414 Nicollet Mall
Minneapolis, MN 55401

May 18, 2015

—Via Electronic Filing—

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: PETITION
2015 ANNUAL REVIEW OF REMAINING LIVES
DOCKET NO. E,G002/D-15-46

Dear Mr. Wolf:

Northern States Power Company, doing business as Xcel Energy, submits the enclosed 2015 Review of Remaining Lives Petition. This filing is submitted to satisfy the review of depreciation rates for electric and natural gas production facilities in accordance with the 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.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list. Please contact me at lisa.h.perkett@xcelenergy.com or (612) 330-6950 if you have any questions regarding this filing.

Sincerely,

/s/

LISA H. PERKETT
DIRECTOR
CAPITAL ASSET ACCOUNTING

Enclosures
c: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
John Tuma	Commissioner
Betsy Wergin	Commissioner

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF THE 2015 REVIEW OF REMAINING LIVES	DOCKET NO. E,G002/D-15-46 **PETITION**

OVERVIEW

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission this Petition for approval of our 2015 Review of Remaining Lives. This Petition provides recommendations stemming from our annual review of electric and gas production and gas storage asset lives and net salvage rates.

The remaining lives and net salvage rates currently in use were approved in our 2014 remaining life filing (Docket No. E,G002/D-14-181). This filing shows the impact of the new proposed changes. Specifically, we request approval of:

- Passage of time adjustments for all electric and natural gas production and gas storage facilities, except as discussed below.
- Modification to the remaining lives for electric production plants Blue Lake Units 1-4, Red Wing, and Wilmarth.
- Modifications to the remaining lives for gas production plants Maplewood, Sibley, and Wescott.
- Updates to the net salvage rates for electric and natural gas production and gas storage facilities based on the 5-year Dismantling Study.

In this filing, we also provide discussion of the following items for the Commission's information:

- Black Dog Units 3 and 4 removal costs;
- Minnesota Valley removal costs and reserve reallocation;
- Key City removal costs and reserve reallocation; and
- The transfer of Wind to Battery assets to new Federal Energy Regulatory Commission (FERC) account 348.1.

Overall, this Petition reflects an increase in total Company depreciation expense of $4.9 million based on beginning year balances for assets not presently included in rate riders. We note that the Commission's decisions in one pending matter, Docket No. E999/CI-13-626, *In the Matter of a Commission Inquiry into Decommissioning Policies Related to Depreciation* may impact the net salvage rates currently reflected in this Petition. We will update the information presented in this filing to reflect any Commission decision issued during the time this Petition is pending. We have provided an alternate calculation based on the Department's recommendation in this docket, whereby the increase in depreciation would be $8.4 million instead. Based on the recently received order in Docket No. E002/GR-13-868, *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota,* the related changes approved in this rate proceeding have been incorporated in this Petition. We respectfully request Commission approval of the changes proposed by the Company to be effective January 1, 2016 unless noted. Normally we request an effective date of January 1 in the year of the filing. However, in this docket we are requesting a prospective effective date in order to align any changes approved in this case with the effective date of the Company's upcoming Minnesota Electric Rate Case, set to be filed near the end of 2015.

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. § 216B.17, subd.3, we have electronically filed this Petition. A Summary of the filing has been provided to all persons on the 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.

A. Name, Address, and Telephone Number of Utility

Northern States Power Company doing business as:
Xcel Energy
414 Nicollet Mall
Minneapolis, MN 55401
(612) 330-5500

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

Alison C. Archer
Assistant General Counsel
Xcel Energy
414 Nicollet Mall, 5th Floor
Minneapolis, MN 55401

C. Date of Filing and Date Proposed Rates Will Take Effect

The date of the filing is May 18, 2015. The Company requests that the Commission approve our proposed remaining lives and net salvage rates effective January 1, 2016.

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 Xcel Energy's 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
414 Nicollet Mall, 4th Floor
Minneapolis, MN 55401
(612) 330-6950

IV. MISCELLANEOUS INFORMATION

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

Alison C. Archer
Assistant General Counsel
Xcel Energy
414 Nicollet Mall, 5th floor
Minneapolis, Minnesota 55401
Alison.C.Archer@xcelenergy.com

Regulatory Records
Xcel Energy
414 Nicollet Mall, 7th Floor
Minneapolis, Minnesota 55401
regulatory.records@xcelenergy.com

Any information requests in this proceeding should be submitted to Regulatory Records.

V. REVIEW OF REMAINING LIVES AND NET SALVAGE RATES

A. Background

The Commission approved our current remaining lives and net salvage rates effective January 1, 2014, in their June 16, 2014 Order in Docket No. E,G002/D-14-181. This 2015 review uses the previously approved remaining lives and net salvage rates, assuming a one-year passage of time adjustment, as the starting point for this filing. Thus, we have reviewed the remaining lives of our electric and natural gas production and gas storage facilities as of January 1, 2015, considering 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.

In this filing we request approval of the following changes to remaining lives effective January 1, 2016:

- Adjustments for the passage of time for all electric and natural gas production and gas storage facilities, except as noted below.
- Modification to the remaining lives for electric production plants Blue Lake Units 1-4, Red Wing, and Wilmarth.
- Modifications to the remaining lives for gas production plants Maplewood, Sibley, and Wescott.
- Updates to the net salvage rates for electric and natural gas production and gas storage facilities based on the 5-year Dismantling Study.

Attachment A is summary of all of our requested 2016 remaining lives and net salvage rates.

In addition, the Commission's Order in our 2014 Review of Remaining Lives required our future filing to provide:

- An explanation and schedule of the differences between depreciation remaining lives and Integrated Resource Plan planning lives of electric production plants. This information is provided in Attachment F.
- An attachment providing a historical comparison of changes in remaining lives and net salvage rates. This information is provided in Attachment H.

B. Passage of Time Adjustment

To begin our analysis of 2016 remaining lives, we incorporated a two-year passage of time adjustment to the 2014 certified remaining lives of all facilities. Subtracting two years from the present certified remaining life results in the proposed remaining lives as of January 1, 2016. Attachment B shows our Comparison of Present and Proposed Lives, as it relates to 2016 estimated depreciation expense.

The passage of time adjustment does not change the annual depreciation accrual, but simply reflects that Xcel Energy production facilities have aged two years since January 1, 2014.

C. Recommended Changes in Remaining Lives for Production Facilities

We are requesting approval of the changes to the remaining lives of three electric production facilities – Red Wing and Wilmarth steam production plants and Blue Lake Units 1thru 4 other production plant. We request new remaining lives for two wind facilities that are expected to be in operation in late fall of 2015, Pleasant Valley Wind project and Borders Wind project. In addition, we are requesting changes in the remaining lives for three gas production plants – Maplewood, Sibley and Wescott.

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

- Attachment C, 2015 Plant In-service;
- Attachment D, 2015 Analysis of Depreciation Reserve; and
- Attachment E, 2015 Summary of Annual Depreciation Accruals.

1. Electric Utility – Steam Production: Red Wing and Wilmarth

The 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

(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 each was 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), 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 2017. We anticipate operating the plants through 2027, and we are exploring a 10-year fuel contract extension (through the end of 2027) with our RDF fuel supply contractor. Therefore, we request that the remaining lives for both the Red Wing and Wilmarth RDF plants be extended by 10 years, to a 12-year remaining life as of January 1, 2016. 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 decrease in depreciation of approximately $5.4 million for Red Wing and approximately $4.2 million for Wilmarth.

2. *Electric Utility – Other Production: Blue Lake Units 1- 4*

The Blue Lake Peaking Plant is located south of Shakopee, Minnesota, and consists of four 55 MW oil-fired combustion turbines. The plant became operational in 1974. The plant is primarily used for capacity accreditation, and lesser so for energy production during peak demand periods.

In the Company's 2016-2030 Resource Plan filing, the Company stated that Blue Lake Units 1-4 would provide reserve capacity through 2023. The remaining life of Blue Lake Units 1-4 was allowed to expire at the end of 2012 and the plant is currently fully depreciated. As of right now, there are no major capital additions planned for the facility. However, the new Dismantling Study estimates show an increase in the cost of removal for the Blue Lake Units 1-4 over what was assumed in the past. The Company is recommending a change in net salvage rate for Blue Lake Units 1 to 4 from negative 11.9 percent to negative 22.9 percent.

If the remaining life of this plant is not changed and this new net salvage percentage is approved, the increase in cost of removal depreciation will be expensed immediately in 2016. This would result in depreciation expense of approximately $2.7 million in

2016. To avoid this and to take into account that the plant is still in use, the Company is recommending that the remaining life of the plant be set to eight years as of January 1, 2016, to correspond with the expected remaining life stated in the 2015 resource plan. With this new remaining life 2016 depreciation will be approximately $336,000. No depreciation expense was recorded for Blue Lake Units 1-4 in 2014 and none is expected in 2015.

3. *Electric Utility – Other Production: Pleasant Valley Wind project and Borders Wind project*

The Company has two wind production facilities that are scheduled to begin operation in late 2015. The first is Pleasant Valley Wind project, which is a 200 MW wind farm to be located near Austin, MN. The second is Borders Wind project, which is a 150 MW facility to be located in northeastern Rolette County in North Dakota immediately south of the United States-Canadian Border.

These new facilities are both expected to go in-service in late 2015. As was stated in Lisa Perkett's direct testimony in the recently approved Minnesota Electric Rate Case, the Company is proposing the use of a 25-year remaining life as of the in-service date of these facilities.[1] The proposed remaining life of 25 years is the same initial remaining life used for our Grand Meadow and Nobles Wind Farms. This 25-year life is comparable to the expected remaining life stated by the manufacturer of the turbines being used at these facilities.

Based on the expected capital additions in 2015 for the facilities, the proposed remaining life of 25 years as of the in-service date of each facility, and the proposed net salvage rate of negative 8.5 percent as discussed below, the Company is expecting 2015 depreciation for Pleasant Valley Wind project of approximately $3.1 million and $1.4 million for the Borders Wind project.

4. *Gas Utility – 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 Million cubic feet (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.

[1] See *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota,* Docket No. E002/GR-13-868, DIRECT TESTIMONY AND SCHEDULES OF LISA H. PERKETT, Page 28, Lines 9-12 (November 4, 2013).

In the winter of 2014 these gas production facilities were used extensively to maintain gas system reliability and it was determined that the likelihood of continued extensive use justified substantial capital additions to all gas production plants in the area.

The Company has committed to extensive capital improvement and maintenance of these plants in the coming years. At the Maplewood location there are current capital plans to replace the 4160-volt and 480-volt Motor Control Center panels, as well as several compressors. These and any other capital additions would currently be depreciated over a much shorter period of time than they are projected to last, with higher than appropriate depreciation expense as a result. Based upon the replacements mentioned above, we request the remaining life of five years be extended 10 years to a 15-year remaining life. 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 in depreciation of approximately $170,000.

5. *Gas Utility – 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 (46 million cubic feet) per day.

Like the Maplewood facility, Sibley was utilized extensively during the winter of 2014 and the Company is committed to capital additions that will allow for the continued use of this facility. The current capital expenditure plans for Sibley include the replacement of the 4160-volt control panel and all compressors. These and any other capital additions would currently be depreciated over a much shorter period of time than they are projected to last, with higher than appropriate depreciation expense as a result. Based upon the replacements mentioned above we request the remaining life of five years be extended 10 years to a 15-year remaining life. 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 in depreciation of approximately $155,000.

6. *Gas Utility – 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 liquefied natural gas (LNG) Plant.

Like the Maplewood and Sibley facilities, Wescott was utilized extensively during the winter of 2014 and the Company is committed to capital additions that will allow for the continued use of this facility. At the Wescott location, current capital expenditure plans project upgrading and modifying the LNG and liquefied petroleum gas (LPG) control rooms, and replacing the liquefaction heat exchanger. These and any other capital additions would currently be depreciated over a much shorter period of time than they are projected to last, with higher-than-appropriate depreciation expense as a result. Based upon the replacements mentioned above, we request the remaining life of five years be extended 10 years to a 15-year remaining life. 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 decrease in depreciation of approximately $63,000.

D. Change in Net Salvage Rates

The Commission's June 16, 2014 order in Docket No. E,G002/D-14-181 requires the Company to submit, "its next five-year depreciation study for electric and gas production and gas storage facilities on February 17, 2015."[2] To meet this requirement, we have completed an analysis of the cost of removal and net salvage for all of our facilities and present as a part of this filing several recommended changes to our net salvage rates for both electric and gas facilities. We note that the Commission's inquiry in Docket No. E999/CI-13-626 (Commission Inquiry into Decommissioning Policies Related to Depreciation) is still pending. We expect to update the analysis to reflect the outcome of those proceedings as it relates to our electric utility production assets.

We provide our Comparison of Present and Proposed Lives as Attachment B to this filing, summarizing the depreciation expense impact of our proposed change to net salvage rates in combination with the proposed changes to remaining lives. Further, we are providing Attachment G, which is a comparison of Present and Proposed Net Salvage Rates. This attachment shows the calculation of proposed net salvage rates and compares them to the previously approved net salvage rates.

[2] The Commission's Order dated February 17, 2015 in this Docket granted our request for a three-month extension to submit this petition, extending the filing date to May 18, 2015.

1. Electric Utility

In 2014, the Company contracted with TLG Services, Inc. (TLG) to perform a comprehensive dismantling study on all steam, hydro, and other production electric generating plants. This is the first comprehensive dismantling study TLG has performed on our hydro production facilities. Previously net salvage rates for hydro were based on Company personnel expertise. We provide as Attachment I to this filing, the TLG Dismantling Study (Dismantling Study). The main purpose of the Dismantling Study was to estimate the present-day costs for retiring and demolishing the facilities, also known as final removals of existing facilities. We provide with the Dismantling Study a complete list of the assumptions used in the cost estimates.

To arrive at the proposed net salvage rates, we started with the 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 Dismantling Studyand 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. We calculated the proposed net salvage rates from the 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 Dismantling Study 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 Dismantling Study 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 Dismantling Study estimate to calculate the net salvage rate.

These principles are consistent with what was approved in our 2014 remaining life filing. We recognize that these generic rules may not be applicable to all facilities. For example, we request the net salvage for the King plant and all wind facilities be set at 100 percent of the Dismantling Study. The King plant is located on a national waterway and it has been assumed since the 1983 remaining life filing that it will be completely dismantled at the end of its productive life. Further, the easement agreements for the land on which wind facilities are located require 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 Dismantling Study estimate was between zero and negative five percent net salvage, we recommended using 100 percent of the net salvage calculated from the Dismantling Study estimate.

After applying the described criteria, we arrived at an estimated net salvage rate for each electric 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. Applying a net salvage rate to all FERC accounts will better capture all costs which will ultimately be incurred for removal.

a) Hydro Production – Hennepin Island

The Dismantling Study being submitted in this filing represents the first site-specific dismantling cost estimate that has been completed for the Hennepin Island plant. In the past the Company has assumed a net salvage percentage of negative-30 percent.

The Hennepin Island facility resides on the Mississippi River adjacent to downtown Minneapolis. Due to the location on a national waterway the Company is requesting to use 100 percent of the Dismantling Study estimate. This is consistent with previous treatment of the estimates for King steam production facility, another production plant on a national waterway. Based on the new Dismantling Study, the Company is requesting a net salvage percentage of negative 26.4percent for the Hennepin Island hydro facility.

b) Other Production– Pleasant Valley Wind project and Borders Wind project

Although we cannot currently determine with certainty when or under what conditions Pleasant Valley Wind project and Borders Wind project 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 of these large wind energy conversion systems.

In the current Minnesota Electric Rate Case (Docket E002/GR-13-868), the Company is proposing to use a net salvage rate of negative 8.5 percent for both Pleasant Valley Wind project and Border Winds project. This net salvage rate is similar to the negative 8.7 percent net salvage rate that is currently approved for both Grand Meadow and Nobles Wind Farms. There are currently no site-specific studies to rely on for the new wind facilities, so the previously approved net salvage rates for other wind facilities were used as a guideline until a site-specific study can be completed for these facilities.

Pleasant Valley Wind project and Borders Wind project were not included in the Dismantling Study because the projects are still under construction. The construction and equipment for Pleasant Valley Wind project and Borders Wind project are similar enough to the Grand Meadow and Nobles Wind Farms that we are confident that the net salvage rates for each facility will be comparable. For this reason, and to be consistent with our proposal in the current Minnesota Electric Rate Case (Docket E002/GR-13-868), we are requesting that the initial net salvage rate for Pleasant Valley Wind project and Borders Wind project be set at negative 8.5 percent, effective with the expected in-service date of late 2015.

c) Minnesota Valley Removal Update and Reserve Reallocation

The Minnesota Valley Plant is a former steam production facility located in Granite Falls, Minnesota along the Minnesota River. Minnesota Valley last burned coal in 2004, and the air permit was formally retired in 2009. The plant is no longer in operation and preliminary demolition work has begun.

In our 2013 Minnesota Electric Rate Case, the Commission approved a reallocation of reserve within the Steam Production function to the Minnesota Valley plant in order to cover all expected future removal costs. In compliance with the Commission's rate case order, we implemented that reserve reallocation based on the estimated removal costs in our rate case, which were the same as the costs presented in our 2012 remaining lives filing. At the same time the remaining life of the Minnesota Valley plant was set to zero.

As a part of the Dismantling Study, TLG completed an updated assessement of the estimated costs required to remove the Minnesota Valley plant. The most recent estimate of total removal cost for the facility is $22.1 million dollars. This is an increase of approximately $3.2 million over what is currently in the depreciation reserve account in order to cover future terminal removal expenses.

The Company is recommending doing another reallocation of reserve within the Steam Production function to the Minnesota Valley plant to cover the additional expected removal costs. Without a reallocation of reserve, the Company would have to immediately expense the incremental $3.2 million in expected removal costs due to the fact that the plant no longer has a remaining life. This increase would be offset by the decrease in net salvage being requested for Black Dog Units 3 and 4. Due to a lower net salvage rate, Black Dog Units 3 and 4 now have approximately $2.7 million in excess depreciation reserve to fully recover the estimated future cost of removal. We are requesting a reallocation of reserve from Black Dog of the excess depreciation reserve resulting from the decrease in net salvage rate. The transfer of reserve from other Steam Production facilities to Minnesota Valley and from Black Dog Units 3 &4 causes the depreciation on the other facilities to go up approximately $42,000. The reserve reallocation results in a decrease in depreciation of approximately $416,000 million in 2016.

As costs of removal are incurred at the Minnesota Valley plant, the costs will be treated as a debit to the depreciation reserve, and the reserve balance will be reduced. At final retirement of the plant assets, if there is reserve in excess of the plant balance being retired, we plan to transfer this reserve to other steam production accounts.

d) Key City Reserve Reallocation

The Key City Plant is a former Other Production facility located in Mankato, Minnesota, adjacent to Xcel Energy's Wilmarth power plant. The plant ceased operations on March 31, 2015. The remaining life of the plant for depreciation purposes was allowed to expire on December 31, 2012. As of December 31, 2014 the plant was fully depreciated.

As a part of the Dismantling Study, TLG completed an updated assessement of the estimated costs required to remove the Key City plant. The most recent estimate of total removal cost for the facility is $4.1 million dollars. This is an increase of approximately $776,000 over what is currently in the depreciation reserve account in order to cover future terminal removal expenses.

Due to the fact that the plant is no longer operational, the Company is recommending doing a reallocation of reserve within the Other Production function to the Key City plant to cover the additional expected removal costs. Without a reallocation of reserve, the Company would have to immediately expense the incremental $776,000 in expected removal costs due to the fact that the plant no longer has a remaining life. The transfer of reserve from the remaining Other Production facilities to Key City causes the depreciation on the other facilities to go up approximately $44,000. The

reserve reallocation results in a decrease in depreciation of approximately $733,000 million in 2016.

e) Black Dog Units 3 and 4 Removal and Reserve Reallocation

Black Dog Units 3 and 4 were officially retired from service in April 2015. These two units were coal-burning steam production units. Their removal from service ends the coal-fired production of electricity at Black Dog after more than 60 years.

The Company will be adding Black Dog Unit 6, a single 215 MW gas-powered generator, at the facility. The addition of Black Dog Unit 6 was proposed in the Company's competitive acquisition proposal filing (Docket No. CN-12-1240). The Commission selected and approved Black Dog Unit 6 in its Order of February 5, 2015. The Order does not specify an exact in-service date for Unit 6, but we are proceeding with a construction schedule that would result in commercial operation in mid-2018.

The removal of the plant structures and equipment for Black Dog Units 3 and 4 are recovered through the negative net salvage rate. The net salvage rate approved for these units is negative 29.7 percent. The Dismantling Study resulted in a lower net salvage of negative 27.3 percent. Since there is no longer a remaining life on Black Dog Units 3 and 4, this change in net salvage was made through a reserve reallocation to the other steam units, thus leaving the annual depreciation expense at zero. At this time there is no specific plan for the removal of Units 3 and 4 related assets. We expect that some assets will have to be removed in order to make room for new unit, but the specific assets that require removal for this new unit is not known. It is possible many assets will remain in place, to be removed with the entire structure at the cessation of operations at the Black Dog facility.

While it is unknown what specific assets will be removed from the facility itself related to Units 3 and 4, the remediation and closure activities related to coal and ash ponds continues and is a separate recovery from the net salvage one discussed above. As has been discussed in previous remaining life filings, the Company has entered into a Volunteer Investigation and Compliance (VIC) program with the State of Minnesota to remediate the land. This program requires the Company to fully remediate the land where the coal pile and ash ponds are located. The initial cost estimate for these activities was $33.2 million. These costs were above and beyond any removal costs estimated for plant facilities. In the Company's 2012 Minnesota Electric Rate Case (Docket E002/GR-12-961), the Commission approved a plan for the Company to amortize the expected remediation costs over 15 years. We have been following this procedure since 2013. The accumulated balance of the amortization of the costs is included on the Steam Production tabs of Attachment B.

f) Department of Commerce Recommendation in Docket No. E999/CI-13-626

This investigation docket is still open, however reply comments from all participating parties have been submitted. The Company recommended that it be allowed to continue the use of its probability analysis for removal cost estimates as desctibed above. The Department of Commerce presented a very detailed analysis of the issue and recommends that the use be discontinued. The difference between the Company's and the Department's recommendation is that the Department's recommendation will greatly increase the depreciation expense for those units or plants not using 100 percent of the dismantling cost provided in the Dismantling Study.

While we believe that both recommendations have merit, we continue to support the use of probabilities as the better option for our customers. Using probabilities effectively scales the decommissioning cost estimate to prevent customers in the early years of the plant's life from paying more than their share of the final removal costs, assuming that as improvements are made throughout the life that the remaining life will be extended. The Department noted the following in their Reply Comments, dated May 7, 2014:

> …the Department concludes that there is a theoretical basis for the use of decommissioning estimates. The fact that remaining lives do not reflect the potential for future, life-extending capital investments creates the potential for over-recovery of decommissioning expense in the early years of a plant's life. Therefore, the Department concludes that the use of decommissioning probabilities may create the desired effect of smoothing decommissioning costs over the whole lives of plants. However, the Department also concludes that utilities' current use of decommissioning probabilities may not reflect both the uncertainty related to the timing of decommissioning costs and the uncertainty of the amount of dcommissioning costs that will be incurred.
>
> Therefore, the Department recommends that the Commission require utilities to cease using decommissioning probablilitis, on a going-forward basis.

Thus, we presented the change in depreciation expense using our recommendation for the removal cost estimate in this filing using decommissioning probabilities.

However, we understand that the Commission may decide that the Department's recommendation is preferred. The impact to depreciation based on the Department's recommendation is $3.5 million further increase to depreciation expense.

Table 1

Total Depreciation Change With Probabilities (From Attachment B)	$4,890,685
Total Depreciation Change Without Probabilities (From Attachment B - Alternative)	$8,411,706
Difference	$3,521,021

Attachment B (Alternative) is included with this filing showing 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 assuming the Department's recommendation was accepted. Further, we are providing Attachment A (Alternative) for the proposed remaining life and net salvage rates and Attachment G (Alternative), which is a comparison of Present and Proposed Net Salvage Rates, both shown without the use of probabilities. This Attachment G shows the calculation of proposed net salvage rates and compares them to the previously approved net salvage rates.

Lastly, the Department recommended the following in their Reply Comments dated October 10, 2014:

> If the Commission agrees with this recommendation, it may wish to consider the financial impact this change will have on MP [Minnesota Power] and Xcel in determining whether to require the utilities to make this change before their next rate cases.

Accordingly, should the Commission choose the Department's position, the Company requests that all the changes for the Electric Utility depreciation expense for assets except the new wind farms be effective January 1, 2016 and included in our next electric rate case proceeding.

2. Gas Utility

This filing also represents the first time that TLG has performed a comprehensive Dismantling Study of removal costs for our gas utility facilities. Previously, company gas personnel performed an internal review of the net salvage rates for gas production and gas storage assets. The process was similar to that of the electric facilities.

TLG prepared detailed dismantling cost estimates for each of the gas facilities individually. As such, we are recommending using the same net salvage rate for all utility accounts at each facility. This includes at the Wescott facility, which contains both Gas Production and Gas Storage assets. This is a departure from what we have used in the past, where each utility account had distinct net salvage percentages. The Company feels that the switch is appropriate since TLG analyzed each facility as a whole, and not by utility account.

The Company is recommending the use of 75 percent of the dismantling costs for each facility in order to calculate net salvage rates. This is being recommended because the remaining life of each of the facilities is between 10 years and 20 years. This is consistent with the methodology used for electric facilities.

E. Wind to Battery Utility Account Transfer

In 2013, the Federal Energy Regulatory Commission (FERC) issued Order No. 784, Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for Electric Storage Technologies. This order required electric production assets designated as energy storage assets to be recorded in a new FERC Account 348 – Energy Storage Equipment - Production. The Company currently has one asset, Wind to Battery system, which falls under the definition of this newly established account. The Company filed a waiver with FERC to allow the Wind to Battery asset to remain in its previous FERC Account 342 – Fuel Holders, Producers & Accessories. In 2014 this waiver was denied by FERC. In order to comply with the new FERC rule, the Company transferred the Wind to Battery assets to the new FERC Account 348. There is no functional change to the assets themselves, so the Company has not requested a change in remaining life and net salvage rate for the assets. Based on this, there is no impact on depreciation resulting from this transfer.

F. Resource Plan

The Commission's order in our 2014 remaining lives filing requires the Company to, "continue to provide in future depreciation filings a comparison of depreciation remaining lives and resource planning lives with an explanation of any differences."[3]

Attachment F is a Resource Plan Comparison for our electric production plant facilities that compares our proposed depreciation life on current investment, the Resource Plan capacity planning period, and the rationale for any differences between the depreciation life and the Resource Plan capacity planning.

[3] See Commission's Order of of June 16, 2014 in Docket No. E002/D-14-181, Order Point # 4.

VI. MINNESOTA JURISDICTIONAL DEPRECIATION

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 respective Public Utility Commissions. For *financial* purposes, we must account for the impact of those differences in our approved rates in Company retail jurisdictions. We do this by calculating a depreciation expense for each jurisdiction based on its remaining lives, then apply a jurisdictional allocator to each resulting amount, and add the amounts together to get a total Company financial view. Attachments to this filing show the reserve amounts applicable to the Minnesota jurisdiction, shown at a total Company level. This method has been in use for the Minnesota assets since 2009 and has been filed in the last three electric rate case proceedings.

However, the depreciation reserve using Minnesota-approved lives and net salvage rates in this filing cannot be compared directly with total Company financial results reported in Securities and Exchange Commission or other financial filings. This stems from the fact that the North Dakota Public Service Commission and the South Dakota Public Utilities Commission have applied remaining lives for some production plants that are materially different from what the Minnesota Commission has approved in previous remaining life filings.[4]

VII. EFFECT OF THE CHANGE IN RATES

This Petition will not impact customer 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 the Company recognizes depreciation expenses for relevant assets in the current year.

CONCLUSION

Xcel Energy respectfully requests the Commission approve a total increase in depreciation expense of $4.9 million as proposed in this filing based on using the decommissioning probabilities for setting the net salvage rates for electric utility, with an effective date of January 1, 2016 for assets included in base rates, and effective with the in-service date for assets included in Riders. Alternatively, should the Commission choose the Department's position in their investigation of decommissioning probabilities for setting net salvage rates, the Company requests that all the changes

[4] 2012 North Dakota Electric Rate Case, Case No. PU-12-813; 2012 South Dakota Electric Rate Case Docket No. EL12-046.

for the Electric Utility depreciation expense for assets except the new wind farms be effective January 1, 2016 and included in our next electric rate case proceeding.

Dated:

Northern States Power Company

Respectfully submitted by:

/s/

LISA H. PERKETT
DIRECTOR
CAPITAL ASSET ACCOUNTING

2015 REVIEW OF REMAINING LIVES
Supporting Attachments

A	Summary of Proposed Remaining Lives
A (alt)	Summary of Proposed Remaining Lives – Alternative
B	Comparison of Present and Proposed Lives
B (alt)	Comparison of Present and Proposed Lives – Alternative
C	2014 Plant In-service
D	2014 Analysis of Depreciation Reserve
E	2014 Summary of Annual Depreciation Accruals
F	Resource Plan Comparison
G	Comparison of Present and Proposed Net Salvage Rates
G (alt)	Comparison of Present and Proposed Net Salvage Rates - Alternative
H	Historical Comparison of Changes to Remaining Life
I	2015 TLG Services, Inc. Dismantling Cost Study

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
John Tuma	Commissioner
Betsy Wergin	Commissioner

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF THE 2015 REVIEW OF REMAINING LIVES	DOCKET NO. E,G002/D-15-46 **PETITION**

SUMMARY OF FILING

Please take notice that on May 18, 2015, Northern States Power Company, doing business as Xcel Energy, filed with the Minnesota Public Utilities Commission a Petition for approval of its 2015 Review of Remaining Lives. The Company requests an increase of $4.9 million in 2016 total Company annual depreciation expense based on using the decommissioning probabilities for setting the net salvage rates for electric utility and on beginning of year balances for assets not presently included in rate riders, with changes to net salvage rates resulting from our new dismantling study for all the assets. The Company requests that upon Commission approval, the new remaining lives become effective January 1, 2016, except for the new wind farms where the effective date is requested to be when the assets are in service in 2015.

