pipe hangers for large bore piping, each	116.62	111.49	2.3	-	50	-	-	-	-	-	-
26	Pump and motor set < 300 pounds	243.82	239.54	4.7	-	-	50	12.5	-	-	-	62.3
27	Pumps, 300-1000 pound pump	674.80	667.96	12.7	293	-	49	48.9	-	-	-	-
29	Pumps, >10,000 pound pump	5,186.09	5,155.31	98.9	43,693	-	7,282	7,282.1	-	-	-	-
32	Pump motors, 300-1000 pound pump	284.20	284.20	5.4	-	-	-	-	-	-	-	307.8
34	Pump motors, >10,000 pound pump	2,517.23	2,517.23	48.3	-	-	-	-	-	-	-	42,324.5
39	Heat exchanger <3000 pound	1,438.86	1,428.60	27.3	-	-	416	623.4	-	-	-	-
40	Heat exchanger >3000 pound	3,612.69	3,571.65	68.3	-	-	5,599	8,397.9	-	-	-	-
41	Feedwater heater/deaerator	10,204.94	10,122.86	194.2	-	-	12,000	18,000.0	-	-	-	-
51	Tanks, <300 gallons, filters, and ion exchangers	313.87	308.74	6.0	-	-	401	401.2	-	-	-	-
52	Tanks, 300-3000 gallons	993.40	983.14	19.1	-	-	2,700	300.0	-	-	-	-
53	Tanks, >3000 gallons, square foot surface	8.25	8.12	0.2	-	-	10	10.3	-	-	-	-

TABLE C-2 (continued)

UNIT COST FACTOR LISTING
South Dakota Station
(Costs are in 2009 dollars/Scrap Weights in pounds)

UCF #	Description	Unit Cost Factors			Scrap Weight							
		Total Cost	Labor Cost	Labor Hours	Cast Iron	Carbon Steel No. 1	Mixed Scrap	SS-1	Galv. Steel	Insul Cable	No. 2 Copper	Large Motor
54	Electrical equipment, <300 pound	133.91	133.91	2.6	-	-	56	-	-	-	2.9	-
55	Electrical equipment, 300-1000 pound	462.72	462.72	8.8	-	-	624	-	-	-	32.8	-
56	Electrical equipment, 1000-10,000 pound	925.44	925.44	17.6	-	-	2,212	-	-	-	116.4	-
57	Electrical equipment, >10,000 pound	2,193.94	2,193.94	41.0	-	-	19,950	-	-	-	1,050.0	-
59	Electrical transformers < 30 tons	1,523.66	1,523.66	28.4	-	-	11,250	-	-	-	3,750.0	-
60	Electrical transformers > 30 tons	4,387.89	4,387.89	81.9	-	-	375,000	-	-	-	125,000.0	-
64	Fluorescent light fixture	55.92	55.92	1.1	-	-	-	-	-	-	-	-
65	Incandescent light fixture	27.90	27.90	0.6	-	-	-	-	-	-	-	-
66	Electrical cable tray, linear foot	12.46	12.29	0.2	-	-	-	-	6.6	6.6	-	-
67	Electrical conduit, linear foot	5.44	5.35	0.1	-	-	-	-	3.4	3.4	-	-
69	Mechanical equipment, <300 pound	133.91	133.91	2.6	-	-	127	-	-	-	-	-
70	Mechanical equipment, 300-1000 pound	462.72	462.72	8.8	-	-	641	-	-	-	-	-
71	Mechanical equipment, 1000-10,000 pound	925.44	925.44	17.6	-	-	4,184	-	-	-	-	-
72	Mechanical equipment, >10,000 pound	2,193.94	2,193.94	41.0	-	-	11,938	-	-	-	-	-
76	HVAC equipment, <300 pound	133.91	133.91	2.6	-	-	184	-	-	-	-	-
77	HVAC equipment, 300-1000 pound	462.72	462.72	8.8	-	-	643	-	-	-	-	-
201	Standard reinforced concrete, cubic yard	132.36	93.76	1.8	-	183	-	-	-	-	-	-
202	Grade slab concrete, cubic yard	178.32	137.69	2.6	-	183	-	-	-	-	-	-
222	Hollow masonry block wall, cubic yard	98.17	66.36	1.4	-	66	-	-	-	-	-	-
229	Backfill of below grade voids, cubic yard	24.07	3.34	0.1	-	-	-	-	-	-	-	-
235	Building by volume, cubic foot	0.29	0.17	-	-	-	1	-	-	-	-	-
236	Building metal siding, square foot	1.17	0.97	0.0	-	-	-	-	2.4	-	-	-
260	Structural steel, pounds	0.21	0.16	-	-	1	-	-	-	-	-	-
262	Steel floor grating, square foot	4.45	4.28	0.1	-	-	6	-	1.1	-	-	-
270	Landscaping with topsoil, acre	22,027.75	2,799.75	52.6	-	-	-	-	-	-	-	-
272	Chain link fencing, linear foot	3.28	2.68	0.1	-	-	-	-	10.0	-	-	-
274	Asphalt pavement, square foot	0.84	0.60	0.0	-	-	-	-	-	-	-	-
294	Carbon steel plate 1/2 inch thick, square foot	3.75	3.11	0.1	-	-	20	-	-	-	-	-
359	Steam drum removal (fossil)	20,061.45	19,993.05	411.6	-	-	480,000	-	-	-	-	-
376	Process ductwork (8'x8' section), inches cut	0.32	0.31	0.0	-	-	0	-	-	-	-	-