Electric Utility
Steam Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Black Dog			
E311	Structures & Improvements	-8.6	16.0 yrs
E312	Boiler Plant Equipment	-27.3	0.0
E314	Turbogenerator Units	-27.3	0.0
E315	Accessory Electric Equipment	-27.3	0.0
E316	Miscellaneous Power Plant Equipment	-27.3	0.0
Allen S. King			
E311	Structures & Improvements	-8.2	21.5 yrs
E312	Boiler Plant Equipment	-8.2	21.5
E314	Turbogenerator Units	-8.2	21.5
E315	Accessory Electric Equipment	-8.2	21.5
E316	Miscellaneous Power Plant Equipment	-8.2	21.5
Minnesota Valley			
E311	Structures & Improvements	N/A	0.0 yrs
E312	Boiler Plant Equipment	N/A	0.0
E314	Turbogenerator Units	N/A	0.0
E315	Accessory Electric Equipment	N/A	0.0
E316	Miscellaneous Power Plant Equipment	N/A	0.0
Red Wing			
E311	Structures & Improvements	-20.8	12.0 yrs
E312	Boiler Plant Equipment	-20.8	12.0
E314	Turbogenerator Units	-20.8	12.0
E315	Accessory Electric Equipment	-20.8	12.0
E316	Miscellaneous Power Plant Equipment	-20.8	12.0
Sherco Unit 1 & 2			
E311	Structures & Improvements	-17.0	7.0 yrs
E312	Boiler Plant Equipment	-17.0	7.0
E314	Turbogenerator Units	-17.0	7.0
E315	Accessory Electric Equipment	-17.0	7.0
E316	Miscellaneous Power Plant Equipment	-17.0	7.0

Electric Utility
Steam Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Sherco Unit 3			
E311	Structures & Improvements	-3.0	19.0 yrs
E312	Boiler Plant Equipment	-3.0	19.0
E314	Turbogenerator Units	-3.0	19.0
E315	Accessory Electric Equipment	-3.0	19.0
E316	Miscellaneous Power Plant Equipment	-3.0	19.0
Wilmarth			
E311	Structures & Improvements	-20.1	12.0 yrs
E312	Boiler Plant Equipment	-20.1	12.0
E314	Turbogenerator Units	-20.1	12.0
E315	Accessory Electric Equipment	-20.1	12.0
E316	Miscellaneous Power Plant Equipment	-20.1	12.0

Electric Utility
Nuclear Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Monticello			
E302	Franchises & Consents	0.0	14.8 yrs
E321	Structures & Improvements	0.0	14.8
E322	Reactor Plant Equipment	0.0	14.8
E323	Turbogenerator Units	0.0	14.8
E324	Accessory Electric Equipment	0.0	14.8
E325	Miscellaneous Power Plant Equipment	0.0	14.8
Monticello - Interim Storage Facility			
E321	Structures and Improvements	0.0	14.8 yrs
E322	Reactor Plant Equipment	0.0	14.8
Prairie Island Unit 1 & 2			
E302	Franchises & Consents	0.0	18.3 yrs
E321	Structures & Improvements	0.0	18.3
E322	Reactor Plant Equipment	0.0	18.3
E323	Turbogenerator Units	0.0	18.3
E324	Accessory Electric Equipment	0.0	18.3
E325	Miscellaneous Power Plant Equipment	0.0	18.3
Prairie Island - Interim Storage Facility			
E321	Structures and Improvements	0.0	18.3 yrs
E322	Reactor Plant Equipment	0.0	18.3

Electric Utility
Hydro Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Hennepin Island			
E302	Franchises & Consents	0.0	18.2 yrs
E331	Structures & Improvements	-26.4	18.2
E332	Reservoirs, Dams & Waterways	-26.4	18.2
E333	Water Wheels, Turbines & Generators	-26.4	18.2
E334	Accessory Electric Equipment	-26.4	18.2
E335	Miscellaneous Power Plant Equipment	-26.4	18.2
Upper Dam			
E332	Reservoirs, Dams & Waterways	-26.4	18.2 yrs
E335	Miscellaneous Power Plant Equipment	-26.4	18.2

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Angus C. Anson Unit 2 & 3			
E341	Structures & Improvements	-3.3	19.4 yrs
E342	Fuel Holders, Producers & Accessories	-9.6	3.8
E344	Generators	-9.6	3.8
E345	Accessory Electric Equipment	-9.6	3.8
E346	Miscellaneous Power Plant Equipment	-9.6	3.8
Angus C. Anson Unit 4			
E341	Structures & Improvements	-3.3	19.4 yrs
E342	Fuel Holders, Producers & Accessories	-3.3	19.4
E344	Generators	-3.3	19.4
E345	Accessory Electric Equipment	-3.3	19.4
E346	Miscellaneous Power Plant Equipment	-3.3	19.4
Black Dog Unit 5			
E341	Structures & Improvements	-8.6	16.0 yrs
E342	Fuel Holders, Producers & Accessories	-8.6	16.0
E344	Generators	-8.6	16.0
E345	Accessory Electric Equipment	-8.6	16.0
E346	Miscellaneous Power Plant Equipment	-8.6	16.0
Blue Lake Units 1 thru 4			
E341	Structures & Improvements	-5.8	19.4 yrs
E342	Fuel Holders, Producers & Accessories	-22.9	8.0
E344	Generators	-22.9	8.0
E345	Accessory Electric Equipment	-22.9	8.0
E346	Miscellaneous Power Plant Equipment	-22.9	8.0
Blue Lake Units 7 & 8			
E341	Structures & Improvements	-5.8	19.4 yrs
E342	Fuel Holders, Producers & Accessories	-5.8	19.4
E344	Generators	-5.8	19.4
E345	Accessory Electric Equipment	-5.8	19.4
E346	Miscellaneous Power Plant Equipment	-5.8	19.4

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Border Winds Project			
E340.1	Wind Rights	0.0	25.0 yrs*
E341	Structures & Improvements	-8.5	25.0*
E342	Fuel Holders, Producers & Accessories	-8.5	25.0*
E344	Generators	-8.5	25.0*
E345	Accessory Electric Equipment	-8.5	25.0*
E346	Miscellaneous Power Plant Equipment	-8.5	25.0*
Grand Meadow Wind Project			
E340.1	Wind Rights	0.0	17.9 yrs
E341	Structures & Improvements	-11.1	17.9
E342	Fuel Holders, Producers & Accessories	-11.1	17.9
E344	Generators	-11.1	17.9
E345	Accessory Electric Equipment	-11.1	17.9
E346	Miscellaneous Power Plant Equipment	-11.1	17.9
Granite City			
E341	Structures & Improvements	-50.4	3.4 yrs
E342	Fuel Holders, Producers & Accessories	-50.4	3.4
E344	Generators	-50.4	3.4
E345	Accessory Electric Equipment	-50.4	3.4
E346	Miscellaneous Power Plant Equipment	-50.4	3.4
High Bridge			
E341	Structures & Improvements	-3.5	32.4 yrs
E342	Fuel Holders, Producers & Accessories	-3.5	32.4
E344	Generators	-3.5	32.4
E345	Accessory Electric Equipment	-3.5	32.4
E346	Miscellaneous Power Plant Equipment	-3.5	32.4
Inver Hills			
E341	Structures & Improvements	-13.7	11.0 yrs
E342	Fuel Holders, Producers & Accessories	-13.7	11.0
E344	Generators	-13.7	11.0
E345	Accessory Electric Equipment	-13.7	11.0
E346	Miscellaneous Power Plant Equipment	-13.7	11.0
Key City			
E341	Structures & Improvements	-47.6	0.0 yrs
E342	Fuel Holders, Producers & Accessories	-47.6	0.0
E344	Generators	-47.6	0.0
E345	Accessory Electric Equipment	-47.6	0.0
E346	Miscellaneous Power Plant Equipment	-47.6	0.0

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Nobles Wind Project			
E340.1	Wind Rights	0.0	19.9 yrs
E341	Structures & Improvements	-6.0	19.9
E342	Fuel Holders, Producers & Accessories	-6.0	19.9
E344	Generators	-6.0	19.9
E345	Accessory Electric Equipment	-6.0	19.9
E346	Miscellaneous Power Plant Equipment	-6.0	19.9
Pleasant Valley Wind Project			
E340.1	Wind Rights	0.0	25.0 yrs*
E341	Structures & Improvements	-8.5	25.0*
E342	Fuel Holders, Producers & Accessories	-8.5	25.0*
E344	Generators	-8.5	25.0*
E345	Accessory Electric Equipment	-8.5	25.0*
E346	Miscellaneous Power Plant Equipment	-8.5	25.0*
Riverside			
E341	Structures & Improvements	-5.7	33.2 yrs
E342	Fuel Holders, Producers & Accessories	-5.7	33.2
E344	Generators	-5.7	33.2
E345	Accessory Electric Equipment	-5.7	33.2
E346	Miscellaneous Power Plant Equipment	-5.7	33.2
United Hospital			
E344	Generators	0.0	1.7 yrs
Wind-to-Battery System			
E348.1§	Energy Storage Equipment	0.0	8.0 yrs

*Note: Remaining Lives shown for Borders Wind and Pleasant Valley Wind projects are as of each individual facilities in-service date, expected in late 2015.

§Note: Wind-to-Battery System was previously classified in the Fuel Holders, Producers & Accessories account, FERC Account 342. A 2014 FERC order required all energy storage equipment to be classified in a newly created account, FERC Account 348.1.

Gas Utility
Gas Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Maplewood			
G305	Structures & Improvements	-70.3	14.0 yrs
G311	LP Gas Equipment	-70.3	14.0
G320	Other Equipment	-70.3	14.0
Sibley			
G305	Structures & Improvements	-59.6	14.0 yrs
G311	LP Gas Equipment	-59.6	14.0
G320	Other Equipment	-59.6	14.0
Wescott			
G305	Structures & Improvements	-14.4	14.0 yrs
G311	LP Gas Equipment	-14.4	14.0
G320	Other Equipment	-14.4	14.0

Gas Utility
Gas Storage

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Wescott			
G361	Structures & Improvements	-14.4	8.0 yrs
G362	Gas Holders	-14.4	8.0
G363	Purification Equipment	-14.4	8.0
G363.1	Liquefaction Equipment	-14.4	8.0
G363.2	Vaporizing Equipment	-14.4	12.0
G363.3	Compressor Equipment	-14.4	17.0
G363.4	Measuring & Regulating Equipment	-14.4	8.0
G363.5	Other Equipment	-14.4	8.0

Electric Utility
Steam Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Black Dog			
E311	Structures & Improvements	-11.4	16.0 yrs
E312	Boiler Plant Equipment	-27.3	0.0
E314	Turbogenerator Units	-27.3	0.0
E315	Accessory Electric Equipment	-27.3	0.0
E316	Miscellaneous Power Plant Equipment	-27.3	0.0
Allen S. King			
E311	Structures & Improvements	-8.2	21.5 yrs
E312	Boiler Plant Equipment	-8.2	21.5
E314	Turbogenerator Units	-8.2	21.5
E315	Accessory Electric Equipment	-8.2	21.5
E316	Miscellaneous Power Plant Equipment	-8.2	21.5
Minnesota Valley			
E311	Structures & Improvements	N/A	0.0 yrs
E312	Boiler Plant Equipment	N/A	0.0
E314	Turbogenerator Units	N/A	0.0
E315	Accessory Electric Equipment	N/A	0.0
E316	Miscellaneous Power Plant Equipment	N/A	0.0
Red Wing			
E311	Structures & Improvements	-27.8	12.0 yrs
E312	Boiler Plant Equipment	-27.8	12.0
E314	Turbogenerator Units	-27.8	12.0
E315	Accessory Electric Equipment	-27.8	12.0
E316	Miscellaneous Power Plant Equipment	-27.8	12.0
Sherco Unit 1 & 2			
E311	Structures & Improvements	-17.0	7.0 yrs
E312	Boiler Plant Equipment	-17.0	7.0
E314	Turbogenerator Units	-17.0	7.0
E315	Accessory Electric Equipment	-17.0	7.0
E316	Miscellaneous Power Plant Equipment	-17.0	7.0

Electric Utility
Steam Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Sherco Unit 3			
E311	Structures & Improvements	-6.0	19.0 yrs
E312	Boiler Plant Equipment	-6.0	19.0
E314	Turbogenerator Units	-6.0	19.0
E315	Accessory Electric Equipment	-6.0	19.0
E316	Miscellaneous Power Plant Equipment	-6.0	19.0
Wilmarth			
E311	Structures & Improvements	-26.8	12.0 yrs
E312	Boiler Plant Equipment	-26.8	12.0
E314	Turbogenerator Units	-26.8	12.0
E315	Accessory Electric Equipment	-26.8	12.0
E316	Miscellaneous Power Plant Equipment	-26.8	12.0

Electric Utility
Nuclear Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Monticello			
E302	Franchises & Consents	0.0	14.8 yrs
E321	Structures & Improvements	0.0	14.8
E322	Reactor Plant Equipment	0.0	14.8
E323	Turbogenerator Units	0.0	14.8
E324	Accessory Electric Equipment	0.0	14.8
E325	Miscellaneous Power Plant Equipment	0.0	14.8
Monticello - Interim Storage Facility			
E321	Structures and Improvements	0.0	14.8 yrs
E322	Reactor Plant Equipment	0.0	14.8
Prairie Island Unit 1 & 2			
E302	Franchises & Consents	0.0	18.3 yrs
E321	Structures & Improvements	0.0	18.3
E322	Reactor Plant Equipment	0.0	18.3
E323	Turbogenerator Units	0.0	18.3
E324	Accessory Electric Equipment	0.0	18.3
E325	Miscellaneous Power Plant Equipment	0.0	18.3
Prairie Island - Interim Storage Facility			
E321	Structures and Improvements	0.0	18.3 yrs
E322	Reactor Plant Equipment	0.0	18.3

Electric Utility
Hydro Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Hennepin Island			
E302	Franchises & Consents	0.0	18.2 yrs
E331	Structures & Improvements	-26.4	18.2
E332	Reservoirs, Dams & Waterways	-26.4	18.2
E333	Water Wheels, Turbines & Generators	-26.4	18.2
E334	Accessory Electric Equipment	-26.4	18.2
E335	Miscellaneous Power Plant Equipment	-26.4	18.2
Upper Dam			
E332	Reservoirs, Dams & Waterways	-26.4	18.2 yrs
E335	Miscellaneous Power Plant Equipment	-26.4	18.2

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Angus C. Anson Unit 2 & 3			
E341	Structures & Improvements	-6.5	19.4 yrs
E342	Fuel Holders, Producers & Accessories	-9.6	3.8
E344	Generators	-9.6	3.8
E345	Accessory Electric Equipment	-9.6	3.8
E346	Miscellaneous Power Plant Equipment	-9.6	3.8
Angus C. Anson Unit 4			
E341	Structures & Improvements	-6.5	19.4 yrs
E342	Fuel Holders, Producers & Accessories	-6.5	19.4
E344	Generators	-6.5	19.4
E345	Accessory Electric Equipment	-6.5	19.4
E346	Miscellaneous Power Plant Equipment	-6.5	19.4
Black Dog Unit 5			
E341	Structures & Improvements	-11.4	16.0 yrs
E342	Fuel Holders, Producers & Accessories	-11.4	16.0
E344	Generators	-11.4	16.0
E345	Accessory Electric Equipment	-11.4	16.0
E346	Miscellaneous Power Plant Equipment	-11.4	16.0
Blue Lake Units 1 thru 4			
E341	Structures & Improvements	-11.7	19.4 yrs
E342	Fuel Holders, Producers & Accessories	-22.9	8.0
E344	Generators	-22.9	8.0
E345	Accessory Electric Equipment	-22.9	8.0
E346	Miscellaneous Power Plant Equipment	-22.9	8.0
Blue Lake Units 7 & 8			
E341	Structures & Improvements	-11.7	19.4 yrs
E342	Fuel Holders, Producers & Accessories	-11.7	19.4
E344	Generators	-11.7	19.4
E345	Accessory Electric Equipment	-11.7	19.4
E346	Miscellaneous Power Plant Equipment	-11.7	19.4

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Border Winds Project			
E340.1	Wind Rights	0.0	25.0 yrs*
E341	Structures & Improvements	-8.5	25.0*
E342	Fuel Holders, Producers & Accessories	-8.5	25.0*
E344	Generators	-8.5	25.0*
E345	Accessory Electric Equipment	-8.5	25.0*
E346	Miscellaneous Power Plant Equipment	-8.5	25.0*
Grand Meadow Wind Project			
E340.1	Wind Rights	0.0	17.9 yrs
E341	Structures & Improvements	-11.1	17.9
E342	Fuel Holders, Producers & Accessories	-11.1	17.9
E344	Generators	-11.1	17.9
E345	Accessory Electric Equipment	-11.1	17.9
E346	Miscellaneous Power Plant Equipment	-11.1	17.9
Granite City			
E341	Structures & Improvements	-50.4	3.4 yrs
E342	Fuel Holders, Producers & Accessories	-50.4	3.4
E344	Generators	-50.4	3.4
E345	Accessory Electric Equipment	-50.4	3.4
E346	Miscellaneous Power Plant Equipment	-50.4	3.4
High Bridge			
E341	Structures & Improvements	-3.5	32.4 yrs
E342	Fuel Holders, Producers & Accessories	-3.5	32.4
E344	Generators	-3.5	32.4
E345	Accessory Electric Equipment	-3.5	32.4
E346	Miscellaneous Power Plant Equipment	-3.5	32.4
Inver Hills			
E341	Structures & Improvements	-18.3	11.0 yrs
E342	Fuel Holders, Producers & Accessories	-18.3	11.0
E344	Generators	-18.3	11.0
E345	Accessory Electric Equipment	-18.3	11.0
E346	Miscellaneous Power Plant Equipment	-18.3	11.0
Key City			
E341	Structures & Improvements	-47.6	0.0 yrs
E342	Fuel Holders, Producers & Accessories	-47.6	0.0
E344	Generators	-47.6	0.0
E345	Accessory Electric Equipment	-47.6	0.0
E346	Miscellaneous Power Plant Equipment	-47.6	0.0

Electric Utility
Other Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Nobles Wind Project			
E340.1	Wind Rights	0.0	19.9 yrs
E341	Structures & Improvements	-6.0	19.9
E342	Fuel Holders, Producers & Accessories	-6.0	19.9
E344	Generators	-6.0	19.9
E345	Accessory Electric Equipment	-6.0	19.9
E346	Miscellaneous Power Plant Equipment	-6.0	19.9
Pleasant Valley Wind Project			
E340.1	Wind Rights	0.0	25.0 yrs*
E341	Structures & Improvements	-8.5	25.0*
E342	Fuel Holders, Producers & Accessories	-8.5	25.0*
E344	Generators	-8.5	25.0*
E345	Accessory Electric Equipment	-8.5	25.0*
E346	Miscellaneous Power Plant Equipment	-8.5	25.0*
Riverside			
E341	Structures & Improvements	-11.3	33.2 yrs
E342	Fuel Holders, Producers & Accessories	-11.3	33.2
E344	Generators	-11.3	33.2
E345	Accessory Electric Equipment	-11.3	33.2
E346	Miscellaneous Power Plant Equipment	-11.3	33.2
United Hospital			
E344	Generators	0.0	1.7 yrs
Wind-to-Battery System			
E348.1§	Energy Storage Equipment	0.0	8.0 yrs

*Note: Remaining Lives shown for Borders Wind and Pleasant Valley Wind projects are as of each individual facilities in-service date.

§Note: Wind-to-Battery System was previously classified in the Fuel Holders, Producers & Accessories account, FERC Account 342. A 2014 FERC order required all energy storage equipment to be classified in a newly created account, FERC Account 348.1.

Gas Utility
Gas Production

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Maplewood			
G305	Structures & Improvements	-93.7	14.0 yrs
G311	LP Gas Equipment	-93.7	14.0
G320	Other Equipment	-93.7	14.0
Sibley			
G305	Structures & Improvements	-79.5	14.0 yrs
G311	LP Gas Equipment	-79.5	14.0
G320	Other Equipment	-79.5	14.0
Wescott			
G305	Structures & Improvements	-19.2	14.0 yrs
G311	LP Gas Equipment	-19.2	14.0
G320	Other Equipment	-19.2	14.0

Gas Utility
Gas Storage

Account	Description	Net Salvage (%)	Remaining Life 01/01/16
Wescott			
G361	Structures & Improvements	-19.2	8.0 yrs
G362	Gas Holders	-19.2	8.0
G363	Purification Equipment	-19.2	8.0
G363.1	Liquefaction Equipment	-19.2	8.0
G363.2	Vaporizing Equipment	-19.2	12.0
G363.3	Compressor Equipment	-19.2	17.0
G363.4	Measuring & Regulating Equipment	-19.2	8.0
G363.5	Other Equipment	-19.2	8.0

Electric and Gas Utilities Summary

	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs)	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Total Steam Production	$ 2,334,759,505	$ 1,483,653,369	14.4	12.4	-6.9	$ 81,392,677	13.2	-10.5	$ 83,273,522	$ 1,880,846
(After Minnesota Valley Reallocation)										
Total Nuclear Production	3,365,571,533	1,588,146,051	18.3	16.2	0.0	109,475,786	16.2	0.0	109,475,786	-
Total Hydro Production	26,100,514	9,051,336	20.2	18.2	-30.0	1,319,902	18.2	-26.4	1,273,926	(45,976)
Total Other Production	1,843,514,908	559,198,720	23.5	21.5 0	-6.3 0	65,286,350	21.0	-7.1	67,354,137	2,067,788
(After Key City Reallocation)										
Total Gas Production	16,009,492	13,887,654	6.0	4.0	2.9	415,778	14.0	-46.1	678,596	262,818
Total Gas Storage	53,427,008	31,292,265	16.3	14.3	1.2	1,505,315	13.4	-14.4	2,230,525	725,210
Total Company	$ 7,639,382,960	$ 3,685,229,395				$ 259,395,808			$ 264,286,493	$ 4,890,685

Total Change to Depreciation Expense $ 4,890,685

	2015 Additions	2014 Depreciation	Proposed Rem. Life (Yrs)	Proposed Net Salv %	2015 Depreciation	2015 Change in Depreciation
	(1)	(2)	(3)	(4)	(5)	(6)
Total Other Production - New Wind Facilities	$ 606,391,843	$ -	25.0	-8.5	$ 4,527,160	$ 4,527,160

	Amortizable Balance 1/1/2015	Amortization Expense	Amortization Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)
Total Steam Production - Regulatory Liability Amortization	$ 47,308,519	$ 2,884,215	$ 2,884,215	$ -

Note: All amounts shown in this schedule are represented as Northern States Power Company-Minnesota total company

Steam Production - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E311 Structures & Improvements										
Black Dog	$ 32,535,884	$ 26,047,361	18.0	17.0	-1.7	$ 414,214	17.0	-1.7	$ 414,214	-
Allen S. King	38,745,715	21,473,578	23.5	22.5	-5.5	862,362	22.5	-5.5	862,362	-
Minnesota Valley	4,047,924	8,094,186	-	-	N/A	-	-	N/A	-	-
Red Wing	12,541,195	9,689,653	4.0	3.0	-23.3	1,924,547	3.0	-23.3	1,924,547	-
Sherco Unit 1 & 2	91,678,021	74,982,452	9.0	8.0	-5.1	2,671,394	8.0	-5.1	2,671,394	-
Sherco Unit 3	132,175,992	103,577,706	21.0	20.0	-4.3	1,714,093	20.0	-4.3	1,714,093	-
Wilmarth	8,056,263	7,988,269	4.0	3.0	-23.0	640,311	3.0	-23.0	640,311	-
Total/Composite	$ 319,780,995	$ 251,853,203	11.4	10.4	-5.6	$ 8,226,921	10.4	-5.6	$ 8,226,921	-
E312 Boiler Plant Equipment										
Black Dog	$ 56,060,968	$ 62,815,132	2.0	1.0	-29.7	$ 9,895,944	1.0	-29.7	$ 9,895,944	$ -
Allen S. King	504,006,208	136,889,404	23.5	22.5	-5.5	17,548,318	22.5	-5.5	17,548,318	-
Minnesota Valley	6,380,531	16,467,877	-	-	N/A	-	-	N/A	-	-
Red Wing	39,941,887	38,124,052	4.0	3.0	-23.3	3,708,098	3.0	-23.3	3,708,098	-
Sherco Unit 1 & 2	393,827,768	241,428,776	9.0	8.0	-5.1	21,560,526	8.0	-5.1	21,560,526	-
Sherco Unit 3	397,716,678	259,944,605	21.0	20.0	-4.3	7,743,695	20.0	-4.3	7,743,695	-
Wilmarth	37,416,781	35,168,450	4.0	3.0	-23.0	3,618,064	3.0	-23.0	3,618,064	-
Total/Composite	$ 1,435,350,821	$ 790,838,297	12.6	11.6	-6.9	$ 64,074,643	11.6	-6.9	$ 64,074,643	$ -
E314 Turbogenerator Units										
Black Dog	$ 39,055,694	$ 43,217,002	2.0	1.0	-29.7	$ 7,438,234	1.0	-29.7	$ 7,438,234	$ -
Allen S. King	92,980,018	30,194,356	23.5	22.5	-5.5	3,017,758	22.5	-5.5	3,017,758	-
Minnesota Valley	2,156,244	5,488,279	-	-	N/A	-	-	N/A	-	-
Red Wing	2,931,531	2,407,844	4.0	3.0	-23.3	402,244	3.0	-23.3	402,244	-
Sherco Unit 1 & 2	98,551,343	70,145,949	9.0	8.0	-5.1	4,178,939	8.0	-5.1	4,178,939	-
Sherco Unit 3	89,533,194	38,919,260	21.0	20.0	-4.3	2,723,193	20.0	-4.3	2,723,193	-
Wilmarth	3,500,717	3,118,358	4.0	3.0	-23.0	395,841	3.0	-23.0	395,841	-
Total/Composite	$ 328,708,741	$ 193,491,048	9.9	8.9	-8.2	$ 18,156,210	8.9	-8.2	$ 18,156,210	$ -

Steam Production - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E315 Accessory Electric Equipment										
Black Dog	$ 14,812,768	$ 16,194,808	2.0	1.0	-29.7	$ 3,017,353	1.0	-29.7	$ 3,017,353	$ -
Allen S. King	43,404,998	10,777,151	23.5	22.5	-5.5	1,556,228	22.5	-5.5	1,556,228	-
Minnesota Valley	597,520	1,523,683	-	-	N/A	-	-	N/A	-	-
Red Wing	1,821,364	1,654,932	4.0	3.0	-23.3	196,936	3.0	-23.3	196,936	-
Sherco Unit 1 & 2	50,332,906	32,143,686	9.0	8.0	-5.1	2,594,525	8.0	-5.1	2,594,525	-
Sherco Unit 3	81,922,467	43,173,154	21.0	20.0	-4.3	2,113,599	20.0	-4.3	2,113,599	-
Wilmarth	1,456,195	1,210,438	4.0	3.0	-23.0	193,561	3.0	-23.0	193,561	-
Total/Composite	$ 194,348,217	$ 106,677,852	11.5	10.5	-7.0	$ 9,672,201	10.5	-7.0	$ 9,672,201	$ -
E316 Miscellaneous Power Plant Equipment										
Black Dog	$ 3,153,700	$ 3,462,829	2.0	1.0	-29.7	$ 627,520	1.0	-29.7	$ 627,520	$ -
Allen S. King	7,876,988	5,458,775	23.5	22.5	-5.5	126,731	22.5	-5.5	126,731	-
Minnesota Valley	304,630	804,687	-	-	N/A	-	-	N/A	-	-
Red Wing	1,007,544	1,025,700	4.0	3.0	-23.3	72,200	3.0	-23.3	72,200	-
Sherco Unit 1 & 2	11,901,988	7,538,538	9.0	8.0	-5.1	621,306	8.0	-5.1	621,306	-
Sherco Unit 3	31,543,737	19,365,452	21.0	20.0	-4.3	676,733	20.0	-4.3	676,733	-
Wilmarth	782,144	842,765	4.0	3.0	-23.0	39,758	3.0	-23.0	39,758	-
Total/Composite	$ 56,570,732	$ 38,498,746	11.1	10.1	-6.6	$ 2,164,248	10.1	-6.6	$ 2,164,248	$ -
Total Steam Production - Depreciation	$ 2,334,759,505	$ 1,381,359,145	11.9	10.9	-6.9	$ 102,294,224	10.9	-6.9	$ 102,294,224	$ -

* Remaining life as of 1/1/15 due to passage of time.

	Beginning Regulatory Balance 1/1/2015	Accumulated Amortization 1/1/2015	Amortization Period (Yrs)	Amortization Expense	Amortization Period (Yrs)	Amortization Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Regulatory Liability Amortizations							
Black Dog Remediation	$ 33,150,000	$ 4,420,000	13.0	$ 2,210,000	13.0	$ 2,210,000	$ -
Sherco Unit 3 Deferral	14,158,519	674,215	20.0	674,215	20.0	674,215	-
Total Steam Production - Amortization	$ 47,308,519	$ 5,094,215		$ 2,884,215		$ 2,884,215	$ -
Total Steam Production	$ 2,382,068,024	$ 1,386,453,360	11.9	10.9	-6.9	$ 105,178,439	10.9	-6.9	$ 105,178,439	$ -

Steam Production - 2016 Before Reserve Reallocation

	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E311 Structures & Improvements										
Black Dog	$ 32,535,884	$ 26,461,574	18.0	16.0	-1.7	$ 414,214	16.0	-8.6	$ 554,525	140,311
Allen S. King	38,745,715	22,335,940	23.5	21.5	-5.5	862,362	21.5	-8.2	911,020	48,657
Minnesota Valley	4,047,924	8,094,186	-	-	N/A	-	-	N/A	2,575,796	2,575,796
Red Wing	12,541,195	11,614,200	4.0	2.0	-23.3	1,924,547	12.0	-20.8	294,630	(1,629,917)
Sherco Unit 1 & 2	91,678,021	77,653,845	9.0	7.0	-5.1	2,671,394	7.0	-17.0	4,229,920	1,558,526
Sherco Unit 3	132,175,992	105,291,798	21.0	19.0	-4.3	1,714,093	19.0	-3.0	1,623,657	(90,436)
Wilmarth	8,056,263	8,628,580	4.0	2.0	-23.0	640,311	12.0	-20.1	87,249	(553,062)
Total/Composite	$ 319,780,995	$ 260,080,124	10.4	9.4	-5.6	$ 8,226,921	8.7	-9.3	$ 10,276,797	2,049,876
E312 Boiler Plant Equipment										
Black Dog	$ 56,060,968	$ 72,711,076	2.0	-	-29.7	$ -	-	-27.3	$ (1,345,463)	$ (1,345,463)
Allen S. King	504,006,208	154,437,722	23.5	21.5	-5.5	17,548,318	21.5	-8.2	18,181,256	632,938
Minnesota Valley	6,380,531	16,467,877	-	-	N/A	-	-	N/A	350,658	350,658
Red Wing	39,941,887	41,832,150	4.0	2.0	-23.3	3,708,098	12.0	-20.8	534,804	(3,173,294)
Sherco Unit 1 & 2	393,827,768	262,989,302	9.0	7.0	-5.1	21,560,526	7.0	-17.0	28,255,598	6,695,072
Sherco Unit 3	397,716,678	267,688,299	21.0	19.0	-4.3	7,743,695	19.0	-3.0	7,471,573	(272,122)
Wilmarth	37,416,781	38,786,514	4.0	2.0	-23.0	3,618,064	12.0	-20.1	512,587	(3,105,477)
Total/Composite	$ 1,435,350,821	$ 854,912,940	13.5	12.5	-6.9	$ 54,178,700	13.6	-10.5	$ 53,961,012	$ (217,688)
E314 Turbogenerator Units										
Black Dog	$ 39,055,694	$ 50,655,235	1.0	-	-29.7	$ -	-	-27.3	$ (937,337)	$ (937,337)
Allen S. King	92,980,018	33,212,114	22.5	21.5	-5.5	3,017,758	21.5	-8.2	3,134,524	116,766
Minnesota Valley	2,156,244	5,488,279	-	-	N/A	-	-	N/A	195,396	195,396
Red Wing	2,931,531	2,810,089	3.0	2.0	-23.3	402,244	12.0	-20.8	60,933	(341,311)
Sherco Unit 1 & 2	98,551,343	74,324,888	8.0	7.0	-5.1	4,178,939	7.0	-17.0	5,854,312	1,675,373
Sherco Unit 3	89,533,194	41,642,454	20.0	19.0	-4.3	2,723,193	19.0	-3.0	2,661,934	(61,260)
Wilmarth	3,500,717	3,514,199	3.0	2.0	-23.0	395,841	12.0	-20.1	57,513	(338,328)
Total/Composite	$ 328,708,741	$ 211,647,258	14.4	13.4	-8.2	$ 10,717,976	14.2	-11.9	$ 11,027,276	$ 309,300

Steam Production - 2016 Before Reserve Reallocation

	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E315 Accessory Electric Equipment										
Black Dog	$ 14,812,768	$ 19,212,161	2.0	-	-29.7	$ -	-	-27.3	$ (355,506)	$ (355,506)
Allen S. King	43,404,998	12,333,378	23.5	21.5	-5.5	1,556,228	21.5	-8.2	1,610,736	54,509
Minnesota Valley	597,520	1,523,683	-	-	N/A	-	-	N/A	51,328	51,328
Red Wing	1,821,364	1,851,869	4.0	2.0	-23.3	196,936	12.0	-20.8	29,028	(167,908)
Sherco Unit 1 & 2	50,332,906	34,738,211	9.0	7.0	-5.1	2,594,525	7.0	-17.0	3,450,184	855,659
Sherco Unit 3	81,922,467	45,286,753	21.0	19.0	-4.3	2,113,599	19.0	-3.0	2,057,547	(56,052)
Wilmarth	1,456,195	1,403,999	4.0	2.0	-23.0	193,561	12.0	-20.1	28,741	(164,820)
Total/Composite	$ 194,348,217	$ 116,350,053	14.8	13.8	-7.0	$ 6,654,848	14.2	-9.9	$ 6,872,058	$ 217,210
E316 Miscellaneous Power Plant Equipment										
Black Dog	$ 3,153,700	$ 4,090,348	2.0	-	-29.7	$ -	-	-27.3	$ (75,689)	$ (75,689)
Allen S. King	7,876,988	5,585,506	23.5	21.5	-5.5	126,731	21.5	-8.2	136,623	9,892
Minnesota Valley	304,630	804,687	-	-	N/A	-	-	N/A	(1,708)	(1,708)
Red Wing	1,007,544	1,097,900	4.0	2.0	-23.3	72,200	12.0	-20.8	9,934	(62,266)
Sherco Unit 1 & 2	11,901,988	8,159,845	9.0	7.0	-5.1	621,306	7.0	-17.0	823,640	202,334
Sherco Unit 3	31,543,737	20,042,186	21.0	19.0	-4.3	676,733	19.0	-3.0	655,151	(21,583)
Wilmarth	782,144	882,522	4.0	2.0	-23.0	39,758	12.0	-20.1	4,736	(35,022)
Total/Composite	$ 56,570,732	$ 40,662,994	13.8	12.8	-6.6	$ 1,536,729	13.4	-8.6	$ 1,552,688	$ 15,959
Total Steam Production - Depreciation	$ 2,334,759,505	$ 1,483,653,369	13.5	12.5	-6.9	$ 81,315,174	13.1	-10.5	$ 83,689,831	$ 2,374,657

* Remaining life as of 1/1/16 due to passage of time.

	Beginning Regulatory Balance 1/1/2015	Accumulated Amortization 1/1/2016 (Est.)	Amortization Period (Yrs)	Amortization Expense	Amortization Period (Yrs)	Amortization Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Regulatory Liability Amortizations							
Black Dog Remediation	$ 33,150,000	$ 6,630,000	12.0	$ 2,210,000	12.0	$ 2,210,000	$ -
Sherco Unit 3 Deferral	14,158,519	1,348,430	19.0	674,215	19.0	674,215	-
Total Steam Production - Amortization	$ 47,308,519	$ 7,978,430		$ 2,884,215		$ 2,884,215	$ -
Total Steam Production	$ 2,382,068,024	$ 1,491,631,799	13.5	12.5	-6.9	$ 84,199,389	13.1	-10.5	$ 86,574,046	$ 2,374,657

Steam Production - 2016 After Reserve Reallocation

	Plant Balance 1/1/2015	Reallocated Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E311 Structures & Improvements										
Black Dog	$ 32,535,884	$ 26,196,142	18.0	16.0	-1.7	$ 430,803	16.0	-8.6	$ 571,114	$ 140,311
Allen S. King	38,745,715	22,019,847	23.5	21.5	-5.5	877,064	21.5	-8.2	925,722	48,657
Minnesota Valley	4,047,924	10,669,982	-	-	N/A	-	-	N/A	-	-
Red Wing	12,541,195	11,511,887	4.0	2.0	-23.3	1,975,704	12.0	-20.8	303,156	(1,672,547)
Sherco Unit 1 & 2	91,678,021	76,905,923	9.0	7.0	-5.1	2,778,240	7.0	-17.0	4,336,766	1,558,526
Sherco Unit 3	132,175,992	104,213,487	21.0	19.0	-4.3	1,770,846	19.0	-3.0	1,680,410	(90,436)
Wilmarth	8,056,263	8,562,856	4.0	2.0	-23.0	673,174	12.0	-20.1	92,726	(580,447)
Total/Composite	$ 319,780,995	$ 260,080,124	10.1	9.1	-5.6	$ 8,505,830	11.3	-9.3	$ 7,909,894	$ (595,936)
E312 Boiler Plant Equipment										
Black Dog	$ 56,060,968	$ 71,365,613	2.0	-	-29.7	$ -	-	-27.3	$ -	$ -
Allen S. King	504,006,208	154,802,923	23.5	21.5	-5.5	17,531,331	21.5	-8.2	18,164,270	632,938
Minnesota Valley	6,380,531	16,818,535	-	-	N/A	-	-	N/A	-	-
Red Wing	39,941,887	41,861,092	4.0	2.0	-23.3	3,693,627	12.0	-20.8	532,392	(3,161,235)
Sherco Unit 1 & 2	393,827,768	263,274,668	9.0	7.0	-5.1	21,519,759	7.0	-17.0	28,214,831	6,695,072
Sherco Unit 3	397,716,678	267,976,484	21.0	19.0	-4.3	7,728,527	19.0	-3.0	7,456,405	(272,122)
Wilmarth	37,416,781	38,813,626	4.0	2.0	-23.0	3,604,507	12.0	-20.1	510,327	(3,094,180)
Total/Composite	$ 1,435,350,821	$ 854,912,940	13.6	12.6	-6.9	$ 54,077,753	13.3	-10.5	$ 54,878,226	$ 800,473
E314 Turbogenerator Units										
Black Dog	$ 39,055,694	$ 49,717,899	1.0	-	-29.7	$ -	-	-27.3	$ -	$ -
Allen S. King	92,980,018	33,452,067	22.5	21.5	-5.5	3,006,598	21.5	-8.2	3,123,363	116,766
Minnesota Valley	2,156,244	5,683,675	-	-	N/A	-	-	N/A	-	-
Red Wing	2,931,531	2,817,654	3.0	2.0	-23.3	398,462	12.0	-20.8	60,303	(338,159)
Sherco Unit 1 & 2	98,551,343	74,579,218	8.0	7.0	-5.1	4,142,606	7.0	-17.0	5,817,979	1,675,373
Sherco Unit 3	89,533,194	41,873,511	20.0	19.0	-4.3	2,711,032	19.0	-3.0	2,649,773	(61,260)
Wilmarth	3,500,717	3,523,234	3.0	2.0	-23.0	391,324	12.0	-20.1	56,761	(334,564)
Total/Composite	$ 328,708,741	$ 211,647,258	14.5	13.5	-8.2	$ 10,650,022	13.3	-11.9	$ 11,708,178	$ 1,058,157

Steam Production - 2016 After Reserve Reallocation

	Plant Balance 1/1/2015	Reallocated Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E315 Accessory Electric Equipment										
Black Dog	$ 14,812,768	$ 18,856,654	2.0	-	-29.7	$ -	-	-27.3	$ -	$ -
Allen S. King	43,404,998	12,407,163	23.5	21.5	-5.5	1,552,796	21.5	-8.2	1,607,304	54,509
Minnesota Valley	597,520	1,575,011	-	-	N/A	-	-	N/A	-	-
Red Wing	1,821,364	1,854,965	4.0	2.0	-23.3	195,388	12.0	-20.8	28,770	(166,618)
Sherco Unit 1 & 2	50,332,906	34,823,772	9.0	7.0	-5.1	2,582,302	7.0	-17.0	3,437,961	855,659
Sherco Unit 3	81,922,467	45,426,013	21.0	19.0	-4.3	2,106,269	19.0	-3.0	2,050,217	(56,052)
Wilmarth	1,456,195	1,406,474	4.0	2.0	-23.0	192,323	12.0	-20.1	28,535	(163,788)
Total/Composite	$ 194,348,217	$ 116,350,053	14.8	13.8	-7.0	$ 6,629,078	13.6	-9.9	$ 7,152,788	$ 523,710
E316 Miscellaneous Power Plant Equipment										
Black Dog	$ 3,153,700	$ 4,014,660	2.0	-	-29.7	$ -	-	-27.3	$ -	$ -
Allen S. King	7,876,988	5,596,985	23.5	21.5	-5.5	126,197	21.5	-8.2	136,089	9,892
Minnesota Valley	304,630	802,980	-	-	N/A	-	-	N/A	-	-
Red Wing	1,007,544	1,099,369	4.0	2.0	-23.3	71,466	12.0	-20.8	9,812	(61,654)
Sherco Unit 1 & 2	11,901,988	8,177,188	9.0	7.0	-5.1	618,829	7.0	-17.0	821,163	202,334
Sherco Unit 3	31,543,737	20,088,151	21.0	19.0	-4.3	674,314	19.0	-3.0	652,731	(21,583)
Wilmarth	782,144	883,662	4.0	2.0	-23.0	39,188	12.0	-20.1	4,641	(34,547)
Total/Composite	$ 56,570,732	$ 40,662,994	13.8	12.8	-6.6	$ 1,529,994	12.8	-8.6	$ 1,624,436	$ 94,442
Total Steam Production - Depreciation	$ 2,334,759,505	$ 1,483,653,369	13.4	12.4	-6.9	$ 81,392,677	13.2	-10.5	$ 83,273,522	$ 1,880,846

* Remaining life as of 1/1/16 due to passage of time.

	Beginning Regulatory Balance 1/1/2015	Accumulated Amortization 1/1/2016 (Est.)	Amortization Period (Yrs)	Amortization Expense	Amortization Period (Yrs)	Amortization Expense	Proposed Less Present Expense
	(1)	(2)	(2)	(3)	(4)	(5)	(6)
Regulatory Liability Amortizations							
Black Dog Remediation	$ 33,150,000	$ 6,630,000	12.0	$ 2,210,000	12.0	$ 2,210,000	$ -
Sherco Unit 3 Deferral	14,158,519	1,348,430	19.0	674,215	19.0	674,215	-
Total Steam Production - Amortization	$ 47,308,519	$ 7,978,430		$ 2,884,215		$ 2,884,215	$ -
Total Steam Production	$ 2,382,068,024	$ 1,491,631,799	13.4	12.4	-6.9	$ 84,276,892	13.2	-10.5	$ 86,157,738	$ 1,880,846

Reallocation	Plant Balance 1/1/2015	Current Reserve Balance 1/1/2016 (Est.)	Amount To Allocate	New Reserve Balance
E311 Structures & Improvements				
Black Dog	32,535,884	26,461,574	(265,432)	26,196,142
Allen S. King	38,745,715	22,335,940	(316,093)	22,019,847
Minnesota Valley	4,047,924	8,094,186	2,575,796	10,669,982
Red Wing	12,541,195	11,614,200	(102,313)	11,511,887
Sherco Unit 1 & 2	91,678,021	77,653,845	(747,923)	76,905,923
Sherco Unit 3	132,175,992	105,291,798	(1,078,311)	104,213,487
Wilmarth	8,056,263	8,628,580	(65,724)	8,562,856
Total	319,780,995	260,080,124	0	260,080,124
E312 Boiler Plant Equipment				
Black Dog	56,060,968	72,711,076	(1,345,463)	71,365,613
Minnesota Valley	6,380,531	16,467,877	350,658	16,818,535
To Reallocate	62,441,499	89,178,953	(994,805)	88,184,148
Allen S. King	504,006,208	154,437,722	365,201.13	154,802,923
Red Wing	39,941,887	41,832,150	28,941.75	41,861,092
Sherco Unit 1 & 2	393,827,768	262,989,302	285,366.21	263,274,668
Sherco Unit 3	397,716,678	267,688,299	288,184.11	267,976,484
Wilmarth	37,416,781	38,786,514	27,112.07	38,813,626
Subtotal	1,372,909,322	765,733,987	994,805	766,728,792
Grand Total	1,435,350,821	854,912,940	-	854,912,940
E314 Turbogenerator Units				
Black Dog	39,055,694	50,655,235	(937,337)	49,717,899
Minnesota Valley	2,156,244	5,488,279	195,396	5,683,675
To Reallocate	41,211,938	56,143,515	(741,941)	55,401,574
Allen S. King	92,980,018	33,212,114	239,952.79	33,452,067
Red Wing	2,931,531	2,810,089	7,565.38	2,817,654
Sherco Unit 1 & 2	98,551,343	74,324,888	254,330.67	74,579,218
Sherco Unit 3	89,533,194	41,642,454	231,057.60	41,873,511
Wilmarth	3,500,717	3,514,199	9,034.27	3,523,234
Subtotal	287,496,803	155,503,744	741,941	156,245,684
Grand Total	328,708,741	211,647,258	-	211,647,258

Reallocation	Plant Balance 1/1/2015	Current Reserve Balance 1/1/2016 (Est.)	Amount To Allocate	New Reserve Balance
E315 Accessory Electric Equipment				
Black Dog	14,812,768	19,212,161	(355,506)	18,856,654
Minnesota Valley	597,520	1,523,683	51,328	1,575,011
To Reallocate	15,410,288	20,735,843	(304,178)	20,431,665
Allen S. King	43,404,998	12,333,378	73,784.52	12,407,163
Red Wing	1,821,364	1,851,869	3,096.15	1,854,965
Sherco Unit 1 & 2	50,332,906	34,738,211	85,561.33	34,823,772
Sherco Unit 3	81,922,467	45,286,753	139,260.69	45,426,013
Wilmarth	1,456,195	1,403,999	2,475.40	1,406,474
Subtotal	178,937,929	95,614,209	304,178	95,918,388
Grand Total	194,348,217	116,350,053	-	116,350,053
E316 Miscellaneous Power Plant Equipment				
Black Dog	3,153,700	4,090,348	(75,689)	4,014,660
Minnesota Valley	304,630	804,687	(1,707)	802,980
To Reallocate	3,458,330	4,895,035	(77,396)	4,817,639
Allen S. King	7,876,988	5,585,506	11,478.38	5,596,985
Red Wing	1,007,544	1,097,900	1,468.20	1,099,369
Sherco Unit 1 & 2	11,901,988	8,159,845	17,343.63	8,177,188
Sherco Unit 3	31,543,737	20,042,186	45,965.66	20,088,151
Wilmarth	782,144	882,522	1,139.74	883,662
Subtotal	53,112,401	35,767,959	77,396	35,845,355
Grand Total	56,570,732	40,662,994	-	40,662,994

Nuclear Production - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E302 Franchises & Consents										
Monticello	$ 119,009,309	$ 17,791,398	16.8	15.8	0.0	$ 6,406,197	15.8	0.0	$ 6,406,197	$ -
Prairie Island	109,455,602	10,701,924	20.3	19.3	0.0	5,116,771	19.3	0.0	5,116,771	-
Total/Composite	$ 228,464,910	$ 28,493,322	18.4	17.4	0.0	$ 11,522,968	17.4	0.0	$ 11,522,968	$ -
E321 Structures & Improvements										
Monticello	$ 184,488,826	$ 105,500,837	16.8	15.8	0.0	$ 4,999,240	15.8	0.0	$ 4,999,240	$ -
Monticello Interim Storage	23,617,479	6,655,456	16.8	15.8	0.0	1,073,546	15.8	0.0	1,073,546	-
Prairie Island Unit 1 & 2	260,831,974	175,623,637	20.3	19.3	0.0	4,414,940	19.3	0.0	4,414,940	-
PI Interim Storage	11,938,940	11,156,755	20.3	19.3	0.0	40,528	19.3	0.0	40,528	-
Total/Composite	$ 480,877,219	$ 298,936,685	18.3	17.3	0.0	$ 10,528,253	17.3	0.0	$ 10,528,253	$ -
E322 Reactor Plant Equipment										
Monticello	$ 518,102,665	$ 234,114,432	16.8	15.8	0.0	$ 17,973,939	15.8	0.0	$ 17,973,939	$ -
Monticello Interim Storage	15,132,425	4,320,004	16.8	15.8	0.0	684,330	15.8	0.0	684,330	-
Prairie Island Unit 1 & 2	840,535,408	369,953,291	20.3	19.3	0.0	24,382,493	19.3	0.0	24,382,493	-
PI Interim Storage	136,224,110	39,703,544	20.3	19.3	0.0	5,001,066	19.3	0.0	5,001,066	-
Total/Composite	$ 1,509,994,609	$ 648,091,271	18.9	17.9	0.0	$ 48,041,828	17.9	0.0	$ 48,041,828	$ -
E323 Turbogenerator Units										
Monticello	$ 352,746,334	$ 61,462,720	16.8	15.8	0.0	$ 18,435,672	15.8	0.0	$ 18,435,672	$ -
Prairie Island Unit 1 & 2	189,210,935	133,698,061	20.3	19.3	0.0	2,876,315	19.3	0.0	2,876,315	-
Total/Composite	$ 541,957,269	$ 195,160,781	17.3	16.3	0.0	$ 21,311,986	16.3	0.0	$ 21,311,986	$ -

Nuclear Production - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E324 Accessory Electric Equipment										
Monticello	$ 219,102,009	$ 39,951,537	16.8	15.8	0.0	$ 11,338,637	15.8	0.0	$ 11,338,637	$ -
Prairie Island Unit 1 & 2	223,393,092	162,343,236	20.3	19.3	0.0	3,163,205	19.3	0.0	3,163,205	-
Total/Composite	$ 442,495,101	$ 202,294,773	17.6	16.6	0.0	$ 14,501,842	16.6	0.0	$ 14,501,842	$ -
E325 Miscellaneous Power Plant Equipment										
Monticello	$ 77,464,799	$ 44,156,556	16.8	15.8	0.0	$ 2,108,117	15.8	0.0	$ 2,108,117	$ -
Prairie Island Unit 1 & 2	84,317,626	61,832,644	20.3	19.3	0.0	1,165,025	19.3	0.0	1,165,025	-
Total/Composite	$ 161,782,425	$ 105,989,199	18.0	17.0	0.0	$ 3,273,142	17.0	0.0	$ 3,273,142	$ -
Total Nuclear Production	$ 3,365,571,533	$ 1,478,966,031	18.3	17.3	0.0	$ 109,180,019	17.3	0.0	$ 109,180,019	$ -

*Remaining life as of 1/1/15 due to passage of time.

Nuclear Production - 2016

	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E302 Franchises & Consents										
Monticello	$ 119,009,309	$ 24,197,595	16.8	14.8	0.0	$ 6,406,197	14.8	0.0	$ 6,406,197	$ -
Prairie Island	109,455,602	15,818,695	19.3	17.3	0.0	5,412,538	17.3	0.0	5,412,538	-
Total/Composite	$ 228,464,910	$ 40,016,290	16.9	15.9	0.0	$ 11,818,735	15.9	0.0	$ 11,818,735	$ -
E321 Structures & Improvements										
Monticello	$ 184,488,826	$ 110,500,077	16.8	14.8	0.0	$ 4,999,240	14.8	0.0	$ 4,999,240	$ -
Monticello Interim Storage	23,617,479	7,729,002	16.8	14.8	0.0	1,073,546	14.8	0.0	1,073,546	-
Prairie Island Unit 1 & 2	260,831,974	180,038,576	20.3	18.3	0.0	4,414,940	18.3	0.0	4,414,940	-
PI Interim Storage	11,938,940	11,197,282	20.3	18.3	0.0	40,528	18.3	0.0	40,528	-
Total/Composite	$ 480,877,219	$ 309,464,938	17.3	16.3	0.0	$ 10,528,253	16.3	0.0	$ 10,528,253	$ -
E322 Reactor Plant Equipment										
Monticello	$ 518,102,665	$ 252,088,371	16.8	14.8	0.0	$ 17,973,939	14.8	0.0	$ 17,973,939	$ -
Monticello Interim Storage	15,132,425	5,004,335	16.8	14.8	0.0	684,330	14.8	0.0	684,330	-
Prairie Island Unit 1 & 2	840,535,408	394,335,784	20.3	18.3	0.0	24,382,493	18.3	0.0	24,382,493	-
PI Interim Storage	136,224,110	44,704,609	20.3	18.3	0.0	5,001,066	18.3	0.0	5,001,066	-
Total/Composite	$ 1,509,994,609	$ 696,133,099	17.9	16.9	0.0	$ 48,041,828	16.9	0.0	$ 48,041,828	$ -
E323 Turbogenerator Units										
Monticello	$ 352,746,334	$ 79,898,392	16.8	14.8	0.0	$ 18,435,672	14.8	0.0	$ 18,435,672	$ -
Prairie Island Unit 1 & 2	189,210,935	136,574,376	20.3	18.3	0.0	2,876,315	18.3	0.0	2,876,315	-
Total/Composite	$ 541,957,269	$ 216,472,768	16.3	15.3	0.0	$ 21,311,986	15.3	0.0	$ 21,311,986	$ -

Nuclear Production - 2016

	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E324 Accessory Electric Equipment										
Monticello	$ 219,102,009	$ 51,290,174	16.8	14.8	0.0	$ 11,338,637	14.8	0.0	$ 11,338,637	$ -
Prairie Island Unit 1 & 2	223,393,092	165,506,441	20.3	18.3	0.0	3,163,205	18.3	0.0	3,163,205	-
Total/Composite	$ 442,495,101	$ 216,796,615	16.6	15.6	0.0	$ 14,501,842	15.6	0.0	$ 14,501,842	$ -
E325 Miscellaneous Power Plant Equipment										
Monticello	$ 77,464,799	$ 46,264,672	16.8	14.8	0.0	$ 2,108,117	14.8	0.0	$ 2,108,117	$ -
Prairie Island Unit 1 & 2	84,317,626	62,997,669	20.3	18.3	0.0	1,165,025	18.3	0.0	1,165,025	-
Total/Composite	$ 161,782,425	$ 109,262,341	17.0	16.0	0.0	$ 3,273,142	16.0	0.0	$ 3,273,142	$ -
Total Nuclear Production	$ 3,365,571,533	$ 1,588,146,051	17.2	16.2	0.0	$ 109,475,786	16.2	0.0	$ 109,475,786	$ -

*Remaining life as of 1/1/16 due to passage of time.

Hydro Production - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E302 Franchises & Consents										
Hennepin Island	$ 2,857,039	$ 809,511	20.2	19.2	0.0	$ 106,642	19.2	0.0	$ 106,642	$ -
Total/Composite	$ 2,857,039	$ 809,511	20.2	19.2	0.0	$ 106,642	19.2	0.0	$ 106,642	$ -
E331 Structures & Improvements										
Hennepin Island	$ 1,349,723	$ 424,976	20.2	19.2	-30.0	$ 69,253	19.2	-30.0	$ 69,253	$ -
Total/Composite	$ 1,349,723	$ 424,976	20.2	19.2	-30.0	$ 69,253	19.2	-30.0	$ 69,253	$ -
E332 Reservoirs, Dams & Waterways										
Hennepin Island	$ 4,045,484	$ 916,203	20.2	19.2	-30.0	$ 226,194	19.2	-30.0	$ 226,194	$ -
Upper Dam	4,491,476	3,405,944	20.2	19.2	-30.0	126,717	19.2	-30.0	126,717	-
Total/Composite	$ 8,536,960	$ 4,322,147	20.2	19.2	-30.0	$ 352,912	19.2	-30.0	$ 352,912	$ -
E333 Water Wheels, Turbines & Generators										
Hennepin Island	$ 10,038,996	$ 1,522,168	20.2	19.2	-30.0	$ 600,444	19.2	-30.0	$ 600,444	$ -
Total/Composite	$ 10,038,996	$ 1,522,168	20.2	19.2	-30.0	$ 600,444	19.2	-30.0	$ 600,444	$ -
E334 Accessory Electric Equipment										
Hennepin Island	$ 3,256,972	$ 587,902	20.2	19.2	-30.0	$ 189,904	19.2	-30.0	$ 189,904	$ -
Total/Composite	$ 3,256,972	$ 587,902	20.2	19.2	-30.0	$ 189,904	19.2	-30.0	$ 189,904	$ -
E335 Miscellaneous Power Plant Equipment										
Hennepin Island	$ 37,779	$ 40,072	20.2	19.2	-30.0	$ 471	19.2	-30.0	$ 471	$ -
Upper Dam	23,046	24,659	20.2	19.2	-30.0	276	19.2	-30.0	276	-
Total/Composite	$ 60,824	$ 64,731	20.2	19.2	-30.0	$ 747	19.2	-30.0	$ 747	$ -
Total Hydro Production	$ 26,100,514	$ 7,731,434	20.2	19.2	-30.0 *	$ 1,319,902	19.2	-30.0 *	$ 1,319,902	$ -

*Remaining life as of 1/1/15 due to passage of time.

Hydro Production - 2016

	Plant Balance 1/1/2015 (1)	Reserve Balance 1/1/2016 (Est.) (2)	Present Approved Rem Life (Yrs) (3)	Present Rem. Life (Yrs) * (4)	Present Net Salv % (5)	Present Depreciation Expense (6)	Proposed Rem. Life (Yrs) (7)	Proposed Net Salv % (8)	Proposed Depreciation Expense (9)	Proposed Less Present Expense (10)
E302 Franchises & Consents										
Hennepin Island	$ 2,857,039	$ 916,153	20.2	18.2	0.0	$ 106,642	18.2	0.0	$ 106,642	$ -
Total/Composite	$ 2,857,039	$ 916,153	20.2	18.2	0.0	$ 106,642	18.2	0.0	$ 106,642	$ -
E331 Structures & Improvements										
Hennepin Island	$ 1,349,723	$ 494,229	20.2	18.2	-30.0	$ 69,253	18.2	-26.4	$ 66,584	$ (2,670)
Total/Composite	$ 1,349,723	$ 494,229	20.2	18.2	-30.0	$ 69,253	18.2	-26.4	$ 66,584	$ (2,670)
E332 Reservoirs, Dams & Waterways										
Hennepin Island	$ 4,045,484	$ 1,142,397	20.2	18.2	-30.0	$ 226,194	18.2	-26.4	$ 218,192	$ (8,002)
Upper Dam	4,491,476	3,532,661	20.2	18.2	-30.0	126,717	18.2	-26.4	117,833	(8,884)
Total/Composite	$ 8,536,960	$ 4,675,058	20.2	18.2	-30.0	$ 352,912	18.2	-26.4	$ 336,025	$ (16,886)
E333 Water Wheels, Turbines & Generators										
Hennepin Island	$ 10,038,996	$ 2,122,612	20.2	18.2	-30.0	$ 600,444	18.2	-26.4	$ 580,587	$ (19,857)
Total/Composite	$ 10,038,996	$ 2,122,612	20.2	18.2	-30.0	$ 600,444	18.2	-26.4	$ 580,587	$ (19,857)
E334 Accessory Electric Equipment										
Hennepin Island	$ 3,256,972	$ 777,806	20.2	18.2	-30.0	$ 189,904	18.2	-26.4	$ 183,462	$ (6,442)
Total/Composite	$ 3,256,972	$ 777,806	20.2	18.2	-30.0	$ 189,904	18.2	-26.4	$ 183,462	$ (6,442)
E335 Miscellaneous Power Plant Equipment										
Hennepin Island	$ 37,779	$ 40,543	20.2	18.2	-30.0	$ 471	18.2	-26.4	$ 396	$ (75)
Upper Dam	23,046	24,935	20.2	18.2	-30.0	276	18.2	-26.4	230	(46)
Total/Composite	$ 60,824	$ 65,478	20.2	18.2	-30.0	$ 747	18.2	-26.4	$ 627	$ (120)
Total Hydro Production	$ 26,100,514	$ 9,051,336	20.2	18.2	-30.0 *	$ 1,319,902	18.2	-26.4 *	$ 1,273,926	$ (45,976)

*Remaining life as of 1/1/16 due to passage of time.

Other Production - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E340.1 Wind Rights										
Grand Meadow Wind Project	$ 8,686,818	$ 2,113,167	19.9	18.9	0.0	$ 347,812	18.9	0.0	$ 347,812	-
Nobles Wind Project	3,884,834	613,589	21.9	20.9	0.0	156,519	20.9	0.0	156,519	-
Total/Composite	$ 12,571,653	$ 2,726,756	20.5	19.5	0.0	$ 504,331	19.5	0.0	$ 504,331	-
E341 Structures & Improvements										
Angus C. Anson Unit 4	$ 7,521,063	$ 4,852,250	21.4	20.4	-4.5	$ 147,415	20.4	-4.5	$ 147,415	$ -
Black Dog Unit 5	15,361,662	6,599,962	18.0	17.0	-1.7	530,756	17.0	-1.7	530,756	-
Blue Lake Units 7 & 8	1,587,263	1,250,943	21.4	20.4	-5.2	20,532	20.4	-5.2	20,532	-
Grand Meadow Wind Project	4,750,902	1,267,143	19.9	18.9	-8.7	206,195	18.9	-8.7	206,195	-
Granite City	1,241,718	1,723,505	5.4	4.4	-38.8	-	4.4	-38.8	(0)	(0)
High Bridge	70,873,656	8,823,373	34.4	33.4	-3.1	1,923,574	33.4	-3.1	1,923,574	-
Inver Hills	1,412,246	1,329,809	13.0	12.0	-11.0	19,815	12.0	-11.0	19,815	-
Key City	1,002,265	1,389,139	-	-	-38.6	-	-	-38.6	-	-
Nobles Wind Project	13,536,911	2,726,626	21.9	20.9	-8.7	573,588	20.9	-8.7	573,588	-
Riverside	52,358,980	22,261,525	35.2	34.2	-5.0	956,591	34.2	-5.0	956,591	-
Total/Composite	$ 169,646,668	$ 52,224,274	29.7	28.7	-4.8	$ 4,378,466	28.7	-4.8	$ 4,378,466	$ (0)
E342 Fuel Holders, Producers & Accessories										
Angus C. Anson Unit 2 & 3	$ 1,104,673	$ 908,710	5.8	4.8	-4.4	$ 50,952	4.8	-4.4	$ 50,952	$ -
Black Dog Unit 5	3,542,706	1,268,294	18.0	17.0	-1.7	137,332	17.0	-1.7	137,332	-
Blue Lake Units 1 thru 4	1,311,529	1,467,601	-	-	-11.9	-	-	-11.9	-	-
Blue Lake Units 7 & 8	45,374	97	21.4	20.4	-5.2	2,335	20.4	-5.2	2,335	-
Granite City	416,373	577,926	5.4	4.4	-38.8	-	4.4	-38.8	(0)	(0)
High Bridge	65,161,180	8,614,325	34.4	33.4	-3.1	1,753,499	33.4	-3.1	1,753,499	-
Inver Hills	2,903,525	2,486,766	13.0	12.0	-11.0	61,346	12.0	-11.0	61,346	-
Key City	242,384	335,944	-	-	-38.6	-	-	-38.6	-	-
Riverside	887,545	26,505	35.2	34.2	-5.0	26,474	34.2	-5.0	26,474	-
Total/Composite	$ 75,615,290	$ 15,686,167	31.9	30.9	-3.8	$ 2,031,937	30.9	-3.8	$ 2,031,937	$ (0)

Other Production - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E344 Generators										
Angus C. Anson Unit 2 & 3	$ 68,468,442	$ 54,260,626	5.8	4.8	-4.4	3,587,589	4.8	-4.4	3,587,589	-
Angus C. Anson Unit 4	32,741,391	10,256,959	21.4	20.4	-4.5	1,174,402	20.4	-4.5	1,174,402	-
Black Dog Unit 5	103,811,625	22,979,976	18.0	17.0	-1.7	4,858,615	17.0	-1.7	4,858,615	-
Blue Lake Units 1 thru 4	21,198,509	23,716,242	-	-	-11.9	-	-	-11.9	-	-
Blue Lake Units 7 & 8	60,450,578	19,710,302	21.4	20.4	-5.2	2,151,162	20.4	-5.2	2,151,162	-
Grand Meadow Wind Project	182,650,050	45,034,679	19.9	18.9	-8.7	8,122,007	18.9	-8.7	8,122,007	-
Granite City	6,468,402	8,680,764	5.4	4.4	-38.8	67,586	4.4	-38.8	67,586	-
High Bridge	189,312,241	26,636,470	34.4	33.4	-3.1	5,046,241	33.4	-3.1	5,046,241	-
Inver Hills	50,365,644	43,885,846	13.0	12.0	-11.0	1,001,668	12.0	-11.0	1,001,668	-
Key City	5,374,748	7,449,401	-	-	-38.6	-	-	-38.6	-	-
Nobles Wind Project	469,273,168	80,694,612	21.9	20.9	-8.7	20,545,709	20.9	-8.7	20,545,709	-
Riverside	200,845,106	26,406,153	35.2	34.2	-5.0	5,394,187	34.2	-5.0	5,394,187	-
United Hospital	2,031,625	1,814,577	3.7	2.7	0.0	80,388	2.7	0.0	80,388	-
Total/Composite	$ 1,392,991,529	$ 371,526,607	22.5	21.5	-6.8	$ 52,029,554	21.5	-6.8	$ 52,029,554	$ -
E345 Accessory Electric Equipment										
Angus C. Anson Unit 2 & 3	$ 3,335,587	$ 2,598,978	5.8	4.8	-4.4	$ 184,036	4.8	-4.4	$ 184,036	$ -
Angus C. Anson Unit 4	4,621,874	1,458,730	21.4	20.4	-4.5	165,251	20.4	-4.5	165,251	-
Black Dog Unit 5	9,889,980	3,713,869	18.0	17.0	-1.7	373,191	17.0	-1.7	373,191	-
Blue Lake Units 1 thru 4	1,369,569	1,532,548	-	-	-11.9	-	-	-11.9	-	-
Blue Lake Units 7 & 8	7,849,102	2,617,812	21.4	20.4	-5.2	276,443	20.4	-5.2	276,443	-
Grand Meadow Wind Project	12,027,032	3,234,040	19.9	18.9	-8.7	520,600	18.9	-8.7	520,600	-
Granite City	629,592	812,807	5.4	4.4	-38.8	13,879	4.4	-38.8	13,879	-
High Bridge	51,033,267	8,101,208	34.4	33.4	-3.1	1,332,757	33.4	-3.1	1,332,757	-
Inver Hills	3,414,158	2,196,541	13.0	12.0	-11.0	132,765	12.0	-11.0	132,765	-
Key City	1,702,722	2,359,972	-	-	-38.6	-	-	-38.6	-	-
Nobles Wind Project	29,931,151	5,215,947	21.9	20.9	-8.7	1,307,139	20.9	-8.7	1,307,139	-
Riverside	40,246,066	6,483,258	35.2	34.2	-5.0	1,046,056	34.2	-5.0	1,046,056	-
Total/Composite	$ 166,050,099	$ 40,325,711	26.3	25.3	-5.8	$ 5,352,118	25.3	-5.8	$ 5,352,118	$ -

Other Production - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E346 Miscellaneous Power Plant Equipment										
Angus C. Anson Unit 2 & 3	$ 2,667,289	$ 1,628,184	5.8	4.8	-4.4	$ 240,930	4.8	-4.4	$ 240,930	$ -
Black Dog Unit 5	1,356,629	580,044	18.0	17.0	-1.7	47,038	17.0	-1.7	47,038	-
Blue Lake Units 1 thru 4	424,921	475,487	-	-	-11.9	-	-	-11.9	-	-
Blue Lake Units 7 & 8	32,958	6,656	21.4	20.4	-5.2	1,373	20.4	-5.2	1,373	-
Grand Meadow Wind Project	207,761	55,894	19.9	18.9	-8.7	8,992	18.9	-8.7	8,992	-
Granite City	13,279	18,432	5.4	4.4	-38.8	-	4.4	-38.8	-	-
High Bridge	7,233,190	1,401,625	34.4	33.4	-3.1	181,311	33.4	-3.1	181,311	-
Inver Hills	619,054	613,366	13.0	12.0	-11.0	6,149	12.0	-11.0	6,149	-
Key City	277,794	385,022	-	-	-38.6	-	-	-38.6	-	-
Nobles Wind Project	627,971	71,689	21.9	20.9	-8.7	29,230	20.9	-8.7	29,230	-
Riverside	9,049,921	4,745,999	35.2	34.2	-5.0	139,077	34.2	-5.0	139,077	-
Total/Composite	$ 22,510,768	$ 9,982,399	21.9	20.9	-5.0	$ 654,100	20.9	-5.0	$ 654,100	$ -
E348.1 Energy Storage Equipment										
Wind-to-Battery System	$ 4,128,902	$ 1,482,225	10.0	9.0	0.0	$ 294,075	9.0	0.0	$ 294,075	-
Total/Composite	$ 4,128,902	$ 1,482,225	10.0	9.0	0.0	$ 294,075	9.0	0.0	$ 294,075	$ -
Total Other Production	$ 1,843,514,908	$ 493,954,139	23.5	22.5	-6.3	$ 65,244,581	22.5	-6.3	$ 65,244,581	$ (0)

* Remaining life as of 1/1/15 due to passage of time.

Other Production - 2016 Before Reserve Reallocatin

			Present				Proposed			Proposed
	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Approved Rem Life (Yrs)	Rem. Life (Yrs) *	Net Salv %	Depreciation Expense	Rem. Life (Yrs)	Net Salv %	Depreciation Expense	Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E340.1 Wind Rights										
Grand Meadow Wind Project	$ 8,686,818	$ 2,460,979	19.9	17.9	0.0	$ 347,812	17.9	0.0	$ 347,812	-
Nobles Wind Project	3,884,834	770,108	21.9	19.9	0.0	156,519	19.9	0.0	156,519	-
Total/Composite	$ 12,571,653	$ 3,231,087	19.5	18.5	0.0	$ 504,331	18.5	0.0	$ 504,331	-
E341 Structures & Improvements										
Angus C. Anson Unit 4	$ 7,521,063	$ 4,999,665	21.4	19.4	-4.5	$ 147,415	19.4	-3.3	$ 142,763	$ (4,652)
Black Dog Unit 5	15,361,662	7,130,717	18.0	16.0	-1.7	530,756	16.0	-8.6	597,003	66,247
Blue Lake Units 7 & 8	1,587,263	1,271,475	21.4	19.4	-5.2	20,532	19.4	-5.8	21,023	491
Grand Meadow Wind Project	4,750,902	1,473,338	19.9	17.9	-8.7	206,195	17.9	-11.1	212,565	6,370
Granite City	1,241,718	1,723,505	5.4	3.4	-38.8	-	3.4	-50.4	42,365	42,365
High Bridge	70,873,656	10,746,946	34.4	32.4	-3.1	1,923,574	32.4	-3.5	1,932,324	8,750
Inver Hills	1,412,246	1,349,624	13.0	11.0	-11.0	19,815	11.0	-13.7	23,282	3,466
Key City	1,002,265	1,389,139	-	-	-38.6	-	-	-47.6	90,514	90,514
Nobles Wind Project	13,536,911	3,300,214	21.9	19.9	-8.7	573,588	19.9	-6.0	555,222	(18,367)
Riverside	52,358,980	23,218,116	35.2	33.2	-5.0	956,591	33.2	-5.7	967,630	11,040
Total/Composite	$ 169,646,668	$ 56,602,740	28.7	27.7	-4.8	$ 4,378,466	26.8	-5.8	$ 4,584,690	$ 206,224
E342 Fuel Holders, Producers & Accessories										
Angus C. Anson Unit 2 & 3	$ 1,104,673	$ 959,662	5.8	3.8	-4.4	$ 50,952	3.8	-9.6	$ 66,068	$ 15,117
Black Dog Unit 5	3,542,706	1,405,626	18.0	16.0	-1.7	137,332	16.0	-8.6	152,610	15,278
Blue Lake Units 1 thru 4	1,311,529	1,467,601	-	-	-11.9	-	8.0	-22.9	18,034	18,034
Blue Lake Units 7 & 8	45,374	2,432	21.4	19.4	-5.2	2,335	19.4	-5.8	2,349	14
Granite City	416,373	577,926	5.4	3.4	-38.8	-	3.4	-50.4	14,206	14,206
High Bridge	65,161,180	10,367,823	34.4	32.4	-3.1	1,753,499	32.4	-3.5	1,761,543	8,045
Inver Hills	2,903,525	2,548,111	13.0	11.0	-11.0	61,346	11.0	-13.7	68,472	7,127
Key City	242,384	335,944	-	-	-38.6	-	-	-47.6	21,890	21,890
Riverside	887,545	52,979	35.2	33.2	-5.0	26,474	33.2	-5.7	26,661	187
Total/Composite	$ 75,615,290	$ 17,718,104	30.9	29.9	-3.8	$ 2,031,937	28.9	-5.0	$ 2,131,833	$ 99,896

Other Production - 2016 Before Reserve Reallocatin

	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E344 Generators										
Angus C. Anson Unit 2 & 3	$ 68,468,442	$ 57,848,215	5.8	3.8	-4.4	3,587,589	3.8	-9.6	4,524,526	936,937
Angus C. Anson Unit 4	32,741,391	11,431,361	21.4	19.4	-4.5	1,174,402	19.4	-3.3	1,154,149	(20,252)
Black Dog Unit 5	103,811,625	27,838,590	18.0	16.0	-1.7	4,858,615	16.0	-8.6	5,306,302	447,688
Blue Lake Units 1 thru 4	21,198,509	23,716,242	-	-	-11.9	-	8.0	-22.9	292,091	292,091
Blue Lake Units 7 & 8	60,450,578	21,861,464	21.4	19.4	-5.2	2,151,162	19.4	-5.8	2,169,858	18,696
Grand Meadow Wind Project	182,650,050	53,156,686	19.9	17.9	-8.7	8,122,007	17.9	-11.1	8,366,901	244,894
Granite City	6,468,402	8,748,350	5.4	3.4	-38.8	67,586	3.4	-50.4	288,272	220,687
High Bridge	189,312,241	31,682,711	34.4	32.4	-3.1	5,046,241	32.4	-3.5	5,069,613	23,372
Inver Hills	50,365,644	44,887,514	13.0	11.0	-11.0	1,001,668	11.0	-13.7	1,125,293	123,625
Key City	5,374,748	7,449,401	-	-	-38.6	-	-	-47.6	485,392	485,392
Nobles Wind Project	469,273,168	101,240,321	21.9	19.9	-8.7	20,545,709	19.9	-6.0	19,909,007	(636,702)
Riverside	200,845,106	31,800,340	35.2	33.2	-5.0	5,394,187	33.2	-5.7	5,436,534	42,347
United Hospital	2,031,625	1,894,965	3.7	1.7	0.0	80,388	1.7	0.0	80,388	-
Total/Composite	$ 1,392,991,529	$ 423,556,161	21.5	20.5	-6.8	$ 52,029,554	19.8	-7.5	$ 54,208,326	$ 2,178,772
E345 Accessory Electric Equipment										
Angus C. Anson Unit 2 & 3	$ 3,335,587	$ 2,783,015	5.8	3.8	-4.4	$ 184,036	3.8	-9.6	$ 229,681	$ 45,645
Angus C. Anson Unit 4	4,621,874	1,623,982	21.4	19.4	-4.5	165,251	19.4	-3.3	162,392	(2,859)
Black Dog Unit 5	9,889,980	4,087,059	18.0	16.0	-1.7	373,191	16.0	-8.6	415,841	42,651
Blue Lake Units 1 thru 4	1,369,569	1,532,548	-	-	-11.9	-	8.0	-22.9	18,832	18,832
Blue Lake Units 7 & 8	7,849,102	2,894,255	21.4	19.4	-5.2	276,443	19.4	-5.8	278,871	2,428
Grand Meadow Wind Project	12,027,032	3,754,640	19.9	17.9	-8.7	520,600	17.9	-11.1	536,726	16,126
Granite City	629,592	826,686	5.4	3.4	-38.8	13,879	3.4	-50.4	35,359	21,480
High Bridge	51,033,267	9,433,965	34.4	32.4	-3.1	1,332,757	32.4	-3.5	1,339,058	6,300
Inver Hills	3,414,158	2,329,306	13.0	11.0	-11.0	132,765	11.0	-13.7	141,145	8,380
Key City	1,702,722	2,359,972	-	-	-38.6	-	-	-47.6	153,772	153,772
Nobles Wind Project	29,931,151	6,523,086	21.9	19.9	-8.7	1,307,139	19.9	-6.0	1,266,529	(40,610)
Riverside	40,246,066	7,529,314	35.2	33.2	-5.0	1,046,056	33.2	-5.7	1,054,542	8,486
Total/Composite	$ 166,050,099	$ 45,677,829	25.3	24.3	-5.8	$ 5,352,118	23.3	-6.6	$ 5,632,747	$ 280,630

Other Production - 2016 Before Reserve Reallocatin

	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E346 Miscellaneous Power Plant Equipment										
Angus C. Anson Unit 2 & 3	$ 2,667,289	$ 1,869,115	5.8	3.8	-4.4	$ 240,930	3.8	-9.6	$ 277,430	$ 36,500
Black Dog Unit 5	1,356,629	627,083	18.0	16.0	-1.7	47,038	16.0	-8.6	52,889	5,850
Blue Lake Units 1 thru 4	424,921	475,487	-	-	-11.9	-	8.0	-22.9	5,843	5,843
Blue Lake Units 7 & 8	32,958	8,030	21.4	19.4	-5.2	1,373	19.4	-5.8	1,384	10
Grand Meadow Wind Project	207,761	64,885	19.9	17.9	-8.7	8,992	17.9	-11.1	9,270	279
Granite City	13,279	18,432	5.4	3.4	-38.8	-	3.4	-50.4	-	-
High Bridge	7,233,190	1,582,936	34.4	32.4	-3.1	181,311	32.4	-3.5	182,204	893
Inver Hills	619,054	619,515	13.0	11.0	-11.0	6,149	11.0	-13.7	7,668	1,519
Key City	277,794	385,022	-	-	-38.6	-	-	-47.6	25,087	25,087
Nobles Wind Project	627,971	100,919	21.9	19.9	-8.7	29,230	19.9	-6.0	28,378	(852)
Riverside	9,049,921	4,885,075	35.2	33.2	-5.0	139,077	33.2	-5.7	140,985	1,908
Total/Composite	$ 22,510,768	$ 10,636,499	20.9	19.9	-5.0	$ 654,100	18.3	-6.8	$ 731,138	$ 77,038
E348.1 Energy Storage Equipment										
Wind-to-Battery System	$ 4,128,902	$ 1,776,300	10.0	8.0	0.0	$ 294,075	8.0	0.0	$ 294,075	-
Total/Composite	$ 4,128,902	$ 1,776,300	9.0	8.0	0.0	$ 294,075	8.0	0.0	$ 294,075	$ -
Total Other Production	$ 1,843,514,908	$ 559,198,720	22.5	21.5	-6.3	$ 65,244,581	20.8	-7.1	$ 68,087,140	$ 2,842,559

* Remaining life as of 1/1/15 due to passage of time.

Other Production - After Reserve Reallocation

	Plant Balance 1/1/2015	Reallocated Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E340.1 Wind Rights										
Grand Meadow Wind Project	$ 8,686,818	$ 2,460,979	19.9	17.9	0.0	$ 347,812	17.9	0.0	$ 347,812	-
Nobles Wind Project	3,884,834	770,108	21.9	19.9	0.0	156,519	19.9	0.0	156,519	-
Total/Composite	$ 12,571,653	$ 3,231,087	19.5	18.5	0.0	$ 504,331	18.5	0.0	$ 504,331	-
E341 Structures & Improvements										
Angus C. Anson Unit 4	$ 7,521,063	$ 4,995,628	21.4	19.4	-4.5	$ 147,623	19.4	-3.3	$ 142,971	$ (4,652)
Black Dog Unit 5	15,361,662	7,122,473	18.0	16.0	-1.7	531,271	16.0	-8.6	597,518	66,247
Blue Lake Units 7 & 8	1,587,263	1,270,623	21.4	19.4	-5.2	20,576	19.4	-5.8	21,067	491
Grand Meadow Wind Project	4,750,902	1,470,788	19.9	17.9	-8.7	206,338	17.9	-11.1	212,707	6,370
Granite City	1,241,718	1,722,838	5.4	3.4	-38.8	-	3.4	-50.4	42,561	42,561
High Bridge	70,873,656	10,708,907	34.4	32.4	-3.1	1,924,748	32.4	-3.5	1,933,498	8,750
Inver Hills	1,412,246	1,348,866	13.0	11.0	-11.0	19,884	11.0	-13.7	23,351	3,466
Key City	1,002,265	1,479,653	-	-	-38.6	-	-	-47.6	-	-
Nobles Wind Project	13,536,911	3,292,949	21.9	19.9	-8.7	573,953	19.9	-6.0	555,587	(18,367)
Riverside	52,358,980	23,190,014	35.2	33.2	-5.0	957,437	33.2	-5.7	968,477	11,040
Total/Composite	$ 169,646,668	$ 56,602,740	28.6	27.6	-4.8	$ 4,381,831	27.3	-5.8	$ 4,497,736	$ 115,905
E342 Fuel Holders, Producers & Accessories										
Angus C. Anson Unit 2 & 3	$ 1,104,673	$ 959,341	5.8	3.8	-4.4	$ 51,036	3.8	-9.6	$ 66,153	$ 15,117
Black Dog Unit 5	3,542,706	1,404,597	18.0	16.0	-1.7	137,396	16.0	-8.6	152,674	15,278
Blue Lake Units 1 thru 4	1,311,529	1,467,220	-	-	-11.9	-	8.0	-22.9	18,081	18,081
Blue Lake Units 7 & 8	45,374	2,419	21.4	19.4	-5.2	2,336	19.4	-5.8	2,350	14
Granite City	416,373	577,805	5.4	3.4	-38.8	-	3.4	-50.4	14,241	14,241
High Bridge	65,161,180	10,348,899	34.4	32.4	-3.1	1,754,083	32.4	-3.5	1,762,127	8,045
Inver Hills	2,903,525	2,547,268	13.0	11.0	-11.0	61,422	11.0	-13.7	68,549	7,127
Key City	242,384	357,834	-	-	-38.6	-	-	-47.6	-	-
Riverside	887,545	52,721	35.2	33.2	-5.0	26,482	33.2	-5.7	26,669	187
Total/Composite	$ 75,615,290	$ 17,718,104	30.9	29.9	-3.8	$ 2,032,755	29.2	-5.0	$ 2,110,844	$ 78,089

Other Production - After Reserve Reallocation

	Plant Balance 1/1/2015	Reallocated Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E344 Generators										
Angus C. Anson Unit 2 & 3	68,468,442	57,824,264	5.8	3.8	-4.4	3,593,892	3.8	-9.6	4,530,828	936,937
Angus C. Anson Unit 4	32,741,391	11,419,908	21.4	19.4	-4.5	1,174,992	19.4	-3.3	1,154,740	(20,252)
Black Dog Unit 5	103,811,625	27,802,277	18.0	16.0	-1.7	4,860,884	16.0	-8.6	5,308,572	447,688
Blue Lake Units 1 thru 4	21,198,509	23,708,827	-	-	-11.9	-	8.0	-22.9	293,018	293,018
Blue Lake Units 7 & 8	60,450,578	21,840,318	21.4	19.4	-5.2	2,152,252	19.4	-5.8	2,170,948	18,696
Grand Meadow Wind Project	182,650,050	53,092,794	19.9	17.9	-8.7	8,125,576	17.9	-11.1	8,370,470	244,894
Granite City	6,468,402	8,746,087	5.4	3.4	-38.8	68,251	3.4	-50.4	288,938	220,687
High Bridge	189,312,241	31,616,489	34.4	32.4	-3.1	5,048,285	32.4	-3.5	5,071,657	23,372
Inver Hills	50,365,644	44,869,896	13.0	11.0	-11.0	1,003,270	11.0	-13.7	1,126,895	123,625
Key City	5,374,748	7,934,793	-	-	-38.6	-	-	-47.6	-	-
Nobles Wind Project	469,273,168	101,076,168	21.9	19.9	-8.7	20,553,958	19.9	-6.0	19,917,256	(636,702)
Riverside	200,845,106	31,730,084	35.2	33.2	-5.0	5,396,304	33.2	-5.7	5,438,650	42,347
United Hospital	2,031,625	1,894,254	3.7	1.7	0.0	80,806	1.7	0.0	80,806	-
Total/Composite	$ 1,392,991,529	$ 423,556,161	21.4	20.4	-6.8	$ 52,058,470	20.0	-7.5	$ 53,752,777	$ 1,694,307
E345 Accessory Electric Equipment										
Angus C. Anson Unit 2 & 3	$ 3,335,587	$ 2,779,894	5.8	3.8	-4.4	$ 184,858	3.8	-9.6	$ 230,503	$ 45,645
Angus C. Anson Unit 4	4,621,874	1,619,657	21.4	19.4	-4.5	165,474	19.4	-3.3	162,615	(2,859)
Black Dog Unit 5	9,889,980	4,077,806	18.0	16.0	-1.7	373,769	16.0	-8.6	416,420	42,651
Blue Lake Units 1 thru 4	1,369,569	1,531,267	-	-	-11.9	-	8.0	-22.9	18,992	18,992
Blue Lake Units 7 & 8	7,849,102	2,886,911	21.4	19.4	-5.2	276,822	19.4	-5.8	279,249	2,428
Grand Meadow Wind Project	12,027,032	3,743,387	19.9	17.9	-8.7	521,229	17.9	-11.1	537,354	16,126
Granite City	629,592	826,097	5.4	3.4	-38.8	14,052	3.4	-50.4	35,532	21,480
High Bridge	51,033,267	9,386,216	34.4	32.4	-3.1	1,334,231	32.4	-3.5	1,340,531	6,300
Inver Hills	3,414,158	2,326,111	13.0	11.0	-11.0	133,055	11.0	-13.7	141,435	8,380
Key City	1,702,722	2,513,745	-	-	-38.6	-	-	-47.6	-	-
Nobles Wind Project	29,931,151	6,495,081	21.9	19.9	-8.7	1,308,547	19.9	-6.0	1,267,937	(40,610)
Riverside	40,246,066	7,491,657	35.2	33.2	-5.0	1,047,190	33.2	-5.7	1,055,676	8,486
Total/Composite	$ 166,050,099	$ 45,677,829	25.3	24.3	-5.8	$ 5,359,226	23.9	-6.6	$ 5,486,244	$ 127,018

Other Production - After Reserve Reallocation

	Plant Balance 1/1/2015	Reallocated Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E346 Miscellaneous Power Plant Equipment										
Angus C. Anson Unit 2 & 3	$ 2,667,289	$ 1,866,105	5.8	3.8	-4.4	$ 241,722	3.8	-9.6	$ 278,222	$ 36,500
Black Dog Unit 5	1,356,629	625,552	18.0	16.0	-1.7	47,134	16.0	-8.6	52,984	5,850
Blue Lake Units 1 thru 4	424,921	475,008	-	-	-11.9	-	8.0	-22.9	5,903	5,903
Blue Lake Units 7 & 8	32,958	7,992	21.4	19.4	-5.2	1,375	19.4	-5.8	1,385	10
Grand Meadow Wind Project	207,761	64,651	19.9	17.9	-8.7	9,005	17.9	-11.1	9,283	279
Granite City	13,279	18,417	5.4	3.4	-38.8	-	3.4	-50.4	457	457
High Bridge	7,233,190	1,574,775	34.4	32.4	-3.1	181,563	32.4	-3.5	182,456	893
Inver Hills	619,054	618,816	13.0	11.0	-11.0	6,212	11.0	-13.7	7,732	1,519
Key City	277,794	410,110	-	-	-38.6	-	-	-47.6	-	-
Nobles Wind Project	627,971	100,211	21.9	19.9	-8.7	29,266	19.9	-6.0	28,414	(852)
Riverside	9,049,921	4,874,864	35.2	33.2	-5.0	139,384	33.2	-5.7	141,292	1,908
Total/Composite	$ 22,510,768	$ 10,636,499	20.8	19.8	-5.0	$ 655,662	18.9	-6.8	$ 708,129	$ 52,468
E348.1 Energy Storage Equipment										
Wind-to-Battery System	$ 4,128,902	1,776,300	10.0	8.0	0.0	$ 294,075	8.0	0.0	$ 294,075	-
Total/Composite	$ 4,128,902	$ 1,776,300	9.0	8.0	0.0	$ 294,075	8.0	0.0	$ 294,075	$ -
Total Other Production	$ 1,843,514,908	$ 559,198,720	22.5	21.5	-6.3	$ 65,286,350	21.0	-7.1	$ 67,354,137	$ 2,067,788

* Remaining life as of 1/1/15 due to passage of time.

Reallocation	Plant Balance 1/1/2015	Current Reserve Balance 1/1/2016 (Est.)	Amount To Allocate	New Reserve Balance
E341 Structures & Improvements				
Angus C. Anson	7,521,063	4,999,665	(4,037)	4,995,628
Black Dog Unit 5	15,361,662	7,130,717	(8,245)	7,122,473
Blue Lake	1,587,263	1,271,475	(852)	1,270,623
Grand Meadow Wind Project	4,750,902	1,473,338	(2,550)	1,470,788
Granite City	1,241,718	1,723,505	(666)	1,722,838
High Bridge	70,873,656	10,746,946	(38,039)	10,708,907
Inver Hills	1,412,246	1,349,624	(758)	1,348,866
Key City	1,002,265	1,389,139	90,514	1,479,653
Nobles Wind Project	13,536,911	3,300,214	(7,265)	3,292,949
Riverside	52,358,980	23,218,116	(28,102)	23,190,014
Total	169,646,668	56,602,740	-	56,602,740
E342 Fuel Holders, Producers & Accessories				
Angus C. Anson Unit 2 & 3	1,104,673	959,662	(321)	959,341
Black Dog Unit 5	3,542,706	1,405,626	(1,029)	1,404,597
Blue Lake Units 1 thru 4	1,311,529	1,467,601	(381)	1,467,220
Blue Lake Units 7 & 8	45,374	2,432	(13)	2,419
Granite City	416,373	577,926	(121)	577,805
High Bridge	65,161,180	10,367,823	(18,924)	10,348,899
Inver Hills	2,903,525	2,548,111	(843)	2,547,268
Key City	242,384	335,944	21,890	357,834
Riverside	887,545	52,979	(258)	52,721
Total	75,615,290	17,718,104	(0)	17,718,104
E344 Generators				
Angus C. Anson Unit 2 & 3	68,468,442	57,848,215	(23,950)	57,824,264
Angus C. Anson Unit 4	32,741,391	11,431,361	(11,453)	11,419,908
Black Dog Unit 5	103,811,625	27,838,590	(36,314)	27,802,277
Blue Lake Units 1 thru 4	21,198,509	23,716,242	(7,415)	23,708,827
Blue Lake Unit 7 & 8	60,450,578	21,861,464	(21,146)	21,840,318
Grand Meadow Wind Project	182,650,050	53,156,686	(63,891)	53,092,794
Granite City	6,468,402	8,748,350	(2,263)	8,746,087
High Bridge	189,312,241	31,682,711	(66,222)	31,616,489
Inver Hills	50,365,644	44,887,514	(17,618)	44,869,896
Key City	5,374,748	7,449,401	485,392	7,934,793
Nobles Wind Project	469,273,168	101,240,321	(164,153)	101,076,168
Riverside	200,845,106	31,800,340	(70,256)	31,730,084
United Hospital	2,031,625	1,894,965	(711)	1,894,254
Total	1,392,991,529	423,556,161	0	423,556,161

Reallocation	Plant Balance 1/1/2015	Current Reserve Balance 1/1/2016 (Est.)	Amount To Allocate	New Reserve Balance
E345 Accessory Electric Equipment				
Angus C. Anson Unit 2 & 3	3,335,587	2,783,015	(3,121)	2,779,894
Angus C. Anson Unit 4	4,621,874	1,623,982	(4,324)	1,619,657
Black Dog Unit 5	9,889,980	4,087,059	(9,254)	4,077,806
Blue Lake Units 1 thru 4	1,369,569	1,532,548	(1,281)	1,531,267
Blue Lake Unit 7 & 8	7,849,102	2,894,255	(7,344)	2,886,911
Grand Meadow Wind Project	12,027,032	3,754,640	(11,253)	3,743,387
Granite City	629,592	826,686	(589)	826,097
High Bridge	51,033,267	9,433,965	(47,749)	9,386,216
Inver Hills	3,414,158	2,329,306	(3,194)	2,326,111
Key City	1,702,722	2,359,972	153,772	2,513,745
Nobles Wind Project	29,931,151	6,523,086	(28,005)	6,495,081
Riverside	40,246,066	7,529,314	(37,656)	7,491,657
Total	166,050,099	45,677,829	-	45,677,829
E346 Miscellaneous Power Plant Equipment				
Angus C. Anson Unit 2 & 3	2,667,289	1,869,115	(3,010)	1,866,105
Black Dog Unit 5	1,356,629	627,083	(1,531)	625,552
Blue Lake Units 1 thru 4	424,921	475,487	(479)	475,008
Blue Lake Unit 7 & 8	32,958	8,030	(37)	7,992
Grand Meadow Wind Project	207,761	64,885	(234)	64,651
Granite City	13,279	18,432	(15)	18,417
High Bridge	7,233,190	1,582,936	(8,162)	1,574,775
Inver Hills	619,054	619,515	(699)	618,816
Key City	277,794	385,022	25,087	410,110
Nobles Wind Project	627,971	100,919	(709)	100,211
Riverside	9,049,921	4,885,075	(10,212)	4,874,864
Total	22,510,768	10,636,499	-	10,636,499

Other Production - New Wind Facilities

		Proposed		
	2015 Additions	Rem. Life (Yrs)	Net Salv %	Depreciation Expense
	(1)	(7)	(8)	(9)
E340.1-346.1 New Wind Facilities				
Border Winds Project	$ 264,886,066	25.0	-8.5	$ 1,437,063
Pleasant Valley Wind Project	341,505,777	25.0	-8.5	3,090,097
Total/Composite	$ 606,391,843	25.0	-8.5	$ 4,527,160

Gas Production - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
G305 Structures & Improvements										
Maplewood	$ 952,430	$ 949,119	6.0	5.0	-17.0	$ 33,045	5.0	-17.0	$ 33,045	-
Sibley	776,690	744,877	6.0	5.0	-1.0	7,916	5.0	-1.0	7,916	-
Wescott	1,048,359	768,575	6.0	5.0	-3.0	62,247	5.0	-3.0	62,247	-
Total/Composite	$ 2,777,480	$ 2,462,571	6.0	5.0	-7.2	$ 103,208	5.0	-7.2	$ 103,208	-
G311 LP Gas Equipment										
Maplewood	$ 3,715,761	$ 3,003,240	6.0	5.0	8.0	$ 83,052	5.0	8.0	$ 83,052	-
Sibley	3,926,187	3,187,058	6.0	5.0	8.0	85,007	5.0	8.0	85,007	-
Wescott	4,662,451	4,057,959	6.0	5.0	1.0	111,573	5.0	1.0	111,573	-
Total/Composite	$ 12,304,399	$ 10,248,257	6.0	5.0	5.3	$ 279,632	5.0	5.3	$ 279,632	-
G320 Other Equipment										
Maplewood	$ 203,004	$ 197,401	6.0	5.0	0.0	$ 1,121	5.0	0.0	$ 1,121	-
Sibley	496,538	351,826	6.0	5.0	-1.0	29,936	5.0	-1.0	29,936	-
Wescott	228,070	211,821	6.0	5.0	3.0	1,881	5.0	3.0	1,881	-
Total/Composite	$ 927,613	$ 761,048	6.0	5.0	0.2	$ 32,938	5.0	0.2	$ 32,938	-
Total Gas Production	$ 16,009,492	$ 13,471,876	6.0	5.0	2.9	$ 415,778	5.0	2.9	$ 415,778	-

*Remaining life as of 1/1/15 due to passage of time.

Gas Production - 2016

	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
G305 Structures & Improvements										
Maplewood	$ 952,430	$ 982,164	6.0	4.0	-17.0	$ 33,045	14.0	-70.3	$ 45,702	12,657
Sibley	776,690	752,793	6.0	4.0	-1.0	7,916	14.0	-59.6	34,772	26,856
Wescott	1,048,359	830,822	6.0	4.0	-3.0	62,247	14.0	-14.4	26,322	(35,926)
Total/Composite	$ 2,777,480	$ 2,565,779	5.0	4.0	-7.2	$ 103,208	14.0	-46.2	$ 106,795	3,587
G311 LP Gas Equipment										
Maplewood	$ 3,715,761	$ 3,086,292	6.0	4.0	8.0	$ 83,052	14.0	-70.3	$ 231,546	148,494
Sibley	3,926,187	3,272,065	6.0	4.0	8.0	85,007	14.0	-59.6	213,866	128,860
Wescott	4,662,451	4,169,533	6.0	4.0	1.0	111,573	14.0	-14.4	83,165	(28,408)
Total/Composite	$ 12,304,399	$ 10,527,890	5.0	4.0	5.3	$ 279,632	14.0	-45.7	$ 528,578	248,946
G320 Other Equipment										
Maplewood	$ 203,004	$ 198,522	6.0	4.0	0.0	$ 1,121	14.0	-70.3	$ 10,514	9,393
Sibley	496,538	381,762	6.0	4.0	-1.0	29,936	14.0	-59.6	29,337	(599)
Wescott	228,070	213,702	6.0	4.0	3.0	1,881	14.0	-14.4	3,372	1,491
Total/Composite	$ 927,613	$ 793,986	5.0	4.0	0.2	$ 32,938	14.0	-50.8	$ 43,223	10,285
Total Gas Production	$ 16,009,492	$ 13,887,654	5.0	4.0	2.9	$ 415,778	14.0	-46.1	$ 678,596	262,818

*Remaining life as of 1/1/16 due to passage of time.

Gas Storage - 2015

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
G361 Structures & Improvements										
Wescott	$ 4,798,574	$ 5,002,924	10.0	9.0	-10.0	$ 30,612	9.0	-10.0	$ 30,612	-
G362 Gas Holders										
Wescott	8,169,167	7,489,291	10.0	9.0	5.0	30,158	9.0	5.0	30,158	-
G363 Purification Equipment										
Wescott	1,020,951	973,917	10.0	9.0	1.0	4,092	9.0	1.0	4,092	-
G363.1 Liquefaction Equipment										
Wescott	2,852,841	1,559,875	10.0	9.0	2.0	137,323	9.0	2.0	137,323	-
G363.2 Vaporizing Equipment										
Wescott	9,256,561	5,286,001	14.0	13.0	2.0	291,187	13.0	2.0	291,187	-
G363.3 Compressor Equipment										
Wescott	23,486,534	6,468,654	19.0	18.0	2.0	919,342	18.0	2.0	919,342	-
G363.4 Measuring & Regulating Equipment										
Wescott	44,503	41,024	10.0	9.0	6.0	90	9.0	6.0	90	-
G363.5 Other Equipment										
Wescott	3,797,877	2,965,264	10.0	9.0	0.0	92,513	9.0	0.0	92,513	-
Total Gas Storage	$ 53,427,008	$ 29,786,949	16.3	15.3	1.2	$ 1,505,315	15.3	1.2	$ 1,505,315	-

* Remaining life as of 1/1/15 due to passage of time.

Gas Storage - 2016

	Plant Balance 1/1/2015	Reserve Balance 1/1/2016 (Est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
G361 Structures & Improvements										
Wescott	$ 4,798,574	$ 5,033,536	10.0	8.0	-10.0	$ 30,612	8.0	-14.4	$ 57,004	26,392
G362 Gas Holders										
Wescott	8,169,167	7,519,449	10.0	8.0	5.0	30,158	8.0	-14.4	228,260	198,102
G363 Purification Equipment										
Wescott	1,020,951	978,008	10.0	8.0	1.0	4,092	8.0	-14.4	23,745	19,653
G363.1 Liquefaction Equipment										
Wescott	2,852,841	1,697,198	10.0	8.0	2.0	137,323	8.0	-14.4	195,806	58,483
G363.2 Vaporizing Equipment										
Wescott	9,256,561	5,577,188	14.0	12.0	2.0	291,187	12.0	-14.4	417,693	126,506
G363.3 Compressor Equipment										
Wescott	23,486,534	7,387,996	19.0	17.0	2.0	919,342	17.0	-14.4	1,145,918	226,576
G363.4 Measuring & Regulating Equipment										
Wescott	44,503	41,114	10.0	8.0	6.0	90	8.0	-14.4	1,225	1,135
G363.5 Other Equipment										
Wescott	3,797,877	3,057,776	10.0	8.0	0.0	92,513	8.0	-14.4	160,874	68,362
Total Gas Storage	$ 53,427,008	$ 31,292,265	15.3	14.3	1.2	$ 1,505,315	13.4	-14.4	$ 2,230,525	725,210

* Remaining life as of 1/1/16 due to passage of time.

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs)	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Total Steam Production (After Reserve Reallocation)	$ 2,334,759,505	$ 1,483,653,369	13.5	11.5	-6.9	$ 81,392,677	13.2	-11.8	$ 85,113,346	$ 3,720,670
Total Nuclear Production	3,365,571,533	1,588,146,051	18.3	16.3	0.0	109,180,019	16.3	0.0	109,180,019	-
Total Hydro Production	26,100,514	9,051,336	20.2	18.2	-30.0	1,319,902	18.2	-26.4	1,273,926	(45,976)
Total Other Production (After Reserve Reallocation)	1,843,514,908	559,198,720	22.5	20.5	-6.3	65,227,783	21.0	-8.6	68,573,636	3,345,854
Total Gas Production	16,009,492	13,887,654	6.0	4.0	2.9	415,778	14.0	-61.5	854,282	438,504
Total Gas Storage	53,427,008	31,292,265	16.3	14.3	1.2	1,505,315	13.2	-19.2	2,457,970	952,655
Total Company	$ 7,639,382,960	$ 3,685,229,395				$ 259,041,474			$ 267,453,180	$ 8,411,706

Total Change to Depreciation Expense **$ 8,411,706**

	2015 Additions	2014 Depreciation	Proposed Rem. Life (Yrs)	Proposed Net Salv %	2015 Estimated Depreciation	2015 Change in Depreciation
	(1)	(2)	(3)	(4)	(5)	(6)
Total Other Production - New Wind Facilities	$ 606,391,843	$ -	25.0	-8.5	$ 4,527,160	$ 4,527,160

	Amortizable Balance 1/1/16 (est.)	Amortization Expense	Amortization Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)
Total Steam Production - Regulatory Liability Amortization	$ 47,308,519	$ 2,884,215	$ 2,884,215	$ -

Note: All amounts shown in this schedule are represented as Northern States Power Company-Minnesota total company

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E311 Structures & Improvements										
Black Dog	$ 32,535,884	$ 26,047,361	18.0	17.0	-1.7	$ 414,214	17.0	-1.7	$ 414,214	-
Allen S. King	38,745,715	21,473,578	23.5	22.5	-5.5	862,362	22.5	-5.5	862,362	-
Minnesota Valley	4,047,924	8,094,186	-	-	N/A	-	-	N/A	-	-
Red Wing	12,541,195	9,689,653	4.0	3.0	-23.3	1,924,547	3.0	-23.3	1,924,547	-
Sherco Unit 1 & 2	91,678,021	74,982,452	9.0	8.0	-5.1	2,671,394	8.0	-5.1	2,671,394	-
Sherco Unit 3	132,175,992	103,577,706	21.0	20.0	-4.3	1,714,093	20.0	-4.3	1,714,093	-
Wilmarth	8,056,263	7,988,269	4.0	3.0	-23.0	640,311	3.0	-23.0	640,311	-
Total/Composite	$ 319,780,995	$ 251,853,203	11.4	10.4	-5.6	$ 8,226,921	10.4	-5.6	$ 8,226,921	-
E312 Boiler Plant Equipment										
Black Dog	$ 56,060,968	$ 62,815,132	2.0	1.0	-29.7	$ 9,895,944	1.0	-29.7	$ 9,895,944	$ -
Allen S. King	504,006,208	136,889,404	23.5	22.5	-5.5	17,548,318	22.5	-5.5	17,548,318	-
Minnesota Valley	6,380,531	16,467,877	-	-	N/A	-	-	N/A	-	-
Red Wing	39,941,887	38,124,052	4.0	3.0	-23.3	3,708,098	3.0	-23.3	3,708,098	-
Sherco Unit 1 & 2	393,827,768	241,428,776	9.0	8.0	-5.1	21,560,526	8.0	-5.1	21,560,526	-
Sherco Unit 3	397,716,678	259,944,605	21.0	20.0	-4.3	7,743,695	20.0	-4.3	7,743,695	-
Wilmarth	37,416,781	35,168,450	4.0	3.0	-23.0	3,618,064	3.0	-23.0	3,618,064	-
Total/Composite	$ 1,435,350,821	$ 790,838,297	12.6	11.6	-6.9	$ 64,074,643	11.6	-6.9	$ 64,074,643	$ -
E314 Turbogenerator Units										
Black Dog	$ 39,055,694	$ 43,217,002	2.0	1.0	-29.7	$ 7,438,234	1.0	-29.7	$ 7,438,234	$ -
Allen S. King	92,980,018	30,194,356	23.5	22.5	-5.5	3,017,758	22.5	-5.5	3,017,758	-
Minnesota Valley	2,156,244	5,488,279	-	-	N/A	-	-	N/A	-	-
Red Wing	2,931,531	2,407,844	4.0	3.0	-23.3	402,244	3.0	-23.3	402,244	-
Sherco Unit 1 & 2	98,551,343	70,145,949	9.0	8.0	-5.1	4,178,939	8.0	-5.1	4,178,939	-
Sherco Unit 3	89,533,194	38,919,260	21.0	20.0	-4.3	2,723,193	20.0	-4.3	2,723,193	-
Wilmarth	3,500,717	3,118,358	4.0	3.0	-23.0	395,841	3.0	-23.0	395,841	-
Total/Composite	$ 328,708,741	$ 193,491,048	9.9	8.9	-8.2	$ 18,156,210	8.9	-8.2	$ 18,156,210	$ -

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E315 Accessory Electric Equipment										
Black Dog	$ 14,812,768	$ 16,194,808	2.0	1.0	-29.7	$ 3,017,353	1.0	-29.7	$ 3,017,353	$ -
Allen S. King	43,404,998	10,777,151	23.5	22.5	-5.5	1,556,228	22.5	-5.5	1,556,228	-
Minnesota Valley	597,520	1,523,683	-	-	N/A	-	-	N/A	-	-
Red Wing	1,821,364	1,654,932	4.0	3.0	-23.3	196,936	3.0	-23.3	196,936	-
Sherco Unit 1 & 2	50,332,906	32,143,686	9.0	8.0	-5.1	2,594,525	8.0	-5.1	2,594,525	-
Sherco Unit 3	81,922,467	43,173,154	21.0	20.0	-4.3	2,113,599	20.0	-4.3	2,113,599	-
Wilmarth	1,456,195	1,210,438	4.0	3.0	-23.0	193,561	3.0	-23.0	193,561	-
Total/Composite	$ 194,348,217	$ 106,677,852	11.5	10.5	-7.0	$ 9,672,201	10.5	-7.0	$ 9,672,201	$ -
E316 Miscellaneous Power Plant Equipment										
Black Dog	$ 3,153,700	$ 3,462,829	2.0	1.0	-29.7	$ 627,520	1.0	-29.7	$ 627,520	$ -
Allen S. King	7,876,988	5,458,775	23.5	22.5	-5.5	126,731	22.5	-5.5	126,731	-
Minnesota Valley	304,630	804,687	-	-	N/A	-	-	N/A	-	-
Red Wing	1,007,544	1,025,700	4.0	3.0	-23.3	72,200	3.0	-23.3	72,200	-
Sherco Unit 1 & 2	11,901,988	7,538,538	9.0	8.0	-5.1	621,306	8.0	-5.1	621,306	-
Sherco Unit 3	31,543,737	19,365,452	21.0	20.0	-4.3	676,733	20.0	-4.3	676,733	-
Wilmarth	782,144	842,765	4.0	3.0	-23.0	39,758	3.0	-23.0	39,758	-
Total/Composite	$ 56,570,732	$ 38,498,746	11.1	10.1	-6.6	$ 2,164,248	10.1	-6.6	$ 2,164,248	$ -
Total Steam Production - Depreciation	$ 2,334,759,505	$ 1,381,359,145	11.9	10.9	-6.9	$ 102,294,224	10.9	-6.9	$ 102,294,224	$ -

* Remaining life as of 1/1/15 due to passage of time.

	Beginning Regulatory Balance 1/1/2015	Accumulated Amortization 1/1/2015	Amortization Period (Yrs)	Amortization Expense	Amortization Period (Yrs)	Amortization Expense	Proposed Less Present Expense
	(1)	(2)	(2)	(3)	(4)	(5)	(6)
Regulatory Liability Amortizations							
Black Dog Remediation	$ 33,150,000	$ 4,420,000	13.0	$ 2,210,000	13.0	$ 2,210,000	$ -
Sherco Unit 3 Deferral	14,158,519	674,215	20.0	674,215	20.0	674,215	-
Total Steam Production - Amortization	$ 47,308,519	$ 5,094,215		$ 2,884,215		$ 2,884,215	$ -
Total Steam Production	$ 2,382,068,024	$ 1,386,453,360	11.9	10.9	-6.9	$ 105,178,439	10.9	-6.9	$ 105,178,439	$ -

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E311 Structures & Improvements										
Black Dog	$ 32,535,884	$ 26,461,574	18.0	16.0	-1.7	$ 414,214	16.0	-11.4	$ 611,463	197,249
Allen S. King	38,745,715	22,335,940	23.5	21.5	-5.5	862,362	21.5	-8.2	911,020	48,657
Minnesota Valley	4,047,924	8,094,186	-	-	N/A	-	-	N/A	2,575,796	2,575,796
Red Wing	12,541,195	11,614,200	4.0	2.0	-23.3	1,924,547	12.0	-27.8	367,787	(1,556,760)
Sherco Unit 1 & 2	91,678,021	77,653,845	9.0	7.0	-5.1	2,671,394	7.0	-17.0	4,229,920	1,558,526
Sherco Unit 3	132,175,992	105,291,798	21.0	19.0	-4.3	1,714,093	19.0	-6.0	1,832,355	118,263
Wilmarth	8,056,263	8,628,580	4.0	2.0	-23.0	640,311	12.0	-26.8	132,230	(508,081)
Total/Composite	$ 319,780,995	$ 260,080,124	11.4	9.4	-5.6	$ 8,226,921	9.0	-11.3	$ 10,660,571	2,433,650
E312 Boiler Plant Equipment										
Black Dog	$ 56,060,968	$ 72,711,076	2.0	-	-29.7	$ -	-	-27.3	$ (1,345,463)	$ (1,345,463)
Allen S. King	504,006,208	154,437,722	23.5	21.5	-5.5	17,548,318	21.5	-8.2	18,181,256	632,938
Minnesota Valley	6,380,531	16,467,877	-	-	N/A	-	-	N/A	350,658	350,658
Red Wing	39,941,887	41,832,150	4.0	2.0	-23.3	3,708,098	12.0	-27.8	767,798	(2,940,300)
Sherco Unit 1 & 2	393,827,768	262,989,302	9.0	7.0	-5.1	21,560,526	7.0	-17.0	28,255,598	6,695,072
Sherco Unit 3	397,716,678	267,688,299	21.0	19.0	-4.3	7,743,695	19.0	-6.0	8,099,546	355,852
Wilmarth	37,416,781	38,786,514	4.0	2.0	-23.0	3,618,064	12.0	-26.8	721,497	(2,896,566)
Total/Composite	$ 1,435,350,821	$ 854,912,940	12.6	10.6	-6.9	$ 54,178,700	13.6	-11.7	$ 55,030,891	$ 852,191
E314 Turbogenerator Units										
Black Dog	$ 39,055,694	$ 50,655,235	2.0	-	-29.7	$ -	-	-27.3	$ (937,337)	$ (937,337)
Allen S. King	92,980,018	33,212,114	23.5	21.5	-5.5	3,017,758	21.5	-8.2	3,134,524	116,766
Minnesota Valley	2,156,244	5,488,279	-	-	N/A	-	-	N/A	195,396	195,396
Red Wing	2,931,531	2,810,089	4.0	2.0	-23.3	402,244	12.0	-27.8	78,034	(324,210)
Sherco Unit 1 & 2	98,551,343	74,324,888	9.0	7.0	-5.1	4,178,939	7.0	-17.0	5,854,312	1,675,373
Sherco Unit 3	89,533,194	41,642,454	21.0	19.0	-4.3	2,723,193	19.0	-6.0	2,803,302	80,109
Wilmarth	3,500,717	3,514,199	4.0	2.0	-23.0	395,841	12.0	-26.8	77,059	(318,782)
Total/Composite	$ 328,708,741	$ 211,647,258	9.9	7.9	-8.2	$ 10,717,976	14.2	-12.8	$ 11,205,290	$ 487,314

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E315 Accessory Electric Equipment										
Black Dog	$ 14,812,768	$ 19,212,161	2.0	-	-29.7	$ -	-	-27.3	$ (355,506)	$ (355,506)
Allen S. King	43,404,998	12,333,378	23.5	21.5	-5.5	1,556,228	21.5	-8.2	1,610,736	54,509
Minnesota Valley	597,520	1,523,683	-	-	N/A	-	-	N/A	51,328	51,328
Red Wing	1,821,364	1,851,869	4.0	2.0	-23.3	196,936	12.0	-27.8	39,653	(157,284)
Sherco Unit 1 & 2	50,332,906	34,738,211	9.0	7.0	-5.1	2,594,525	7.0	-17.0	3,450,184	855,659
Sherco Unit 3	81,922,467	45,286,753	21.0	19.0	-4.3	2,113,599	19.0	-6.0	2,186,898	73,299
Wilmarth	1,456,195	1,403,999	4.0	2.0	-23.0	193,561	12.0	-26.8	36,871	(156,689)
Total/Composite	$ 194,348,217	$ 116,350,053	11.5	9.5	-7.0	$ 6,654,848	14.2	-11.3	$ 7,020,165	$ 365,316
E316 Miscellaneous Power Plant Equipment										
Black Dog	$ 3,153,700	$ 4,090,348	2.0	-	-29.7	$ -	-	-27.3	$ (75,689)	$ (75,689)
Allen S. King	7,876,988	5,585,506	23.5	21.5	-5.5	126,731	21.5	-8.2	136,623	9,892
Minnesota Valley	304,630	804,687	-	-	N/A	-	-	N/A	(1,708)	(1,708)
Red Wing	1,007,544	1,097,900	4.0	2.0	-23.3	72,200	12.0	-27.8	15,812	(56,389)
Sherco Unit 1 & 2	11,901,988	8,159,845	9.0	7.0	-5.1	621,306	7.0	-17.0	823,640	202,334
Sherco Unit 3	31,543,737	20,042,186	21.0	19.0	-4.3	676,733	19.0	-6.0	704,957	28,223
Wilmarth	782,144	882,522	4.0	2.0	-23.0	39,758	12.0	-26.8	9,103	(30,655)
Total/Composite	$ 56,570,732	$ 40,662,994	11.1	9.1	-6.6	$ 1,536,729	13.5	-10.5	$ 1,612,738	$ 76,009
Total Steam Production - Depreciation	$ 2,334,759,505	$ 1,483,653,369	13.5	11.5	-6.9	$ 81,315,174	13.2	-11.8	$ 85,529,655	$ 4,214,481

* Remaining life as of 1/1/16 due to passage of time.

	Beginning Regulatory Balance 1/1/2015	Accumulated Amortization 1/1/16 (est.)	Amortization Period (Yrs)	Amortization Expense	Amortization Period (Yrs)	Amortization Expense	Proposed Less Present Expense
	(1)	(2)	(2)	(3)	(4)	(5)	(6)
Regulatory Liability Amortizations							
Black Dog Remediation	$ 33,150,000	$ 6,630,000	12.0	$ 2,210,000	12.0	$ 2,210,000	$ -
Sherco Unit 3 Deferral	14,158,519	1,348,430	19.0	674,215	19.0	674,215	-
Total Steam Production - Amortization	$ 47,308,519	$ 7,978,430		$ 2,884,215		$ 2,884,215	$ -
Total Steam Production	$ 2,382,068,024	$ 1,491,631,799	13.5	11.5	-6.9	$ 84,199,389	13.2	-11.8	$ 88,413,870	$ 4,214,481

	Plant Balance 1/1/2015	Reallocated Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E311 Structures & Improvements										
Black Dog	$ 32,535,884	$ 26,196,142	18.0	16.0	-1.7	$ 430,803	16.0	-11.4	$ 628,052	197,249
Allen S. King	38,745,715	22,019,847	23.5	21.5	-5.5	877,064	21.5	-8.2	925,722	48,657
Minnesota Valley	4,047,924	10,669,982	-	-	N/A	-	-	N/A	-	-
Red Wing	12,541,195	11,511,887	4.0	2.0	-23.3	1,975,704	12.0	-27.8	376,313	(1,599,390)
Sherco Unit 1 & 2	91,678,021	76,905,923	9.0	7.0	-5.1	2,778,240	7.0	-17.0	4,336,766	1,558,526
Sherco Unit 3	132,175,992	104,213,487	21.0	19.0	-4.3	1,770,846	19.0	-6.0	1,889,109	118,263
Wilmarth	8,056,263	8,562,856	4.0	2.0	-23.0	673,174	12.0	-26.8	137,707	(535,466)
Total/Composite	$ 319,780,995	$ 260,080,124	11.4	9.4	-5.6	$ 8,505,830	11.5	-11.3	$ 8,293,669	(212,161)
E312 Boiler Plant Equipment										
Black Dog	$ 56,060,968	$ 71,365,613	2.0	-	-29.7	$ -	-	-27.3	$ -	$ -
Allen S. King	504,006,208	154,802,923	23.5	21.5	-5.5	17,531,331	21.5	-8.2	18,164,270	632,938
Minnesota Valley	6,380,531	16,818,535	-	-	N/A	-	-	N/A	-	-
Red Wing	39,941,887	41,861,092	4.0	2.0	-23.3	3,693,627	12.0	-27.8	765,387	(2,928,241)
Sherco Unit 1 & 2	393,827,768	263,274,668	9.0	7.0	-5.1	21,519,759	7.0	-17.0	28,214,831	6,695,072
Sherco Unit 3	397,716,678	267,976,484	21.0	19.0	-4.3	7,728,527	19.0	-6.0	8,084,379	355,852
Wilmarth	37,416,781	38,813,626	4.0	2.0	-23.0	3,604,507	12.0	-26.8	719,238	(2,885,270)
Total/Composite	$ 1,435,350,821	$ 854,912,940	12.6	10.6	-6.9	$ 54,077,753	13.4	-11.7	$ 55,948,104	$ 1,870,351
E314 Turbogenerator Units										
Black Dog	$ 39,055,694	$ 49,717,899	2.0	-	-29.7	$ -	-	-27.3	$ -	$ -
Allen S. King	92,980,018	33,452,067	23.5	21.5	-5.5	3,006,598	21.5	-8.2	3,123,363	116,766
Minnesota Valley	2,156,244	5,683,675	-	-	N/A	-	-	N/A	-	-
Red Wing	2,931,531	2,817,654	4.0	2.0	-23.3	398,462	12.0	-27.8	77,404	(321,058)
Sherco Unit 1 & 2	98,551,343	74,579,218	9.0	7.0	-5.1	4,142,606	7.0	-17.0	5,817,979	1,675,373
Sherco Unit 3	89,533,194	41,873,511	21.0	19.0	-4.3	2,711,032	19.0	-6.0	2,791,141	80,109
Wilmarth	3,500,717	3,523,234	4.0	2.0	-23.0	391,324	12.0	-26.8	76,306	(315,018)
Total/Composite	$ 328,708,741	$ 211,647,258	9.9	7.9	-8.2	$ 10,650,022	13.4	-12.8	$ 11,886,193	$ 1,236,171

	Plant Balance 1/1/2015	Reallocated Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E315 Accessory Electric Equipment										
Black Dog	$ 14,812,768	$ 18,856,654	2.0	-	-29.7	$ -	-	-27.3	$ -	$ -
Allen S. King	43,404,998	12,407,163	23.5	21.5	-5.5	1,552,796	21.5	-8.2	1,607,304	54,509
Minnesota Valley	597,520	1,575,011	-	-	N/A	-	-	N/A	-	-
Red Wing	1,821,364	1,854,965	4.0	2.0	-23.3	195,388	12.0	-27.8	39,395	(155,993)
Sherco Unit 1 & 2	50,332,906	34,823,772	9.0	7.0	-5.1	2,582,302	7.0	-17.0	3,437,961	855,659
Sherco Unit 3	81,922,467	45,426,013	21.0	19.0	-4.3	2,106,269	19.0	-6.0	2,179,568	73,299
Wilmarth	1,456,195	1,406,474	4.0	2.0	-23.0	192,323	12.0	-26.8	36,665	(155,658)
Total/Composite	$ 194,348,217	$ 116,350,053	11.5	9.5	-7.0	$ 6,629,078	13.7	-11.3	$ 7,300,894	$ 671,816
E316 Miscellaneous Power Plant Equipment										
Black Dog	$ 3,153,700	$ 4,014,660	2.0	-	-29.7	$ -	-	-27.3	$ -	$ -
Allen S. King	7,876,988	5,596,985	23.5	21.5	-5.5	126,197	21.5	-8.2	136,089	9,892
Minnesota Valley	304,630	802,980	-	-	N/A	-	-	N/A	-	-
Red Wing	1,007,544	1,099,369	4.0	2.0	-23.3	71,466	12.0	-27.8	15,689	(55,777)
Sherco Unit 1 & 2	11,901,988	8,177,188	9.0	7.0	-5.1	618,829	7.0	-17.0	821,163	202,334
Sherco Unit 3	31,543,737	20,088,151	21.0	19.0	-4.3	674,314	19.0	-6.0	702,537	28,223
Wilmarth	782,144	883,662	4.0	2.0	-23.0	39,188	12.0	-26.8	9,008	(30,180)
Total/Composite	$ 56,570,732	$ 40,662,994	11.1	9.1	-6.6	$ 1,529,994	13.0	-10.5	$ 1,684,487	$ 154,492
Total Steam Production - Depreciation	$ 2,334,759,505	$ 1,483,653,369	13.5	11.5	-6.9	$ 81,392,677	13.2	-11.8	$ 85,113,346	$ 3,720,670

* Remaining life as of 1/1/16 due to passage of time.

	Beginning Regulatory Balance 1/1/2015	Accumulated Amortization 1/1/16 (est.)	Amortization Period (Yrs)	Amortization Expense	Amortization Period (Yrs)	Amortization Expense	Proposed Less Present Expense
	(1)	(2)	(2)	(3)	(4)	(5)	(6)
Regulatory Liability Amortizations							
Black Dog Remediation	$ 33,150,000	$ 6,630,000	12.0	$ 2,210,000	12.0	$ 2,210,000	$ -
Sherco Unit 3 Deferral	14,158,519	1,348,430	19.0	674,215	19.0	674,215	-
Total Steam Production - Amortization	$ 47,308,519	$ 7,978,430		$ 2,884,215		$ 2,884,215	$ -
Total Steam Production	$ 2,382,068,024	$ 1,491,631,799	13.5	11.5	-6.9	$ 84,276,892	13.2	-11.8	$ 87,997,561	$ 3,720,670

Reallocation	Plant Balance	1/1/2016 Reserve Balance	Amount To Allocate	New Reserve Balance
E311 Structures & Improvements				
Black Dog	32,535,884	26,461,574	(265,432)	26,196,142
Allen S. King	38,745,715	22,335,940	(316,093)	22,019,847
Minnesota Valley	4,047,924	8,094,186	2,575,796	10,669,982
Red Wing	12,541,195	11,614,200	(102,313)	11,511,887
Sherco Unit 1 & 2	91,678,021	77,653,845	(747,923)	76,905,923
Sherco Unit 3	132,175,992	105,291,798	(1,078,311)	104,213,487
Wilmarth	8,056,263	8,628,580	(65,724)	8,562,856
Total	319,780,995	260,080,124	0	260,080,124
E312 Boiler Plant Equipment				
Black Dog	56,060,968	72,711,076	(1,345,463)	71,365,613
Minnesota Valley	6,380,531	16,467,877	350,658	16,818,535
Total to Allocate	62,441,499	89,178,953	(994,805)	88,184,148
Allen S. King	504,006,208	154,437,722	365,201	154,802,923
Red Wing	39,941,887	41,832,150	28,942	41,861,092
Sherco Unit 1 & 2	393,827,768	262,989,302	285,366	263,274,668
Sherco Unit 3	397,716,678	267,688,299	288,184	267,976,484
Wilmarth	37,416,781	38,786,514	27,112	38,813,626
Subtotal	1,372,909,322	765,733,987	994,805	766,728,792
Grand Total	1,435,350,821	854,912,940	-	854,912,940
E314 Turbogenerator Units				
Black Dog	39,055,694	50,655,235	(937,337)	49,717,899
Minnesota Valley	2,156,244	5,488,279	195,396	5,683,675
Total to Allocate	41,211,938	56,143,515	(741,941)	55,401,574
Allen S. King	92,980,018	33,212,114	239,953	33,452,067
Red Wing	2,931,531	2,810,089	7,565	2,817,654
Sherco Unit 1 & 2	98,551,343	74,324,888	254,331	74,579,218
Sherco Unit 3	89,533,194	41,642,454	231,058	41,873,511
Wilmarth	3,500,717	3,514,199	9,034	3,523,234
Subtotal	287,496,803	155,503,744	741,941	156,245,684
Grand Total	328,708,741	211,647,258	-	211,647,258

Reallocation	Plant Balance	1/1/2016 Reserve Balance	Amount To Allocate	New Reserve Balance
E315 Accessory Electric Equipment				
Black Dog	14,812,768	19,212,161	(355,506)	18,856,654
Minnesota Valley	597,520	1,523,683	51,328	1,575,011
Total to Allocate	15,410,288	20,735,843	(304,178)	20,431,665
Allen S. King	43,404,998	12,333,378	73,785	12,407,163
Red Wing	1,821,364	1,851,869	3,096	1,854,965
Sherco Unit 1 & 2	50,332,906	34,738,211	85,561	34,823,772
Sherco Unit 3	81,922,467	45,286,753	139,261	45,426,013
Wilmarth	1,456,195	1,403,999	2,475	1,406,474
Subtotal	178,937,929	95,614,209	304,178	95,918,388
Grand Total	194,348,217	116,350,053	-	116,350,053
E316 Miscellaneous Power Plant Equipment				
Black Dog	3,153,700	4,090,348	(75,689)	4,014,660
Minnesota Valley	304,630	804,687	(1,707)	802,980
Total to Allocate	3,458,330	4,895,035	(77,396)	4,817,639
Allen S. King	7,876,988	5,585,506	11,478	5,596,985
Red Wing	1,007,544	1,097,900	1,468	1,099,369
Sherco Unit 1 & 2	11,901,988	8,159,845	17,344	8,177,188
Sherco Unit 3	31,543,737	20,042,186	45,966	20,088,151
Wilmarth	782,144	882,522	1,140	883,662
Subtotal	53,112,401	35,767,959	77,396	35,845,355
Grand Total	56,570,732	40,662,994	-	40,662,994

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E302 Franchises & Consents										
Monticello	$ 119,009,309	$ 17,791,398	16.8	15.8	0.0	$ 6,406,197	15.8	0.0	$ 6,406,197	$ -
Prairie Island	109,455,602	10,701,924	20.3	19.3	0.0	5,116,771	19.3	0.0	5,116,771	-
Total/Composite	$ 228,464,910	$ 28,493,322	18.4	17.4	0.0	$ 11,522,968	17.4	0.0	$ 11,522,968	$ -
E321 Structures & Improvements										
Monticello	$ 184,488,826	$ 105,500,837	16.8	15.8	0.0	$ 4,999,240	15.8	0.0	$ 4,999,240	$ -
Monticello Interim Storage	23,617,479	6,655,456	16.8	15.8	0.0	1,073,546	15.8	0.0	1,073,546	-
Prairie Island Unit 1 & 2	260,831,974	175,623,637	20.3	19.3	0.0	4,414,940	19.3	0.0	4,414,940	-
PI Interim Storage	11,938,940	11,156,755	20.3	19.3	0.0	40,528	19.3	0.0	40,528	-
Total/Composite	$ 480,877,219	$ 298,936,685	18.3	17.3	0.0	$ 10,528,253	17.3	0.0	$ 10,528,253	$ -
E322 Reactor Plant Equipment										
Monticello	$ 518,102,665	$ 234,114,432	16.8	15.8	0.0	$ 17,973,939	15.8	0.0	$ 17,973,939	$ -
Monticello Interim Storage	15,132,425	4,320,004	16.8	15.8	0.0	684,330	15.8	0.0	684,330	-
Prairie Island Unit 1 & 2	840,535,408	369,953,291	20.3	19.3	0.0	24,382,493	19.3	0.0	24,382,493	-
PI Interim Storage	136,224,110	39,703,544	20.3	19.3	0.0	5,001,066	19.3	0.0	5,001,066	-
Total/Composite	$ 1,509,994,609	$ 648,091,271	18.9	17.9	0.0	$ 48,041,828	17.9	0.0	$ 48,041,828	$ -
E323 Turbogenerator Units										
Monticello	$ 352,746,334	$ 61,462,720	16.8	15.8	0.0	$ 18,435,672	15.8	0.0	$ 18,435,672	$ -
Prairie Island Unit 1 & 2	189,210,935	133,698,061	20.3	19.3	0.0	2,876,315	19.3	0.0	2,876,315	-
Total/Composite	$ 541,957,269	$ 195,160,781	17.3	16.3	0.0	$ 21,311,986	16.3	0.0	$ 21,311,986	$ -

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E324 Accessory Electric Equipment										
Monticello	$ 219,102,009	$ 39,951,537	16.8	15.8	0.0	$ 11,338,637	15.8	0.0	$ 11,338,637	$ -
Prairie Island Unit 1 & 2	223,393,092	162,343,236	20.3	19.3	0.0	3,163,205	19.3	0.0	3,163,205	-
Total/Composite	$ 442,495,101	$ 202,294,773	17.6	16.6	0.0	$ 14,501,842	16.6	0.0	$ 14,501,842	$ -
E325 Miscellaneous Power Plant Equipment										
Monticello	$ 77,464,799	$ 44,156,556	16.8	15.8	0.0	$ 2,108,117	15.8	0.0	$ 2,108,117	$ -
Prairie Island Unit 1 & 2	84,317,626	61,832,644	20.3	19.3	0.0	1,165,025	19.3	0.0	1,165,025	-
Total/Composite	$ 161,782,425	$ 105,989,199	18.0	17.0	0.0	$ 3,273,142	17.0	0.0	$ 3,273,142	$ -
Total Nuclear Production	$ 3,365,571,533	$ 1,478,966,031	18.3	17.3	0.0	$ 109,180,019	17.3	0.0	$ 109,180,019	$ -

*Remaining life as of 1/1/15 due to passage of time.

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E302 Franchises & Consents										
Monticello	$ 119,009,309	$ 24,197,595	16.8	14.8	0.0	$ 6,406,197	14.8	0.0	$ 6,406,197	$ -
Prairie Island	109,455,602	15,818,695	20.3	18.3	0.0	5,116,771	18.3	0.0	5,116,771	-
Total/Composite	$ 228,464,910	$ 40,016,290	18.4	16.4	0.0	$ 11,522,968	16.4	0.0	$ 11,522,968	$ -
E321 Structures & Improvements										
Monticello	$ 184,488,826	$ 110,500,077	16.8	14.8	0.0	$ 4,999,240	14.8	0.0	$ 4,999,240	$ -
Monticello Interim Storage	23,617,479	7,729,002	16.8	14.8	0.0	1,073,546	14.8	0.0	1,073,546	-
Prairie Island Unit 1 & 2	260,831,974	180,038,576	20.3	18.3	0.0	4,414,940	18.3	0.0	4,414,940	-
PI Interim Storage	11,938,940	11,197,282	20.3	18.3	0.0	40,528	18.3	0.0	40,528	-
Total/Composite	$ 480,877,219	$ 309,464,938	18.3	16.3	0.0	$ 10,528,253	16.3	0.0	$ 10,528,253	$ -
E322 Reactor Plant Equipment										
Monticello	$ 518,102,665	$ 252,088,371	16.8	14.8	0.0	$ 17,973,939	14.8	0.0	$ 17,973,939	$ -
Monticello Interim Storage	15,132,425	5,004,335	16.8	14.8	0.0	684,330	14.8	0.0	684,330	-
Prairie Island Unit 1 & 2	840,535,408	394,335,784	20.3	18.3	0.0	24,382,493	18.3	0.0	24,382,493	-
PI Interim Storage	136,224,110	44,704,609	20.3	18.3	0.0	5,001,066	18.3	0.0	5,001,066	-
Total/Composite	$ 1,509,994,609	$ 696,133,099	18.9	16.9	0.0	$ 48,041,828	16.9	0.0	$ 48,041,828	$ -
E323 Turbogenerator Units										
Monticello	$ 352,746,334	$ 79,898,392	16.8	14.8	0.0	$ 18,435,672	14.8	0.0	$ 18,435,672	$ -
Prairie Island Unit 1 & 2	189,210,935	136,574,376	20.3	18.3	0.0	2,876,315	18.3	0.0	2,876,315	-
Total/Composite	$ 541,957,269	$ 216,472,768	17.3	15.3	0.0	$ 21,311,986	15.3	0.0	$ 21,311,986	$ -

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E324 Accessory Electric Equipment										
Monticello	$ 219,102,009	$ 51,290,174	16.8	14.8	0.0	$ 11,338,637	14.8	0.0	$ 11,338,637	$ -
Prairie Island Unit 1 & 2	223,393,092	165,506,441	20.3	18.3	0.0	3,163,205	18.3	0.0	3,163,205	-
Total/Composite	$ 442,495,101	$ 216,796,615	17.6	15.6	0.0	$ 14,501,842	15.6	0.0	$ 14,501,842	$ -
E325 Miscellaneous Power Plant Equipment										
Monticello	$ 77,464,799	$ 46,264,672	16.8	14.8	0.0	$ 2,108,117	14.8	0.0	$ 2,108,117	$ -
Prairie Island Unit 1 & 2	84,317,626	62,997,669	20.3	18.3	0.0	1,165,025	18.3	0.0	1,165,025	-
Total/Composite	$ 161,782,425	$ 109,262,341	18.0	16.0	0.0	$ 3,273,142	16.0	0.0	$ 3,273,142	$ -
Total Nuclear Production	$ 3,365,571,533	$ 1,588,146,051	18.3	16.3	0.0	$ 109,180,019	16.3	0.0	$ 109,180,019	$ -

*Remaining life as of 1/1/16 due to passage of time.

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E302 Franchises & Consents										
Hennepin Island	$ 2,857,039	$ 809,511	20.2	19.2	0.0	$ 106,642	19.2	0.0	$ 106,642	$ -
Total/Composite	$ 2,857,039	$ 809,511	20.2	19.2	0.0	$ 106,642	19.2	0.0	$ 106,642	$ -
E331 Structures & Improvements										
Hennepin Island	$ 1,349,723	$ 424,976	20.2	19.2	-30.0	$ 69,253	19.2	-30.0	$ 69,253	$ -
Total/Composite	$ 1,349,723	$ 424,976	20.2	19.2	-30.0	$ 69,253	19.2	-30.0	$ 69,253	$ -
E332 Reservoirs, Dams & Waterways										
Hennepin Island	$ 4,045,484	$ 916,203	20.2	19.2	-30.0	$ 226,194	19.2	-30.0	$ 226,194	$ -
Upper Dam	4,491,476	3,405,944	20.2	19.2	-30.0	126,717	19.2	-30.0	126,717	-
Total/Composite	$ 8,536,960	$ 4,322,147	20.2	19.2	-30.0	$ 352,912	19.2	-30.0	$ 352,912	$ -
E333 Water Wheels, Turbines & Generators										
Hennepin Island	$ 10,038,996	$ 1,522,168	20.2	19.2	-30.0	$ 600,444	19.2	-30.0	$ 600,444	$ -
Total/Composite	$ 10,038,996	$ 1,522,168	20.2	19.2	-30.0	$ 600,444	19.2	-30.0	$ 600,444	$ -
E334 Accessory Electric Equipment										
Hennepin Island	$ 3,256,972	$ 587,902	20.2	19.2	-30.0	$ 189,904	19.2	-30.0	$ 189,904	$ -
Total/Composite	$ 3,256,972	$ 587,902	20.2	19.2	-30.0	$ 189,904	19.2	-30.0	$ 189,904	$ -
E335 Miscellaneous Power Plant Equipment										
Hennepin Island	$ 37,779	$ 40,072	20.2	19.2	-30.0	$ 471	19.2	-30.0	$ 471	$ -
Upper Dam	23,046	24,659	20.2	19.2	-30.0	276	19.2	-30.0	276	-
Total/Composite	$ 60,824	$ 64,731	20.2	19.2	-30.0	$ 747	19.2	-30.0	$ 747	$ -
Total Hydro Production	$ 26,100,514	$ 7,731,434	20.2	19.2	-30.0 *	$ 1,319,902	19.2	-30.0 *	$ 1,319,902	$ -

*Remaining life as of 1/1/15 due to passage of time.

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E302 Franchises & Consents										
Hennepin Island	$ 2,857,039	$ 916,153	20.2	18.2	0.0	$ 106,642	18.2	0.0	$ 106,642	$ -
Total/Composite	$ 2,857,039	$ 916,153	20.2	18.2	0.0	$ 106,642	18.2	0.0	$ 106,642	$ -
E331 Structures & Improvements										
Hennepin Island	$ 1,349,723	$ 494,229	20.2	18.2	-30.0	$ 69,253	18.2	-26.4	$ 66,584	$ (2,670)
Total/Composite	$ 1,349,723	$ 494,229	20.2	18.2	-30.0	$ 69,253	18.2	-26.4	$ 66,584	$ (2,670)
E332 Reservoirs, Dams & Waterways										
Hennepin Island	$ 4,045,484	$ 1,142,397	20.2	18.2	-30.0	$ 226,194	18.2	-26.4	$ 218,192	$ (8,002)
Upper Dam	4,491,476	3,532,661	20.2	18.2	-30.0	126,717	18.2	-26.4	117,833	(8,884)
Total/Composite	$ 8,536,960	$ 4,675,058	20.2	18.2	-30.0	$ 352,912	18.2	-26.4	$ 336,025	$ (16,886)
E333 Water Wheels, Turbines & Generators										
Hennepin Island	$ 10,038,996	$ 2,122,612	20.2	18.2	-30.0	$ 600,444	18.2	-26.4	$ 580,587	$ (19,857)
Total/Composite	$ 10,038,996	$ 2,122,612	20.2	18.2	-30.0	$ 600,444	18.2	-26.4	$ 580,587	$ (19,857)
E334 Accessory Electric Equipment										
Hennepin Island	$ 3,256,972	$ 777,806	20.2	18.2	-30.0	$ 189,904	18.2	-26.4	$ 183,462	$ (6,442)
Total/Composite	$ 3,256,972	$ 777,806	20.2	18.2	-30.0	$ 189,904	18.2	-26.4	$ 183,462	$ (6,442)
E335 Miscellaneous Power Plant Equipment										
Hennepin Island	$ 37,779	$ 40,543	20.2	18.2	-30.0	$ 471	18.2	-26.4	$ 396	$ (75)
Upper Dam	23,046	24,935	20.2	18.2	-30.0	276	18.2	-26.4	230	(46)
Total/Composite	$ 60,824	$ 65,478	20.2	18.2	-30.0	$ 747	18.2	-26.4	$ 627	$ (120)
Total Hydro Production	$ 26,100,514	$ 9,051,336	20.2	18.2	-30.0	$ 1,319,902	18.2	-26.4	$ 1,273,926	$ (45,976)

*Remaining life as of 1/1/16 due to passage of time.

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E340.1 Wind Rights										
Grand Meadow Wind Project	$ 8,686,818	$ 2,113,167	19.9	18.9	0.0	$ 347,812	18.9	0.0	$ 347,812	-
Nobles Wind Project	3,884,834	613,589	21.9	20.9	0.0	156,519	20.9	0.0	156,519	-
Total/Composite	$ 12,571,653	$ 2,726,756	20.5	19.5	0.0	$ 504,331	19.5	0.0	$ 504,331	-
E341 Structures & Improvements										
Angus C. Anson Unit 4	$ 7,521,063	$ 4,852,250	21.4	20.4	-4.5	$ 147,415	20.4	-4.5	$ 147,415	$ -
Black Dog Unit 5	15,361,662	6,599,962	18.0	17.0	-1.7	530,756	17.0	-1.7	530,756	-
Blue Lake Units 7 & 8	1,587,263	1,250,943	21.4	20.4	-5.2	20,532	20.4	-5.2	20,532	-
Grand Meadow Wind Project	4,750,902	1,267,143	19.9	18.9	-8.7	206,195	18.9	-8.7	206,195	-
Granite City	1,241,718	1,723,505	5.4	4.4	-38.8	-	4.4	-38.8	-	-
High Bridge	70,873,656	8,823,373	34.4	33.4	-3.1	1,923,574	33.4	-3.1	1,923,574	-
Inver Hills	1,412,246	1,329,809	13.0	12.0	-11.0	19,815	12.0	-11.0	19,815	-
Key City	1,002,265	1,389,139	-	-	-38.6	-	-	-38.6	-	-
Nobles Wind Project	13,536,911	2,726,626	21.9	20.9	-8.7	573,588	20.9	-8.7	573,588	-
Riverside	52,358,980	22,261,525	35.2	34.2	-5.0	956,591	34.2	-5.0	956,591	-
Total/Composite	$ 169,646,668	$ 52,224,274	29.7	28.7	-4.8	$ 4,378,466	28.7	-4.8	$ 4,378,466	$ -
E342 Fuel Holders, Producers & Accessories										
Angus C. Anson Unit 2 & 3	$ 1,104,673	$ 908,710	5.8	4.8	-4.4	$ 50,952	4.8	-4.4	$ 50,952	$ -
Black Dog Unit 5	3,542,706	1,268,294	18.0	17.0	-1.7	137,332	17.0	-1.7	137,332	-
Blue Lake Units 1 thru 4	1,311,529	1,467,601	-	-	-11.9	-	-	-11.9	-	-
Blue Lake Units 7 & 8	45,374	97	21.4	20.4	-5.2	2,335	20.4	-5.2	2,335	-
Granite City	416,373	577,926	5.4	4.4	-38.8	-	4.4	-38.8	-	-
High Bridge	65,161,180	8,614,325	34.4	33.4	-3.1	1,753,499	33.4	-3.1	1,753,499	-
Inver Hills	2,903,525	2,486,766	13.0	12.0	-11.0	61,346	12.0	-11.0	61,346	-
Key City	242,384	335,944	-	-	-38.6	-	-	-38.6	-	-
Riverside	887,545	26,505	35.2	34.2	-5.0	26,474	34.2	-5.0	26,474	-
Total/Composite	$ 75,615,290	$ 15,686,167	31.9	30.9	-3.8	$ 2,031,937	30.9	-3.8	$ 2,031,937	$ -

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E344 Generators										
Angus C. Anson Unit 2 & 3	68,468,442	54,260,626	5.8	4.8	-4.4	3,587,589	4.8	-4.4	3,587,589	-
Angus C. Anson Unit 4	32,741,391	10,256,959	21.4	20.4	-4.5	1,174,402	20.4	-4.5	1,174,402	-
Black Dog Unit 5	103,811,625	22,979,976	18.0	17.0	-1.7	4,858,615	17.0	-1.7	4,858,615	-
Blue Lake Units 1 thru 4	21,198,509	23,716,242	-	-	-11.9	-	-	-11.9	-	-
Blue Lake Units 7 & 8	60,450,578	19,710,302	21.4	20.4	-5.2	2,151,162	20.4	-5.2	2,151,162	-
Grand Meadow Wind Project	182,650,050	45,034,679	19.9	18.9	-8.7	8,122,007	18.9	-8.7	8,122,007	-
Granite City	6,468,402	8,680,764	5.4	4.4	-38.8	67,586	4.4	-38.8	67,586	-
High Bridge	189,312,241	26,636,470	34.4	33.4	-3.1	5,046,241	33.4	-3.1	5,046,241	-
Inver Hills	50,365,644	43,885,846	13.0	12.0	-11.0	1,001,668	12.0	-11.0	1,001,668	-
Key City	5,374,748	7,449,401	-	-	-38.6	-	-	-38.6	-	-
Nobles Wind Project	469,273,168	80,694,612	21.9	20.9	-8.7	20,545,709	20.9	-8.7	20,545,709	-
Riverside	200,845,106	26,406,153	35.2	34.2	-5.0	5,394,187	34.2	-5.0	5,394,187	-
United Hospital	2,031,625	1,814,577	3.7	2.7	0.0	80,388	2.7	0.0	80,388	-
Total/Composite	$ 1,392,991,529	$ 371,526,607	22.5	21.5	-6.8	$ 52,029,554	21.5	-6.8	$ 52,029,554	$ -
E345 Accessory Electric Equipment										
Angus C. Anson Unit 2 & 3	$ 3,335,587	$ 2,598,978	5.8	4.8	-4.4	$ 184,036	4.8	-4.4	$ 184,036	$ -
Angus C. Anson Unit 4	4,621,874	1,458,730	21.4	20.4	-4.5	165,251	20.4	-4.5	165,251	-
Black Dog Unit 5	9,889,980	3,713,869	18.0	17.0	-1.7	373,191	17.0	-1.7	373,191	-
Blue Lake Units 1 thru 4	1,369,569	1,532,548	-	-	-11.9	-	-	-11.9	-	-
Blue Lake Unit 7 & 8	7,849,102	2,617,812	21.4	20.4	-5.2	276,443	20.4	-5.2	276,443	-
Grand Meadow Wind Project	12,027,032	3,234,040	19.9	18.9	-8.7	520,600	18.9	-8.7	520,600	-
Granite City	629,592	812,807	5.4	4.4	-38.8	13,879	4.4	-38.8	13,879	-
High Bridge	51,033,267	8,101,208	34.4	33.4	-3.1	1,332,757	33.4	-3.1	1,332,757	-
Inver Hills	3,414,158	2,196,541	13.0	12.0	-11.0	132,765	12.0	-11.0	132,765	-
Key City	1,702,722	2,359,972	-	-	-38.6	-	-	-38.6	-	-
Nobles Wind Project	29,931,151	5,215,947	21.9	20.9	-8.7	1,307,139	20.9	-8.7	1,307,139	-
Riverside	40,246,066	6,483,258	35.2	34.2	-5.0	1,046,056	34.2	-5.0	1,046,056	-
Total/Composite	$ 166,050,099	$ 40,325,711	26.3	25.3	-5.8	$ 5,352,118	25.3	-5.8	$ 5,352,118	$ -

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E346 Miscellaneous Power Plant Equipment										
Angus C. Anson Unit 2 & 3	$ 2,667,289	$ 1,628,184	5.8	4.8	-4.4	$ 240,930	4.8	-4.4	$ 240,930	$ -
Black Dog Unit 5	1,356,629	580,044	18.0	17.0	-1.7	47,038	17.0	-1.7	47,038	-
Blue Lake Units 1 thru 4	424,921	475,487	-	-	-11.9	-	-	-11.9	-	-
Blue Lake Units 7 & 8	32,958	6,656	21.4	20.4	-5.2	1,373	20.4	-5.2	1,373	-
Grand Meadow Wind Project	207,761	55,894	19.9	18.9	-8.7	8,992	18.9	-8.7	8,992	-
Granite City	13,279	18,432	5.4	4.4	-38.8	-	4.4	-38.8	-	-
High Bridge	7,233,190	1,401,625	34.4	33.4	-3.1	181,311	33.4	-3.1	181,311	-
Inver Hills	619,054	613,366	13.0	12.0	-11.0	6,149	12.0	-11.0	6,149	-
Key City	277,794	385,022	-	-	-38.6	-	-	-38.6	-	-
Nobles Wind Project	627,971	71,689	21.9	20.9	-8.7	29,230	20.9	-8.7	29,230	-
Riverside	9,049,921	4,745,999	35.2	34.2	-5.0	139,077	34.2	-5.0	139,077	-
Total/Composite	$ 22,510,768	$ 9,982,399	21.9	20.9	-5.0	$ 654,100	20.9	-5.0	$ 654,100	$ -
E348.1 Energy Storage Equipment										
Wind-to-Battery System	$ 4,128,902	1,482,225	10.0	9.0	0.0	$ 294,075	9.0	0.0	$ 294,075	-
Total/Composite	$ 4,128,902	$ 1,482,225	10.0	9.0	0.0	$ 294,075	9.0	0.0	$ 294,075	$ -
Total Other Production	$ 1,843,514,908	$ 493,954,139	23.5	22.5	-6.3	$ 65,244,581	22.5	-6.3	$ 65,244,581	$ -

* Remaining life as of 1/1/15 due to passage of time.

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E340.1 Wind Rights										
Grand Meadow Wind Project	$ 8,686,818	$ 2,460,979	19.9	17.9	0.0	$ 347,812	17.9	0.0	$ 347,812	-
Nobles Wind Project	3,884,834	770,108	21.9	19.9	0.0	156,519	19.9	0.0	156,519	-
Total/Composite	$ 12,571,653	$ 3,231,087	20.5	18.5	0.0	$ 504,331	18.5	0.0	$ 504,331	-
E341 Structures & Improvements										
Angus C. Anson Unit 4	$ 7,521,063	$ 4,999,665	21.4	19.4	-4.5	$ 147,415	19.4	-6.5	$ 155,168	$ 7,754
Black Dog Unit 5	15,361,662	7,130,717	18.0	16.0	-1.7	530,756	16.0	-11.4	623,886	93,130
Blue Lake Units 7 & 8	1,587,263	1,271,475	21.4	19.4	-5.2	20,532	19.4	-11.7	25,850	5,318
Grand Meadow Wind Project	4,750,902	1,473,338	19.9	17.9	-8.7	206,195	17.9	-11.1	212,565	6,370
Granite City	1,241,718	1,723,505	5.4	3.4	-38.8	-	3.4	-50.4	42,365	42,365
High Bridge	70,873,656	10,746,946	34.4	32.4	-3.1	1,923,574	32.4	-3.5	1,932,324	8,750
Inver Hills	1,412,246	1,349,624	13.0	11.0	-11.0	19,815	11.0	-18.3	29,188	9,372
Key City	1,002,265	1,389,139	-	-	-38.6	-	-	-47.6	90,514	90,514
Nobles Wind Project	13,536,911	3,300,214	21.9	19.9	-8.7	573,588	19.9	-6.0	555,222	(18,367)
Riverside	52,358,980	23,218,116	35.2	33.2	-5.0	956,591	33.2	-11.3	1,055,947	99,356
Total/Composite	$ 169,646,668	$ 56,602,740	29.7	27.7	-4.8	$ 4,378,466	26.8	-8.0	$ 4,723,028	$ 344,562
E342 Fuel Holders, Producers & Accessories										
Angus C. Anson Unit 2 & 3	$ 1,104,673	$ 959,662	5.8	3.8	-4.4	$ 50,952	3.8	-9.6	$ 66,068	$ 15,117
Black Dog Unit 5	3,542,706	1,405,626	18.0	16.0	-1.7	137,332	16.0	-11.4	158,809	21,478
Blue Lake Units 1 thru 4	1,311,529	1,467,601	-	-	-11.9	-	8.0	-22.9	18,034	18,034
Blue Lake Units 7 & 8	45,374	2,432	21.4	19.4	-5.2	2,335	19.4	-11.7	2,487	152
Granite City	416,373	577,926	5.4	3.4	-38.8	-	3.4	-50.4	14,206	14,206
High Bridge	65,161,180	10,367,823	34.4	32.4	-3.1	1,753,499	32.4	-3.5	1,761,543	8,045
Inver Hills	2,903,525	2,548,111	13.0	11.0	-11.0	61,346	11.0	-18.3	80,614	19,269
Key City	242,384	335,944	-	-	-38.6	-	-	-47.6	21,890	21,890
Riverside	887,545	52,979	35.2	33.2	-5.0	26,474	33.2	-11.3	28,158	1,684
Total/Composite	$ 75,615,290	$ 17,718,104	31.9	29.9	-3.8	$ 2,031,937	28.8	-5.4	$ 2,151,810	$ 119,873

Other Production - 2016 Before Reserve Reallocation

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E344 Generators										
Angus C. Anson Unit 2 & 3	68,468,442	$ 57,848,215	5.8	3.8	-4.4	3,587,589	3.8	-9.6	4,524,526	936,937
Angus C. Anson Unit 4	32,741,391	11,431,361	21.4	19.4	-4.5	1,174,402	19.4	-6.5	1,208,156	33,754
Black Dog Unit 5	103,811,625	27,838,590	18.0	16.0	-1.7	4,858,615	16.0	-11.4	5,487,973	629,358
Blue Lake Units 1 thru 4	21,198,509	23,716,242	-	-	-11.9	-	8.0	-22.9	292,091	292,091
Blue Lake Units 7 & 8	60,450,578	21,861,464	21.4	19.4	-5.2	2,151,162	19.4	-11.7	2,353,703	202,541
Grand Meadow Wind Project	182,650,050	53,156,686	19.9	17.9	-8.7	8,122,007	17.9	-11.1	8,366,901	244,894
Granite City	6,468,402	8,748,350	5.4	3.4	-38.8	67,586	3.4	-50.4	288,272	220,687
High Bridge	189,312,241	31,682,711	34.4	32.4	-3.1	5,046,241	32.4	-3.5	5,069,613	23,372
Inver Hills	50,365,644	44,887,514	13.0	11.0	-11.0	1,001,668	11.0	-18.3	1,335,913	334,245
Key City	5,374,748	7,449,401	-	-	-38.6	-	-	-47.6	485,392	485,392
Nobles Wind Project	469,273,168	101,240,321	21.9	19.9	-8.7	20,545,709	19.9	-6.0	19,909,007	(636,702)
Riverside	200,845,106	31,800,340	35.2	33.2	-5.0	5,394,187	33.2	-11.3	5,775,309	381,122
United Hospital	2,031,625	1,894,965	3.7	1.7	0.0	80,388	1.7	0.0	80,388	-
Total/Composite	$ 1,392,991,529	$ 423,556,161	22.5	20.5	-6.8	$ 52,029,554	19.8	-9.0	$ 55,177,242	$ 3,147,688
E345 Accessory Electric Equipment										
Angus C. Anson Unit 2 & 3	$ 3,335,587	$ 2,783,015	5.8	3.8	-4.4	$ 184,036	3.8	-9.6	$ 229,681	$ 45,645
Angus C. Anson Unit 4	4,621,874	1,623,982	21.4	19.4	-4.5	165,251	19.4	-6.5	170,016	4,765
Black Dog Unit 5	9,889,980	4,087,059	18.0	16.0	-1.7	373,191	16.0	-11.4	433,149	59,958
Blue Lake Units 1 thru 4	1,369,569	1,532,548	-	-	-11.9	-	8.0	-22.9	18,832	18,832
Blue Lake Unit 7 & 8	7,849,102	2,894,255	21.4	19.4	-5.2	276,443	19.4	-11.7	302,742	26,299
Grand Meadow Wind Project	12,027,032	3,754,640	19.9	17.9	-8.7	520,600	17.9	-11.1	536,726	16,126
Granite City	629,592	826,686	5.4	3.4	-38.8	13,879	3.4	-50.4	35,359	21,480
High Bridge	51,033,267	9,433,965	34.4	32.4	-3.1	1,332,757	32.4	-3.5	1,339,058	6,300
Inver Hills	3,414,158	2,329,306	13.0	11.0	-11.0	132,765	11.0	-18.3	155,422	22,658
Key City	1,702,722	2,359,972	-	-	-38.6	-	-	-47.6	153,772	153,772
Nobles Wind Project	29,931,151	6,523,086	21.9	19.9	-8.7	1,307,139	19.9	-6.0	1,266,529	(40,610)
Riverside	40,246,066	7,529,314	35.2	33.2	-5.0	1,046,056	33.2	-11.3	1,122,426	76,371
Total/Composite	$ 166,050,099	$ 45,677,829	26.3	24.3	-5.8	$ 5,352,118	23.3	-8.6	$ 5,763,712	$ 411,594

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E346 Miscellaneous Power Plant Equipment										
Angus C. Anson Unit 2 & 3	$ 2,667,289	$ 1,869,115	5.8	3.8	-4.4	$ 240,930	3.8	-9.6	$ 277,430	$ 36,500
Black Dog Unit 5	1,356,629	627,083	18.0	16.0	-1.7	47,038	16.0	-11.4	55,263	8,225
Blue Lake Units 1 thru 4	424,921	475,487	-	-	-11.9	-	8.0	-22.9	5,843	5,843
Blue Lake Units 7 & 8	32,958	8,030	21.4	19.4	-5.2	1,373	19.4	-11.7	1,484	110
Grand Meadow Wind Project	207,761	64,885	19.9	17.9	-8.7	8,992	17.9	-11.1	9,270	279
Granite City	13,279	18,432	5.4	3.4	-38.8	-	3.4	-50.4	-	-
High Bridge	7,233,190	1,582,936	34.4	32.4	-3.1	181,311	32.4	-3.5	182,204	893
Inver Hills	619,054	619,515	13.0	11.0	-11.0	6,149	11.0	-18.3	10,257	4,108
Key City	277,794	385,022	-	-	-38.6	-	-	-47.6	25,087	25,087
Nobles Wind Project	627,971	100,919	21.9	19.9	-8.7	29,230	19.9	-6.0	28,378	(852)
Riverside	9,049,921	4,885,075	35.2	33.2	-5.0	139,077	33.2	-11.3	156,250	17,173
Total/Composite	$ 22,510,768	$ 10,636,499	21.9	19.9	-5.0	$ 654,100	18.6	-9.3	$ 751,466	$ 97,366
E348.1 Energy Storage Equipment										
Wind-to-Battery System	$ 4,128,902	$ 1,776,300	10.0	8.0	0.0	$ 294,075	8.0	0.0	$ 294,075	-
Total/Composite	$ 4,128,902	$ 1,776,300	10.0	8.0	0.0	$ 294,075	8.0	0.0	$ 294,075	$ -
Total Other Production	$ 1,843,514,908	$ 559,198,720	23.5	21.5	-6.3	$ 65,244,581	20.8	-8.6	$ 69,365,664	$ 4,121,083

* Remaining life as of 1/1/16 due to passage of time.

Other Production - 2016 After Reserve Reallocation

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E340.1 Wind Rights										
Grand Meadow Wind Project	$ 8,686,818	$ 2,460,979	19.9	18.9	0.0	$ 329,409	18.9	0.0	$ 329,409	-
Nobles Wind Project	3,884,834	770,108	21.9	20.9	0.0	149,030	20.9	0.0	149,030	-
Total/Composite	$ 12,571,653	$ 3,231,087	20.5	19.5	0.0	$ 478,439	19.5	0.0	$ 478,439	-
E341 Structures & Improvements										
Angus C. Anson Unit 4	$ 7,521,063	$ 4,995,628	21.4	19.4	-4.5	$ 147,623	19.4	-6.5	$ 155,376	$ 7,754
Black Dog Unit 5	15,361,662	7,122,473	18.0	16.0	-1.7	531,271	16.0	-11.4	624,401	93,130
Blue Lake Units 7 & 8	1,587,263	1,270,623	21.4	19.4	-5.2	20,576	19.4	-11.7	25,894	5,318
Grand Meadow Wind Project	4,750,902	1,470,788	19.9	17.9	-8.7	206,338	17.9	-11.1	212,707	6,370
Granite City	1,241,718	1,722,838	5.4	3.4	-38.8	-	3.4	-50.4	42,561	42,561
High Bridge	70,873,656	10,708,907	34.4	32.4	-3.1	1,924,748	32.4	-3.5	1,933,498	8,750
Inver Hills	1,412,246	1,348,866	13.0	11.0	-11.0	19,884	11.0	-18.3	29,256	9,372
Key City	1,002,265	1,479,653	-	-	-38.6	-	-	-47.6	-	-
Nobles Wind Project	13,536,911	3,292,949	21.9	19.9	-8.7	573,953	19.9	-6.0	555,587	(18,367)
Riverside	52,358,980	23,190,014	35.2	33.2	-5.0	957,437	33.2	-11.3	1,056,793	99,356
Total/Composite	$ 169,646,668	$ 56,602,740	28.6	26.6	-4.8	$ 4,381,831	27.3	-8.0	$ 4,636,074	$ 254,244
E342 Fuel Holders, Producers & Accessories										
Angus C. Anson Unit 2 & 3	$ 1,104,673	$ 959,341	5.8	3.8	-4.4	$ 51,036	3.8	-9.6	$ 66,153	$ 15,117
Black Dog Unit 5	3,542,706	1,404,597	18.0	16.0	-1.7	137,396	16.0	-11.4	158,874	21,478
Blue Lake Units 1 thru 4	1,311,529	1,467,220	-	-	-11.9	-	8.0	-22.9	18,081	18,081
Blue Lake Units 7 & 8	45,374	2,419	21.4	19.4	-5.2	2,336	19.4	-11.7	2,488	152
Granite City	416,373	577,805	5.4	3.4	-38.8	-	3.4	-50.4	14,241	14,241
High Bridge	65,161,180	10,348,899	34.4	32.4	-3.1	1,754,083	32.4	-3.5	1,762,127	8,045
Inver Hills	2,903,525	2,547,268	13.0	11.0	-11.0	61,422	11.0	-18.3	80,691	19,269
Key City	242,384	357,834	-	-	-38.6	-	-	-47.6	-	-
Riverside	887,545	52,721	35.2	33.2	-5.0	26,482	33.2	-11.3	28,166	1,684
Total/Composite	$ 75,615,290	$ 17,718,104	30.9	28.9	-3.8	$ 2,032,755	29.1	-5.4	$ 2,130,821	$ 98,066

			Present				Proposed			Proposed
	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Approved Rem Life (Yrs)	Rem. Life (Yrs) *	Net Salv %	Depreciation Expense	Rem. Life (Yrs)	Net Salv %	Depreciation Expense	Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E344 Generators										
Angus C. Anson Unit 2 & 3	$ 68,468,442	$ 57,824,264	5.8	3.8	-4.4	3,593,892	3.8	-9.6	4,530,828	936,937
Angus C. Anson Unit 4	32,741,391	11,419,908	21.4	19.4	-4.5	1,174,992	19.4	-6.5	1,208,746	33,754
Black Dog Unit 5	103,811,625	27,802,277	18.0	16.0	-1.7	4,860,884	16.0	-11.4	5,490,242	629,358
Blue Lake Units 1 thru 4	21,198,509	23,708,827	-	-	-11.9	-	8.0	-22.9	293,018	293,018
Blue Lake Units 7 & 8	60,450,578	21,840,318	21.4	19.4	-5.2	2,152,252	19.4	-11.7	2,354,793	202,541
Grand Meadow Wind Project	182,650,050	53,092,794	19.9	17.9	-8.7	8,125,576	17.9	-11.1	8,370,470	244,894
Granite City	6,468,402	8,746,087	5.4	3.4	-38.8	68,251	3.4	-50.4	288,938	220,687
High Bridge	189,312,241	31,616,489	34.4	32.4	-3.1	5,048,285	32.4	-3.5	5,071,657	23,372
Inver Hills	50,365,644	44,869,896	13.0	11.0	-11.0	1,003,270	11.0	-18.3	1,337,515	334,245
Key City	5,374,748	7,934,793	-	-	-38.6	-	-	-47.6	-	-
Nobles Wind Project	469,273,168	101,076,168	21.9	19.9	-8.7	20,553,958	19.9	-6.0	19,917,256	(636,702)
Riverside	200,845,106	31,730,084	35.2	33.2	-5.0	5,396,304	33.2	-11.3	5,777,425	381,122
United Hospital	2,031,625	1,894,254	3.7	1.7	0.0	80,806	1.7	0.0	80,806	-
Total/Composite	$ 1,392,991,529	$ 423,556,161	21.4	19.4	-6.8	$ 52,058,470	20.0	-9.0	$ 54,721,693	$ 2,663,223
E345 Accessory Electric Equipment										
Angus C. Anson Unit 2 & 3	$ 3,335,587	$ 2,779,894	5.8	3.8	-4.4	$ 184,858	3.8	-9.6	$ 230,503	$ 45,645
Angus C. Anson Unit 4	4,621,874	1,619,657	21.4	19.4	-4.5	165,474	19.4	-6.5	170,239	4,765
Black Dog Unit 5	9,889,980	4,077,806	18.0	16.0	-1.7	373,769	16.0	-11.4	433,727	59,958
Blue Lake Units 1 thru 4	1,369,569	1,531,267	-	-	-11.9	-	8.0	-22.9	18,992	18,992
Blue Lake Units 7 & 8	7,849,102	2,886,911	21.4	19.4	-5.2	276,822	19.4	-11.7	303,120	26,299
Grand Meadow Wind Project	12,027,032	3,743,387	19.9	17.9	-8.7	521,229	17.9	-11.1	537,354	16,126
Granite City	629,592	826,097	5.4	3.4	-38.8	14,052	3.4	-50.4	35,532	21,480
High Bridge	51,033,267	9,386,216	34.4	32.4	-3.1	1,334,231	32.4	-3.5	1,340,531	6,300
Inver Hills	3,414,158	2,326,111	13.0	11.0	-11.0	133,055	11.0	-18.3	155,713	22,658
Key City	1,702,722	2,513,745	-	-	-38.6	-	-	-47.6	-	-
Nobles Wind Project	29,931,151	6,495,081	21.9	19.9	-8.7	1,308,547	19.9	-6.0	1,267,937	(40,610)
Riverside	40,246,066	7,491,657	35.2	33.2	-5.0	1,047,190	33.2	-11.3	1,123,561	76,371
Total/Composite	$ 166,050,099	$ 45,677,829	25.3	23.3	-5.8	$ 5,359,226	24.0	-8.6	$ 5,617,209	$ 257,982

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
E346 Miscellaneous Power Plant Equipment										
Angus C. Anson Unit 2 & 3	$ 2,667,289	$ 1,866,105	5.8	3.8	-4.4	$ 241,722	3.8	-9.6	$ 278,222	$ 36,500
Black Dog Unit 5	1,356,629	625,552	18.0	16.0	-1.7	47,134	16.0	-11.4	55,358	8,225
Blue Lake Units 1 thru 4	424,921	475,008	-	-	-11.9	-	8.0	-22.9	5,903	5,903
Blue Lake Units 7 & 8	32,958	7,992	21.4	19.4	-5.2	1,375	19.4	-11.7	1,486	110
Grand Meadow Wind Project	207,761	64,651	19.9	17.9	-8.7	9,005	17.9	-11.1	9,283	279
Granite City	13,279	18,417	5.4	3.4	-38.8	-	3.4	-50.4	-	-
High Bridge	7,233,190	1,574,775	34.4	32.4	-3.1	181,563	32.4	-3.5	182,456	893
Inver Hills	619,054	618,816	13.0	11.0	-11.0	6,212	11.0	-18.3	10,320	4,108
Key City	277,794	410,110	-	-	-38.6	-	-	-47.6	-	-
Nobles Wind Project	627,971	100,211	21.9	19.9	-8.7	29,266	19.9	-6.0	28,414	(852)
Riverside	9,049,921	4,874,864	35.2	33.2	-5.0	139,384	33.2	-11.3	156,557	17,173
Total/Composite	$ 22,510,768	$ 10,636,499	20.8	18.8	-5.0	$ 655,662	19.2	-9.3	$ 728,000	$ 72,338
E348.1 Energy Storage Equipment										
Wind-to-Battery System	$ 4,128,902	1,776,300	10.0	9.0	0.0	$ 261,400	9.0	0.0	$ 261,400	-
Total/Composite	$ 4,128,902	$ 1,776,300	10.0	8.0	0.0	$ 261,400	9.0	0.0	$ 261,400	$ -
Total Other Production	$ 1,843,514,908	$ 559,198,720	22.5	20.5	-6.3	$ 65,227,783	21.0	-8.6	$ 68,573,636	$ 3,345,854

* Remaining life as of 1/1/16 due to passage of time.

Reallocation	Plant Balance	Current Reserve Balance	Amount To Allocate	New Reserve Balance
E341 Structures & Improvements				
Angus C. Anson	7,521,063	4,999,665	(4,037)	4,995,628
Black Dog Unit 5	15,361,662	7,130,717	(8,245)	7,122,473
Blue Lake	1,587,263	1,271,475	(852)	1,270,623
Grand Meadow Wind Project	4,750,902	1,473,338	(2,550)	1,470,788
Granite City	1,241,718	1,723,505	(666)	1,722,838
High Bridge	70,873,656	10,746,946	(38,039)	10,708,907
Inver Hills	1,412,246	1,349,624	(758)	1,348,866
Key City	1,002,265	1,389,139	90,514	1,479,653
Nobles Wind Project	13,536,911	3,300,214	(7,265)	3,292,949
Riverside	52,358,980	23,218,116	(28,102)	23,190,014
Total	169,646,668	56,602,740	-	56,602,740
E342 Fuel Holders, Producers & Accessories				
Angus C. Anson Unit 2 & 3	1,104,673	959,662	(321)	959,341
Black Dog Unit 5	3,542,706	1,405,626	(1,029)	1,404,597
Blue Lake Units 1 thru 4	1,311,529	1,467,601	(381)	1,467,220
Blue Lake Units 7 & 8	45,374	2,432	(13)	2,419
Granite City	416,373	577,926	(121)	577,805
High Bridge	65,161,180	10,367,823	(18,924)	10,348,899
Inver Hills	2,903,525	2,548,111	(843)	2,547,268
Key City	242,384	335,944	21,890	357,834
Riverside	887,545	52,979	(258)	52,721
Total	75,615,290	17,718,104	(0)	17,718,104
E344 Generators				
Angus C. Anson Unit 2 & 3	68,468,442	57,848,215	(23,950)	57,824,264
Angus C. Anson Unit 4	32,741,391	11,431,361	(11,453)	11,419,908
Black Dog Unit 5	103,811,625	27,838,590	(36,314)	27,802,277
Blue Lake Units 1 thru 4	21,198,509	23,716,242	(7,415)	23,708,827
Blue Lake Unit 7 & 8	60,450,578	21,861,464	(21,146)	21,840,318
Grand Meadow Wind Project	182,650,050	53,156,686	(63,891)	53,092,794
Granite City	6,468,402	8,748,350	(2,263)	8,746,087
High Bridge	189,312,241	31,682,711	(66,222)	31,616,489
Inver Hills	50,365,644	44,887,514	(17,618)	44,869,896
Key City	5,374,748	7,449,401	485,392	7,934,793
Nobles Wind Project	469,273,168	101,240,321	(164,153)	101,076,168
Riverside	200,845,106	31,800,340	(70,256)	31,730,084
United Hospital	2,031,625	1,894,965	(711)	1,894,254
Total	1,392,991,529	423,556,161	0	423,556,161

Reallocation	Plant Balance	Current Reserve Balance	Amount To Allocate	New Reserve Balance
E345 Accessory Electric Equipment				
Angus C. Anson Unit 2 & 3	3,335,587	2,783,015	(3,121)	2,779,894
Angus C. Anson Unit 4	4,621,874	1,623,982	(4,324)	1,619,657
Black Dog Unit 5	9,889,980	4,087,059	(9,254)	4,077,806
Blue Lake Units 1 thru 4	1,369,569	1,532,548	(1,281)	1,531,267
Blue Lake Unit 7 & 8	7,849,102	2,894,255	(7,344)	2,886,911
Grand Meadow Wind Project	12,027,032	3,754,640	(11,253)	3,743,387
Granite City	629,592	826,686	(589)	826,097
High Bridge	51,033,267	9,433,965	(47,749)	9,386,216
Inver Hills	3,414,158	2,329,306	(3,194)	2,326,111
Key City	1,702,722	2,359,972	153,772	2,513,745
Nobles Wind Project	29,931,151	6,523,086	(28,005)	6,495,081
Riverside	40,246,066	7,529,314	(37,656)	7,491,657
Total	166,050,099	45,677,829	-	45,677,829
E346 Miscellaneous Power Plant Equipment				
Angus C. Anson Unit 2 & 3	2,667,289	1,869,115	(3,010)	1,866,105
Black Dog Unit 5	1,356,629	627,083	(1,531)	625,552
Blue Lake Units 1 thru 4	424,921	475,487	(479)	475,008
Blue Lake Unit 7 & 8	32,958	8,030	(37)	7,992
Grand Meadow Wind Project	207,761	64,885	(234)	64,651
Granite City	13,279	18,432	(15)	18,417
High Bridge	7,233,190	1,582,936	(8,162)	1,574,775
Inver Hills	619,054	619,515	(699)	618,816
Key City	277,794	385,022	25,087	410,110
Nobles Wind Project	627,971	100,919	(709)	100,211
Riverside	9,049,921	4,885,075	(10,212)	4,874,864
Total	22,510,768	10,636,499	-	10,636,499

		Proposed		
	2015 Additions	Rem. Life (Yrs)	Net Salv %	Depreciation Expense
	(1)	(7)	(8)	(9)
E340.1-346.1 New Wind Facilities				
Border Winds Project	$ 264,886,066	25.0	-8.5	$ 1,437,063
Pleasant Valley Wind Project	341,505,777	25.0	-8.5	3,090,097
Total/Composite	$ 606,391,843	25.0	-8.5	$ 4,527,160

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
G305 Structures & Improvements										
Maplewood	$ 952,430	$ 949,119	6.0	5.0	-17.0	$ 33,045	5.0	-17.0	$ 33,045	-
Sibley	776,690	744,877	6.0	5.0	-1.0	7,916	5.0	-1.0	7,916	-
Wescott	1,048,359	768,575	6.0	5.0	-3.0	62,247	5.0	-3.0	62,247	-
Total/Composite	$ 2,777,480	$ 2,462,571	6.0	5.0	-7.2	$ 103,208	5.0	-7.2	$ 103,208	-
G311 LP Gas Equipment										
Maplewood	$ 3,715,761	$ 3,003,240	6.0	5.0	8.0	$ 83,052	5.0	8.0	$ 83,052	-
Sibley	3,926,187	3,187,058	6.0	5.0	8.0	85,007	5.0	8.0	85,007	-
Wescott	4,662,451	4,057,959	6.0	5.0	1.0	111,573	5.0	1.0	111,573	-
Total/Composite	$ 12,304,399	$ 10,248,257	6.0	5.0	5.3	$ 279,632	5.0	5.3	$ 279,632	-
G320 Other Equipment										
Maplewood	$ 203,004	$ 197,401	6.0	5.0	0.0	$ 1,121	5.0	0.0	$ 1,121	-
Sibley	496,538	351,826	6.0	5.0	-1.0	29,936	5.0	-1.0	29,936	-
Wescott	228,070	211,821	6.0	5.0	3.0	1,881	5.0	3.0	1,881	-
Total/Composite	$ 927,613	$ 761,048	6.0	5.0	0.2	$ 32,938	5.0	0.2	$ 32,938	-
Total Gas Production	$ 16,009,492	$ 13,471,876	6.0	5.0	2.9	$ 415,778	5.0	2.9	$ 415,778	-

*Remaining life as of 1/1/15 due to passage of time.

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
G305 Structures & Improvements										
Maplewood	$ 952,430	$ 982,164	6.0	4.0	-17.0	$ 33,045	14.0	-93.7	$ 61,621	28,576
Sibley	776,690	752,793	6.0	4.0	-1.0	7,916	14.0	-79.5	45,812	37,896
Wescott	1,048,359	830,822	6.0	4.0	-3.0	62,247	14.0	-19.2	29,916	(32,331)
Total/Composite	$ 2,777,480	$ 2,565,779	6.0	4.0	-7.2	$ 103,208	14.0	-61.6	$ 137,349	34,141
G311 LP Gas Equipment										
Maplewood	$ 3,715,761	$ 3,086,292	6.0	4.0	8.0	$ 83,052	14.0	-93.7	$ 293,653	210,601
Sibley	3,926,187	3,272,065	6.0	4.0	8.0	85,007	14.0	-79.5	269,674	184,668
Wescott	4,662,451	4,169,533	6.0	4.0	1.0	111,573	14.0	-19.2	99,151	(12,423)
Total/Composite	$ 12,304,399	$ 10,527,890	6.0	4.0	5.3	$ 279,632	14.0	-60.9	$ 662,478	382,845
G320 Other Equipment										
Maplewood	$ 203,004	$ 198,522	6.0	4.0	0.0	$ 1,121	14.0	-93.7	$ 13,907	12,786
Sibley	496,538	381,762	6.0	4.0	-1.0	29,936	14.0	-79.5	36,395	6,459
Wescott	228,070	213,702	6.0	4.0	3.0	1,881	14.0	-19.2	4,154	2,273
Total/Composite	$ 927,613	$ 793,986	6.0	4.0	0.2	$ 32,938	14.0	-67.8	$ 54,456	21,518
Total Gas Production	$ 16,009,492	$ 13,887,654	6.0	4.0	2.9	$ 415,778	14.0	-61.5	$ 854,282	438,504

*Remaining life as of 1/1/16 due to passage of time.

	Plant Balance 1/1/2015	Reserve Balance 1/1/2015	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
G361 Structures & Improvements										
Wescott	$ 4,798,574	$ 5,002,924	10.0	9.0	-10.0	$ 30,612	9.0	-10.0	$ 30,612	-
G362 Gas Holders										
Wescott	8,169,167	7,489,291	10.0	9.0	5.0	30,158	9.0	5.0	30,158	-
G363 Purification Equipment										
Wescott	1,020,951	973,917	10.0	9.0	1.0	4,092	9.0	1.0	4,092	-
G363.1 Liquefaction Equipment										
Wescott	2,852,841	1,559,875	10.0	9.0	2.0	137,323	9.0	2.0	137,323	-
G363.2 Vaporizing Equipment										
Wescott	9,256,561	5,286,001	14.0	13.0	2.0	291,187	13.0	2.0	291,187	-
G363.3 Compressor Equipment										
Wescott	23,486,534	6,468,654	19.0	18.0	2.0	919,342	18.0	2.0	919,342	-
G363.4 Measuring & Regulating Equipment										
Wescott	44,503	41,024	10.0	9.0	6.0	90	9.0	6.0	90	-
G363.5 Other Equipment										
Wescott	3,797,877	2,965,264	10.0	9.0	0.0	92,513	9.0	0.0	92,513	-
Total Gas Storage	$ 53,427,008	$ 29,786,949	16.3	15.3	1.2	$ 1,505,315	15.3	1.2	$ 1,505,315	-

* Remaining life as of 1/1/15 due to passage of time.

	Plant Balance 1/1/2015	Reserve Balance 1/1/16 (est.)	Present Approved Rem Life (Yrs)	Present Rem. Life (Yrs) *	Present Net Salv %	Present Depreciation Expense	Proposed Rem. Life (Yrs)	Proposed Net Salv %	Proposed Depreciation Expense	Proposed Less Present Expense
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
G361 Structures & Improvements										
Wescott	$ 4,798,574	$ 5,033,536	10.0	8.0	-10.0	$ 30,612	8.0	-19.2	$ 85,796	55,184
G362 Gas Holders										
Wescott	8,169,167	7,519,449	10.0	8.0	5.0	30,158	8.0	-19.2	277,275	247,117
G363 Purification Equipment										
Wescott	1,020,951	978,008	10.0	8.0	1.0	4,092	8.0	-19.2	29,871	25,779
G363.1 Liquefaction Equipment										
Wescott	2,852,841	1,697,198	10.0	8.0	2.0	137,323	8.0	-19.2	212,924	75,600
G363.2 Vaporizing Equipment										
Wescott	9,256,561	5,577,188	14.0	12.0	2.0	291,187	12.0	-19.2	454,719	163,533
G363.3 Compressor Equipment										
Wescott	23,486,534	7,387,996	19.0	17.0	2.0	919,342	17.0	-19.2	1,212,232	292,891
G363.4 Measuring & Regulating Equipment										
Wescott	44,503	41,114	10.0	8.0	6.0	90	8.0	-19.2	1,492	1,402
G363.5 Other Equipment										
Wescott	3,797,877	3,057,776	10.0	8.0	0.0	92,513	8.0	-19.2	183,662	91,149
Total Gas Storage	$ 53,427,008	$ 31,292,265	16.3	14.3	1.2	$ 1,505,315	13.2	-19.2	$ 2,457,970	952,655

* Remaining life as of 1/1/16 due to passage of time.

Electric Utility

FERC Account	Account Description	Beginning Balance	Additions	Retirements	Transfers	Adjustments	Ending Balance
Steam							
310	Land & Land Rights - Fee	$ 9,446,779	$ -	$ (6,313)	$ -	$ -	$ 9,440,466
310	Land & Land Rights - Other	$ 9,856	$ -	$ -	$ -	$ -	$ 9,856
311	Structures & Improvements	$ 314,884,452	$ 5,978,658	$ (1,082,116)	$ -	$ -	$ 319,780,995
312	Boiler Plant Equipment	$ 1,386,373,983	$ 64,177,593	$ (15,200,755)	$ -	$ -	$ 1,435,350,821
314	Turbogenerator Units	$ 336,690,683	$ 318,713	$ (8,300,655)	$ -	$ -	$ 328,708,741
315	Accessory Electric Equipment	$ 187,676,261	$ 10,385,229	$ (3,713,273)	$ -	$ -	$ 194,348,217
316	Miscellaneous Power Plant Equipment	$ 53,737,832	$ 2,891,356	$ (58,456)	$ -	$ -	$ 56,570,732
		$ 2,288,819,845	$ 83,751,550	$ (28,361,568)	$ -	$ -	$ 2,344,209,827
Nuclear							
302	Franchises & Consents	$ 181,284,664	$ 47,180,246	$ -	$ -	$ -	$ 228,464,910
320	Land & Land Rights - Fee	$ 1,153,084	$ -	$ -	$ -	$ -	$ 1,153,084
320	Land and Land Rights - Other	$ 1,729	$ -	$ -	$ -	$ -	$ 1,729
321	Structures & Improvements	$ 444,583,005	$ 37,330,151	$ (1,035,936)	$ -	$ -	$ 480,877,219
322	Reactor Plant Equipment	$ 1,454,660,797	$ 37,111,024	$ (9,869,450)	$ 28,092,238	$ -	$ 1,509,994,609
323	Turbogenerator Units	$ 569,943,615	$ 1,107,676	$ (1,001,785)	$ (28,092,238)	$ -	$ 541,957,269
324	Accessory Electric Equipment	$ 428,583,505	$ 18,753,347	$ (4,841,752)	$ -	$ -	$ 442,495,101
325	Miscellaneous Power Plant Equipment	$ 143,856,066	$ 17,970,866	$ (44,508)	$ -	$ -	$ 161,782,425
		$ 3,224,066,467	$ 159,453,310	$ (16,793,430)	$ -	$ -	$ 3,366,726,347
Hydro							
302	Franchises & Consents	$ 2,857,039	$ -	$ -	$ -	$ -	$ 2,857,039
330	Land & Land Rights - Fee	$ 292,863	$ -	$ -	$ -	$ -	$ 292,863
330	Land & Land Rights - Other	$ 1,400,213	$ -	$ -	$ -	$ -	$ 1,400,213
331	Structures & Improvements	$ 1,299,673	$ 181,638	$ (93,663)	$ -	$ -	$ 1,387,647
332	Reservoirs, Dams & Waterways	$ 8,805,169	$ 6,775	$ (29,380)	$ -	$ -	$ 8,782,564
333	Water Wheels, Turbines & Generators	$ 10,101,704	$ 148,333	$ (211,041)	$ -	$ -	$ 10,038,996
334	Accessory Electric Equipment	$ 3,392,321	$ (99,985)	$ (35,364)	$ -	$ -	$ 3,256,972
335	Miscellaneous Power Plant Equipment	$ 60,824	$ -	$ -	$ -	$ -	$ 60,824
		$ 28,209,806	$ 236,760	$ (369,447)	$ -	$ -	$ 28,077,119
Other							
340	Land & Land Rights - Fee	$ 4,958,572	$ -	$ -	$ (297,837)		$ 4,660,735
340	Land & Land Rights - Other	$ 10,368,887	$ -	$ -	$ -	$ -	$ 10,368,887
340	Wind Rights	$ 12,571,653	$ -	$ -	$ -	$ -	$ 12,571,653
341	Structures & Improvements	$ 168,307,298	$ 1,692,733	$ (255,760)	$ -	$ -	$ 169,744,272
342	Fuel Holders, Producers & Accessories	$ 78,866,957	$ 913,637	$ (36,402)	$ (4,128,902)	$ -	$ 75,615,290
344	Generators	$ 1,390,882,628	$ 5,919,199	$ (3,026,054)	$ -	$ -	$ 1,393,775,773
345	Accessory Electric Equipment	$ 164,779,361	$ 2,212,146	$ (941,408)	$ -	$ -	$ 166,050,099
346	Miscellaneous Power Plant Equipment	$ 22,334,826	$ 225,845	$ (49,902)	$ -	$ -	$ 22,510,768
348.1	Energy Storage Equipment	$ -	$ -	$ -	$ 4,128,902	$ -	$ 4,128,902
		$ 1,853,070,182	$ 10,963,560	$ (4,309,526)	$ (297,837)	$ -	$ 1,859,426,379
Utility Total		$ 7,394,166,301	$ 254,405,179	$ (49,833,972)	$ (297,837)	$ -	$ 7,598,439,671

Gas Utility

FERC Account	Account Description	Beginning Balance	Additions	Retirements	Transfers	Adjustments	Ending Balance
Production							
304	Land & Land Rights - Fee	$ 777,579	$ -	$ -	$ -	$ -	$ 777,579
304	Land & Land Rights - Other	$ 34,537	$ -	$ -	$ -	$ -	$ 34,537
305	Structures & Improvements	$ 2,708,265	$ 267,116	$ -	$ -	$ -	$ 2,975,381
311	LP Gas Equipment	$ 13,371,487	$ 1,009,060	$ (450)	$ -	$ -	$ 14,380,097
320	Other Equipment	$ 936,282	$ -	$ -	$ -	$ -	$ 936,282
		$ 17,828,151	$ 1,276,176	$ (450)	$ -	$ -	$ 19,103,877
Storage							
360	Land & Land Rights - Fee	$ -	$ -	$ -	$ -	$ -	$ -
360	Land & Land Rights - Other	$ 11,264	$ -	$ -	$ -	$ -	$ 11,264
361	Structures & Improvements	$ 4,798,574	$ -	$ -	$ -	$ -	$ 4,798,574
362	Gas Holders	$ 8,169,167	$ -	$ -	$ -	$ -	$ 8,169,167
363	Purification Equipment	$ 1,020,951	$ -	$ -	$ -	$ -	$ 1,020,951
363.1	Liquefaction Equipment	$ 2,819,648	$ 105,993	$ (61,168)	$ (11,632)	$ -	$ 2,852,841
363.2	Vaporizing Equipment	$ 9,222,211	$ 38,590	$ (4,239)	$ -	$ -	$ 9,256,561
363.3	Compressor Equipment	$ 23,704,187	$ (229,285)	$ -	$ 11,632	$ -	$ 23,486,534
363.4	Measuring & Regulating Equipment	$ 44,503	$ -	$ -	$ -	$ -	$ 44,503
363.5	Other Equipment	$ 3,449,998	$ 347,879	$ -	$ -	$ -	$ 3,797,877
		$ 53,240,504	$ 263,176	$ (65,408)	$ 0	$ -	$ 53,438,272
Utility Total		$ 71,068,655	$ 1,539,352	$ (65,858)	$ 0	$ -	$ 72,542,149

Electric Utility

FERC Account	Account Description	Beginning Balance	Credits: Accruals	Credits: Gross Salvage	Debits: Retirements	Debits: Cost of Removal	Transfers Adjustments and Other Credits (Debits)	Ending Balance
Steam								
311	Structures & Improvements	$ 248,660,893	$ 7,276,669	$ -	$ 1,082,116	$ 2,879,249	$ (122,990)	$ 251,853,207
312	Boiler Plant Equipment	$ 749,831,333	$ 52,715,845	$ 199,830	$ 15,200,755	$ 4,804,401	$ (141,777)	$ 782,600,075
314	Turbogenerator Units	$ 189,411,425	$ 13,449,305	$ 1,768	$ 8,300,655	$ 1,007,216	$ (63,388)	$ 193,491,239
315	Accessory Electric Equipment	$ 103,412,671	$ 7,216,758	$ 95	$ 3,713,273	$ 219,232	$ (19,593)	$ 106,677,427
316	Miscellaneous Power Plant Equipment	$ 36,911,456	$ 1,435,315	$ 91,010	$ 58,456	$ 21,634	$ 1,127	$ 38,358,818
		$ 1,328,227,779	$ 82,093,892	$ 292,703	$ 28,355,255	$ 8,931,733	$ (346,621)	$ 1,372,980,765
Nuclear								
302	Franchises & Consents	$ 18,761,579	$ 9,731,743	$ -	$ -	$ -	$ -	$ 28,493,322
321	Structures & Improvements	$ 291,302,993	$ 8,853,765	$ -	$ 1,035,936	$ 184,137	$ -	$ 298,936,685
322	Reactor Plant Equipment	$ 614,356,470	$ 45,373,805	$ -	$ 9,869,450	$ 5,549,915	$ 3,780,361	$ 648,091,271
322	Reactor Plant Equipment	$ 5,775,194	$ -	$ -	$ -	$ -	$ -	$ 5,775,194
323	Turbogenerator Units	$ 177,721,506	$ 22,457,619	$ -	$ 1,001,785	$ 249,503	$ (3,767,056)	$ 195,160,781
324	Accessory Electric Equipment	$ 195,481,583	$ 13,758,604	$ 14,718	$ 4,841,752	$ 2,128,401	$ 10,021	$ 202,294,773
325	Miscellaneous Power Plant Equipment	$ 103,845,946	$ 2,206,906	$ -	$ 44,508	$ 19,145	$ -	$ 105,989,199
		$ 1,407,245,270	$ 102,382,443	$ 14,718	$ 16,793,430	$ 8,131,102	$ 23,325	$ 1,484,741,225
Hydro								
302	Franchises & Consents	$ 702,683	$ 106,828	$ -	$ -	$ -	$ -	$ 809,511
331	Structures & Improvements	$ 559,187	$ 66,713	$ -	$ 93,663	$ 57,055	$ -	$ 475,182
332	Reservoirs, Dams & Waterways	$ 4,566,112	$ 341,396	$ 5,374	$ 29,380	$ 61,365	$ -	$ 4,822,138
333	Water Wheels, Turbines & Generators	$ 1,270,674	$ 596,857	$ -	$ 211,041	$ 134,322	$ -	$ 1,522,168
334	Accessory Electric Equipment	$ 447,305	$ 190,416	$ 117	$ 35,364	$ 14,573	$ -	$ 587,902
335	Miscellaneous Power Plant Equipment	$ 63,983	$ 748	$ -	$ -	$ -	$ -	$ 64,731
		$ 7,609,945	$ 1,302,958	$ 5,491	$ 369,447	$ 267,315	$ -	$ 8,281,632
Other								
340	Wind Rights	$ 2,223,171	$ 503,586	$ -	$ -	$ -	$ -	$ 2,726,756
341	Structures & Improvements	$ 48,243,563	$ 4,397,456	$ -	$ 255,760	$ 24,925	$ 585	$ 52,360,920
342	Fuel Holders, Producers & Accessories	$ 14,918,930	$ 2,263,225	$ -	$ 36,402	$ 25,937	$ (1,433,649)	$ 15,686,167
344	Generators	$ 322,275,901	$ 52,121,009	$ 437,194	$ 3,026,054	$ (499,417)	$ 7,637	$ 372,315,104
345	Accessory Electric Equipment	$ 35,999,304	$ 5,342,151	$ 1,665	$ 941,408	$ 76,568	$ 566	$ 40,325,711
346	Miscellaneous Power Plant Equipment	$ 9,403,126	$ 630,701	$ -	$ 49,902	$ 1,526	$ -	$ 9,982,399
348.1	Energy Storage Equipment	$ -	$ 48,576	$ -	$ -	$ -	$ 1,433,649	$ 1,482,225
		$ 433,063,996	$ 65,306,703	$ 438,859	$ 4,309,527	$ (370,461)	$ 8,788	$ 494,879,281
Utility Total		$ 3,176,146,990	$ 251,085,996	$ 751,770	$ 49,827,659	$ 16,959,688	$ (314,507)	$ 3,360,882,903

Gas Utility

FERC Account	Account Description	Beginning Balance	Credits: Accruals	Credits: Gross Salvage	Debits: Retirements	Debits: Cost of Removal	Transfers Adjustments and Other Credits (Debits)	Ending Balance
Production								
305	Structures & Improvements	$ 2,634,962	$ 55,196	$ -	$ -	$ -	$ -	$ 2,690,158
311	LP Gas Equipment	$ 11,080,923	$ 314,880	$ -	$ 450	$ 4,992	$ -	$ 11,390,361
320	Other Equipment	$ 738,774	$ 32,938	$ -	$ -	$ -	$ -	$ 771,711
		$ 14,454,659	$ 403,013	$ -	$ 450	$ 4,992	$ -	$ 14,852,230
Storage								
361	Structures & Improvements	$ 4,907,094	$ 91,878	$ -	$ -	$ -	$ 3,951	$ 5,002,924
362	Gas Holders	$ 7,398,818	$ 90,473	$ -	$ -	$ -	$ -	$ 7,489,291
363	Purification Equipment	$ 975,271	$ 8,816	$ -	$ -	$ -	$ 214	$ 984,301
363.1	Liquefaction Equipment	$ 2,366,567	$ 39,668	$ -	$ 61,168	$ 173,621	$ (611,571)	$ 1,559,875
363.2	Vaporizing Equipment	$ 5,005,019	$ 288,630	$ -	$ 4,239	$ 3,877	$ 468	$ 5,286,001
363.3	Compressor Equipment	$ 4,107,735	$ 1,063,404	$ -	$ -	$ (3)	$ 1,297,513	$ 6,468,654
363.4	Measuring & Regulating Equipment	$ 40,627	$ 271	$ -	$ -	$ -	$ 126	$ 41,024
363.5	Other Equipment	$ 2,583,550	$ 275,483	$ -	$ -	$ -	$ 106,231	$ 2,965,264
		$ 27,384,682	$ 1,858,623	$ -	$ 65,408	$ 177,495	$ 796,932	$ 29,797,334
Utility Total		$ 41,839,341	$ 2,261,636	$ -	$ 65,858	$ 182,486	$ 796,932	$ 44,649,565

* Retirement Reconciliation:

Major retirements in E311 to Red Wing ($443 thousand), King ($263 thousand), Sherco 1 & 2 ($174 thousand) and Sherco 3 ($132 thousand).

Major retirements in E312 relate to King ($5.95 million), Red Wing ($510 thousand), Sherco 1 & 2 ($6.23 million), Sherco 3 ($1.2 million), and Wilmarth ($1.13 million).

Major retirements in E314 relate to Black Dog (208 thousand), King ($2.62 million), Sherco 1 & 2 ($1.58 million), Sherco 3 ($3.74 million), and Wilmarth ($114 thousand).

Major retirements in E315 relate to King ($455 thousand), Sherco 1 & 2 ($1.15 million), and Sherco 3 ($1.99 million).

Major retirements in E321relate to Monticello ($864 thousand) and Prairie Island ($171 thousand).

Major retirements in E322 relate to Monticello ($8.42 million) and Prairie Island ($1.44 million).

Major retirements in E323 relate primarily to Prairie Island (984 thousand).

Major retirements in E324 relate to Monticello ($4.35 million) and Prairie Island ($495 thousand).

Electric Utility

FERC Account	Account Description	Beginning Plant Balance	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Beginning Depreciation Reserve	Net Balance	Depr Life (Yrs)	Annual Accrual	Reserve Ratio
Steam									
311	Structures & Improvements	$ 314,884,452	-5.5%	$ (17,241,183)	$ 248,660,893	$ 83,464,743	11.4	$ 7,306,968	74.87%
312	Boiler Plant Equipment	$ 1,386,373,983	-7.0%	$ (96,407,060)	$ 749,831,333	$ 732,949,711	12.6	$ 58,126,175	50.57%
314	Turbogenerator Units	$ 336,690,683	-8.1%	$ (27,249,050)	$ 189,411,425	$ 174,528,308	9.9	$ 17,560,235	52.04%
315	Accessory Electric Equipment	$ 187,676,261	-7.1%	$ (13,241,499)	$ 103,412,671	$ 97,505,088	11.5	$ 8,497,966	51.47%
316	Miscellaneous Power Plant Equipment	$ 53,737,832	-6.7%	$ (3,600,650)	$ 36,911,456	$ 20,427,025	11.1	$ 1,843,265	64.37%
								$ 93,334,610	
Nuclear									
302	Franchises & Consents	$ 181,284,664	0.0%	$ -	$ 18,761,579	$ 162,523,085	18.4	$ 8,854,830	10.35%
321	Structures & Improvements	$ 444,583,005	0.0%	$ -	$ 291,302,993	$ 153,280,012	18.3	$ 8,384,584	65.52%
322	Reactor Plant Equipment	$ 1,454,660,797	0.0%	$ -	$ 614,356,470	$ 840,304,328	18.9	$ 44,365,043	42.23%
323	Turbogenerator Units	$ 569,943,615	0.0%	$ -	$ 177,721,506	$ 392,222,109	17.3	$ 22,708,068	31.18%
324	Accessory Electric Equipment	$ 428,583,505	0.0%	$ -	$ 195,481,583	$ 233,101,922	17.6	$ 13,272,001	45.61%
325	Miscellaneous Power Plant Equipment	$ 143,856,066	0.0%	$ -	$ 103,845,946	$ 40,010,120	18.0	$ 2,217,147	72.19%
								$ 99,801,672	
Hydro									
302	Franchises & Consents	$ 2,857,039	0.0%	$ -	$ 702,683	$ 2,154,355	20.2	$ 106,651	24.59%
331	Structures & Improvements	$ 1,299,673	-30.0%	$ (389,902)	$ 559,187	$ 1,130,387	20.2	$ 55,960	33.10%
332	Reservoirs, Dams & Waterways	$ 8,805,169	-30.0%	$ (2,641,551)	$ 4,566,112	$ 6,880,608	20.2	$ 340,624	39.89%
333	Water Wheels, Turbines & Generators	$ 10,101,704	-30.0%	$ (3,030,511)	$ 1,270,674	$ 11,861,541	20.2	$ 587,205	9.68%
334	Accessory Electric Equipment	$ 3,392,321	-30.0%	$ (1,017,696)	$ 447,305	$ 3,962,712	20.2	$ 196,174	10.14%
335	Miscellaneous Power Plant Equipment	$ 60,824	-30.0%	$ (18,247)	$ 63,983	$ 15,089	20.2	$ 747	80.92%
								$ 1,287,361	
Other									
340	Wind Rights	$ 12,571,653	0.0%	$ -	$ 2,223,171	$ 10,348,482	20.5	$ 504,295	N/A
341	Structures & Improvements	$ 168,307,298	-4.8%	$ (8,060,910)	$ 48,243,563	$ 128,124,645	29.7	$ 4,318,191	27.35%
342	Fuel Holders, Producers & Accessories	$ 78,866,957	-3.7%	$ (2,879,985)	$ 14,918,930	$ 66,828,012	31.9	$ 2,093,435	18.25%
344	Generators	$ 1,390,882,628	-6.8%	$ (94,524,383)	$ 322,275,901	$ 1,163,131,110	22.5	$ 51,805,383	21.70%
345	Accessory Electric Equipment	$ 164,779,361	-5.8%	$ (9,571,704)	$ 35,999,304	$ 138,351,761	26.3	$ 5,263,080	20.65%
346	Miscellaneous Power Plant Equipment	$ 22,334,826	-5.0%	$ (1,117,791)	$ 9,403,126	$ 14,049,490	21.9	$ 642,413	40.09%
								$ 64,626,797	
Utility Total								$ 259,050,440	

Gas Utility

FERC Account	Account Description	Beginning Plant Balance	Est. Future Net Salvage %	Est. Future Net Salvage Amount	Beginning Depreciation Reserve	Net Balance	Depr Life (Yrs)	Annual Accrual	Reserve Ratio
Production									
305	Structures & Improvements	$ 2,777,480	-7.7%	$ (213,666)	$ 2,634,962	$ 356,184	6.0	$ 59,364	88.09%
311	LP Gas Equipment	$ 12,304,399	5.4%	$ 661,809	$ 11,080,923	$ 561,667	6.0	$ 93,611	95.18%
320	Other Equipment	$ 927,613	0.2%	$ 1,877	$ 738,774	$ 186,962	6.0	$ 31,160	79.80%
								$ 184,136	
Storage									
361	Structures & Improvements	$ 4,798,574	-10.0%	$ (479,857)	$ 4,907,094	$ 371,337	10.0	$ 37,134	92.97%
362	Gas Holders	$ 8,169,167	5.0%	$ 408,458	$ 7,398,818	$ 361,891	10.0	$ 36,189	95.34%
363	Purification Equipment	$ 1,020,951	1.0%	$ 10,210	$ 975,271	$ 35,471	10.0	$ 3,547	96.49%
363	Liquefaction Equipment	$ 2,819,648	2.0%	$ 56,393	$ 2,366,567	$ 396,689	10.0	$ 39,669	85.64%
363	Vaporizing Equipment	$ 9,222,211	2.0%	$ 184,444	$ 5,005,019	$ 4,032,748	14.0	$ 288,053	55.38%
363	Compressor Equipment	$ 23,704,187	2.0%	$ 474,084	$ 4,107,735	$ 19,122,368	19.0	$ 1,006,440	17.68%
363	Measuring & Regulating Equipment	$ 44,503	6.0%	$ 2,670	$ 40,627	$ 1,205	10.0	$ 121	97.12%
363	Other Equipment	$ 3,449,998	0.0%	$ -	$ 2,583,550	$ 866,447	10.0	$ 86,645	74.89%
								$ 1,497,798	
Utility Total								$ 1,681,933	

Electric Production Plant Facility	Proposed Depreciation Life on Current Investment 1/1/2016	Resource Planning/Modeling End of Life Docket No. E002/RP-15-21 Preferred Plan	Rationale for Difference Between Depreciation Life and Resource Planning Period
Allen S. King	21.5	22	Proposed remaining life is in line with original remaining life of 30 years used when rebuilt plant went into service. Remaining life is similar to potential retirement date shown in the resource plan.
Sherco 1 & 2	7	Through the end of the resource planning period	The 2015 resource plan highlights several options for operations at Sherco in the future. The preferred plan is for Sherco Units 1 and 2 to operate through the planning period with no additional environmental investments at the plants. However there are alternatives that would shut down one or both of the units as early as 2025. As plans are more firm when it comes to the continued operation of Sherco, the depreciable remaining life will be addressed.
Sherco 3	19	Through the end of the resource planning period	Life extension of two years was approved in Docket No. E002/D-14-181, to account for two years the plant was shut down during the damage to the unit. No discussion of plans for the next 15 years are included in the 2015 resource plan. 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.
Monticello	14.8	Through the end of the resource planning period (Retirement Date 2030)	The 20 year depreciation life extension until September 2030 was granted by the MPUC on Sept. 21, 2007. (Operation life of plant is dependent on length of NRC operating license.) Discussion of plans to operate past currently approved remaining life will fall within the 15-year planning period of the next Resource Plan. 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.
Prairie Island	18.3	Through the end of the resource planning period (Retirement Dates 2033/2034)	The Company's request for license extension of an additional 20 years from the NRC was approved in 2011. A 10-year life extension was approved in the 2008 electric rate case (Docket No. E002/GR-08-1065) and an additional 10-year life extension was approved in the 2011 remaining life filing (Docket No. E,G002/D-11-144). These two life extensions match the full 20-year effect of the license extension approved by the NRC. Discussion of plans to operate past currently approved remaining life will fall within the 15-year planning period of the next Resource Plan. 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.
Hennepin Island	18.2	Through the end of the resource planning period	The depreciation period is tied to the FERC operating license which extends the life beyond the planning 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.
Angus C. Anson Unit 2 & 3	3.8	Through the end of the resource planning period (Retirement Date	There was no discussion of plans for the next 15 years included in the resource plan. 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.
Angus C. Anson Unit 4	19.4	Through the end of the resource planning period (Retirement Date 2034)	Unit 4 was given a 30 year life as a new unit in 2005. There was no discussion of plans for the next 15 years included in the resource plan. 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.
Black Dog 5	16	Through the end of the resource planning period (Retirement Date 2031)	Unit 5 was given a 30.4 year life as a new unit in 2002. There was no discussion of plans for the next 15 years included in the resource plan. 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.
Blue Lake Unit 7 & 8	19.4	Through the end of the resource planning period (Retirement Date 2034)	Units 7 & 8 were given 30.4 year lives as new units in 2005. There was no discussion of plans for the next 15 years included in the resource plan. 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.
Grand Meadow Wind Project	17.9	Through the end of the resource planning period	Wind Farm had an in-service date of November 2008 and was given a 25 year initial remaining life. No discussion of plans for the next 15 years are included in the resource plan. 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.

Electric Production Plant Facility	Proposed Depreciation Life on Current Investment 1/1/2016	Resource Planning/Modeling End of Life Docket No. E002/RP-15-21 Preferred Plan	Rationale for Difference Between Depreciation Life and Resource Planning Period
Granite City	3.3	8	Resource Plan states plan is to retire facility in 2024. Remaining life was recently change to align with plan in 2010 resource plan. Remaining life will be reassessed once more definitive plans are known for the facility.
High Bridge	32.4	Through the end of the resource planning period	Approved initial remaining book life for High Bridge plant was 30 years at in-service date in 2008. A life extension of 10 years was included as part of the settlement to the Company's 2010 Rate Case. No discussion of plans for the next 15 years are included in the Resource Plan. 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.
Nobles Wind Project	19.9	Through the end of the resource planning period	Wind Farm had an in-service date of December 2010 and was given a 25 year initial remaining life. No discussion of plans for the next 15 years are included in the resource plan. 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.
Riverside	33.2	Through the end of the resource planning period	Approved initial remaining book life for Riverside plant was 30 years at in-service date in 2009. A life extension of 10 years was included as part of the settlement to the Company's 2010 Rate Case. No discussion of plans for the next 15 years are included in the Resource Plan. 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.

Electric Steam Production

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Allen S. King							
	E311	$ 38,745,715	-5.5	$ 2,131,014	-8.2	$ 3,169,641	$ 1,038,626
	E312	$ 504,006,208	-5.5	$ 27,720,341	-8.2	$ 41,230,847	$ 13,510,505
	E314	$ 92,980,018	-5.5	$ 5,113,901	-8.2	$ 7,606,345	$ 2,492,444
	E315	$ 43,404,998	-5.5	$ 2,387,275	-8.2	$ 3,550,799	$ 1,163,524
	E316	$ 7,876,988	-5.5	$ 433,234	-8.2	$ 644,387	$ 211,152
		$ 687,013,927		$ 37,785,766		$ 56,202,018	$ 18,416,252
				From 2014 Dismantling Study for King	-8.2%	$ 56,202,018	
				Proposed based on 100% because on national waterway	-8.2%		
Black Dog Units 3 and 4							
	E312	$ 56,060,968	-29.7	$ 16,650,108	-27.3	$ 15,303,979	$ (1,346,128)
	E314	$ 39,055,694	-29.7	$ 11,599,541	-27.3	$ 10,661,741	$ (937,800)
	E315	$ 14,812,768	-29.7	$ 4,399,392	-27.3	$ 4,043,710	$ (355,682)
	E316	$ 3,153,700	-29.7	$ 936,649	-27.3	$ 860,923	$ (75,726)
		$ 113,083,130		$ 33,585,690		$ 30,870,353	$ (2,715,337)
				From 2014 Dismantling Study after Allocation to Black Dog Units 2, 3, & 4	-27.3%	$ 30,870,353	
				Proposed based on 100% for Remaining Life < 10 years	-27.3%		
Minnesota Valley							
	E311	$ 4,047,924	N/A	$ 4,046,262	-163.6	$ 6,622,058	$ 2,575,796
	E312	$ 6,380,531	N/A	$ 10,087,346	-163.6	$ 10,438,004	$ 350,658
	E314	$ 2,156,244	N/A	$ 3,332,035	-163.6	$ 3,527,431	$ 195,396
	E315	$ 597,520	N/A	$ 926,163	-163.6	$ 977,491	$ 51,328
	E316	$ 304,630	N/A	$ 500,057	-163.6	$ 498,349	$ (1,708)
		$ 13,486,848		$ 18,891,863		$ 22,063,335	$ 3,171,472
				From 2014 Dismantling Study for Minnesota Valley	-163.6%	$ 22,063,335	
				Proposed based on 100% for Remaining Life < 10 years	-163.6%		

Electric Steam Production

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Red Wing							
	E311	$ 12,541,195	-23.3	$ 2,922,099	-20.8	$ 2,613,374	$ (308,725)
	E312	$ 39,941,887	-23.3	$ 9,306,460	-20.8	$ 8,323,216	$ (983,243)
	E314	$ 2,931,531	-23.3	$ 683,047	-20.8	$ 610,882	$ (72,165)
	E315	$ 1,821,364	-23.3	$ 424,378	-20.8	$ 379,542	$ (44,836)
	E316	$ 1,007,544	-23.3	$ 234,758	-20.8	$ 209,955	$ (24,803)
		$ 58,243,520		$ 13,570,740		$ 12,136,968	$ (1,433,772)
		From 2014 Dismantling Study for Red Wing			-27.8%	$ 16,182,625	
		Proposed based on 75% for Remaining Life > 10 years but < 20 years			-20.8%		
Sherco Units 1 & 2							
	E311	$ 91,678,021	-5.1	$ 4,675,579	-17.0	$ 15,625,701	$ 10,950,122
	E312	$ 393,827,768	-5.1	$ 20,085,216	-17.0	$ 67,124,432	$ 47,039,215
	E314	$ 98,551,343	-5.1	$ 5,026,118	-17.0	$ 16,797,198	$ 11,771,079
	E315	$ 50,332,906	-5.1	$ 2,566,978	-17.0	$ 8,578,795	$ 6,011,817
	E316	$ 11,901,988	-5.1	$ 607,001	-17.0	$ 2,028,588	$ 1,421,586
		$ 646,292,026		$ 32,960,893		$ 110,154,713	$ 77,193,820
		From 2014 Dismantling Study for Sherco 1 & 2			-17.0%	$ 110,154,713	
		Proposed based on 100% for Remaining Life < 10 years			-17.0%		
Sherco Unit 3 (*)							
	E311	$ 132,175,992	-4.3	$ 5,683,568	-3.0	$ 3,991,249	$ (1,692,318)
	E312	$ 397,716,678	-4.3	$ 17,101,817	-3.0	$ 12,009,642	$ (5,092,175)
	E314	$ 89,533,194	-4.3	$ 3,849,927	-3.0	$ 2,703,587	$ (1,146,340)
	E315	$ 81,922,467	-4.3	$ 3,522,666	-3.0	$ 2,473,770	$ (1,048,896)
	E316	$ 31,543,737	-4.3	$ 1,356,381	-3.0	$ 952,510	$ (403,871)
		$ 732,892,069		$ 31,514,359		$ 22,130,758	$ (9,383,601)
		From 2014 Dismantling Study for Sherco 3			-6.0%	$ 44,261,517	
		Proposed based on 50% for Remaining Life > 20 years			-3.0%		

Electric Steam Production

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Wilmarth							
	E311	$ 8,056,263	-23.0	$ 1,852,940	-20.1	$ 1,620,939	$ (232,001)
	E312	$ 37,416,781	-23.0	$ 8,605,860	-20.1	$ 7,528,346	$ (1,077,514)
	E314	$ 3,500,717	-23.0	$ 805,165	-20.1	$ 704,353	$ (100,812)
	E315	$ 1,456,195	-23.0	$ 334,925	-20.1	$ 292,990	$ (41,935)
	E316	$ 782,144	-23.0	$ 179,893	-20.1	$ 157,369	$ (22,524)
		$ 51,212,100		$ 11,778,783		$ 10,303,997	$ (1,474,786)
		From 2014 Dismantling Study for Wilmarth			-26.8%	$ 13,738,662	
		Proposed based on 75% for Remaining Life > 10 years but < 20 years			-20.1%		
Total Steam Production		$ 2,302,223,621		$ 180,088,094		$ 263,862,143	$ 83,774,048

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

Electric Nuclear Production

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Monticello							
	E302	$ 119,009,309	0.0	$ -	0.0	$ -	$ -
	E321	$ 184,488,826	0.0	$ -	0.0	$ -	$ -
	E322	$ 518,102,665	0.0	$ -	0.0	$ -	$ -
	E323	$ 352,746,334	0.0	$ -	0.0	$ -	$ -
	E324	$ 219,102,009	0.0	$ -	0.0	$ -	$ -
	E325	$ 77,464,799	0.0	$ -	0.0	$ -	$ -
		$ 1,470,913,941		$ -		$ -	$ -
Monticello Interim Storage							
	E321	$ 23,617,479	0.0	$ -	0.0	$ -	$ -
	E322	$ 15,132,425	0.0	$ -	0.0	$ -	$ -
		$ 38,749,905		$ -		$ -	$ -
Prairie Island Units 1 & 2							
	E302	$ 109,455,602	0.0	$ -	0.0	$ -	$ -
	E321	$ 260,831,974	0.0	$ -	0.0	$ -	$ -
	E322	$ 840,535,408	0.0	$ -	0.0	$ -	$ -
	E323	$ 189,210,935	0.0	$ -	0.0	$ -	$ -
	E324	$ 223,393,092	0.0	$ -	0.0	$ -	$ -
	E325	$ 84,317,626	0.0	$ -	0.0	$ -	$ -
		$ 1,707,744,637		$ -		$ -	$ -
Prairie Island Interim Storage							
	E321	$ 11,938,940	0.0	$ -	0.0	$ -	$ -
	E322	$ 136,224,110	0.0	$ -	0.0	$ -	$ -
		$ 148,163,051		$ -		$ -	$ -
Total Nuclear Production		$ 3,365,571,533		$ -		$ -	$ -

Electric Hydro Production

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Hennepin Island							
	E331	$ 1,349,723	-30.0	$ 404,917	-26.4	$ 356,079	$ (48,838)
	E332	$ 4,045,484	-30.0	$ 1,213,645	-26.4	$ 1,067,264	$ (146,381)
	E333	$ 10,038,996	-30.0	$ 3,011,699	-26.4	$ 2,648,449	$ (363,250)
	E334	$ 3,256,972	-30.0	$ 977,092	-26.4	$ 859,242	$ (117,850)
	E335	$ 37,779	-30.0	$ 11,334	-26.4	$ 9,967	$ (1,367)
		$ 18,728,954		$ 5,618,686		$ 4,941,000	$ (677,686)
	From 2014 TLG Dismantling Study for Hennepin Island				-26.4%	$ 4,941,000	
	Proposed based on 100% because on national waterway				-26.4%		
Upper Dam							
	E332	$ 4,491,476	-30.0	$ 1,347,443	-26.4	$ 1,184,924	$ (162,519)
	E335	$ 23,046	-30.0	$ 6,914	-26.4	$ 6,080	$ (834)
		$ 4,514,522		$ 1,354,357		$ 1,191,004	$ (163,353)
	From 2014 TLG Dismantling Study for Upper Dam				-26.4%	$ 1,191,004	
	Proposed based on 100% because on national waterway				-26.4%		
Total Hydro Production		**$ 23,243,475**		**$ 6,973,043**		**$ 6,132,004**	**$ (841,039)**

Electric Other Production

FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
	(1)	(2)	(3)	(4)	(5)	(6)
Angus C. Anson Units 2 & 3						
E342	$ 1,104,673	-4.4	$ 48,606	-9.6	$ 105,544	$ 56,938
E344	$ 68,468,442	-4.4	$ 3,012,611	-9.6	$ 6,541,695	$ 3,529,083
E345	$ 3,335,587	-4.4	$ 146,766	-9.6	$ 318,693	$ 171,927
E346	$ 2,667,289	-4.4	$ 117,361	-9.6	$ 254,841	$ 137,481
	$ 75,575,991		$ 3,325,344		$ 7,220,773	$ 3,895,429
From 2014 TLG Dismantling Study for Angus C. Anson Units 2 & 3				-9.6%	$ 7,220,773	
Proposed based on 100% for Remaining Life < 10 years				-9.6%		
Angus C. Anson Unit 4						
E341	$ 7,521,063	-4.5	$ 338,448	-3.3	$ 245,679	$ (92,769)
E342	$ -	-4.5	$ -	-3.3	$ -	$ -
E344	$ 32,741,391	-4.5	$ 1,473,363	-3.3	$ 1,069,513	$ (403,850)
E345	$ 4,621,874	-4.5	$ 207,984	-3.3	$ 150,976	$ (57,009)
E346	$ -	-4.5	$ -	-3.3	$ -	$ -
	$ 44,884,328		$ 2,019,795		$ 1,466,168	$ (553,627)
From 2014 TLG Dismantling Study for Angus C. Anson Unit 4				-6.5%	$ 2,932,335	
Proposed based on 50% for Remaining Life > 20 years				-3.3%		
Black Dog Unit 5						
E311	$ 32,535,884	-1.7	$ 553,110	-8.6	$ 2,798,086	$ 2,244,976
E341	$ 15,361,662	-1.7	$ 261,148	-8.6	$ 1,321,103	$ 1,059,955
E342	$ 3,542,706	-1.7	$ 60,226	-8.6	$ 304,673	$ 244,447
E344	$ 103,811,625	-1.7	$ 1,764,798	-8.6	$ 8,927,800	$ 7,163,002
E345	$ 9,889,980	-1.7	$ 168,130	-8.6	$ 850,538	$ 682,409
E346	$ 1,356,629	-1.7	$ 23,063	-8.6	$ 116,670	$ 93,607
	$ 166,498,486		$ 2,830,474		$ 14,318,870	$ 9,243,420
From 2014 TLG Dismantling Study for Black Dog Unit 5				-11.4%	$ 19,042,760	
Proposed based on 75% for Remaining Life > 10 years but < 20 years				-8.6%		

Electric Other Production

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Blue Lake Units 1 thru 4							
	E341	$ -	-11.9	$ -	-22.9	$ -	$ -
	E342	$ 1,311,529	-11.9	$ 156,072	-22.9	$ 300,261	$ 144,189
	E344	$ 21,198,509	-11.9	$ 2,522,623	-22.9	$ 4,853,181	$ 2,330,559
	E345	$ 1,369,569	-11.9	$ 162,979	-22.9	$ 313,549	$ 150,570
	E346	$ 424,921	-11.9	$ 50,566	-22.9	$ 97,281	$ 46,716
		$ 24,304,528		$ 2,892,239		$ 5,564,272	$ 2,672,034
	From 2014 TLG Dismantling Study for Blue Lake Units 1 - 4				-22.9%	$ 5,564,272	
	Proposed based on 100% for Remaining Life < 10 years				-22.9%		
Blue Lake Units 7 & 8							
	E341	$ 1,587,263	-5.2	$ 82,538	-5.8	$ 92,468	$ 9,931
	E342	$ 45,374	-5.2	$ 2,359	-5.8	$ 2,643	$ 284
	E344	$ 60,450,578	-5.2	$ 3,143,430	-5.8	$ 3,521,642	$ 378,212
	E345	$ 7,849,102	-5.2	$ 408,153	-5.8	$ 457,262	$ 49,108
	E346	$ 32,958	-5.2	$ 1,714	-5.8	$ 1,920	$ 206
		$ 69,965,275		$ 3,638,194		$ 4,075,936	$ 437,741
	From 2014 TLG Dismantling Study for Blue Lake Units 7 & 8				-11.7%	$ 8,151,871	
	Proposed based on 50% for Remaining Life > 20 years				-5.8%		
Grand Meadow Wind Project							
	E341	$ 4,750,902	-8.7	$ 413,329	-11.1	$ 528,047	$ 114,719
	E342	$ -	-8.7	$ -	-11.1	$ -	$ -
	E344	$ 182,650,050	-8.7	$ 15,890,554	-11.1	$ 20,300,955	$ 4,410,401
	E345	$ 12,027,032	-8.7	$ 1,046,352	-11.1	$ 1,336,765	$ 290,413
	E346	$ 207,761	-8.7	$ 18,075	-11.1	$ 23,092	$ 5,017
		$ 199,635,745		$ 17,368,310		$ 22,188,859	$ 4,820,549
	From 2014 TLG Dismantling Study for Grand Meadow Wind Project				-11.1%	$ 22,188,859	
	Proposed based on 100% due to Leased Land				-11.1%		

Electric Other Production

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Granite City							
	E341	$ 1,241,718	-38.8	$ 481,787	-50.4	$ 626,348	$ 144,562
	E342	$ 416,373	-38.8	$ 161,553	-50.4	$ 210,027	$ 48,474
	E344	$ 6,468,402	-38.8	$ 2,509,740	-50.4	$ 3,262,796	$ 753,056
	E345	$ 629,592	-38.8	$ 244,282	-50.4	$ 317,579	$ 73,298
	E346	$ 13,279	-38.8	$ 5,152	-50.4	$ 6,698	$ 1,546
		$ 8,769,364		$ 3,402,513		$ 4,423,449	$ 1,020,936
		From 2014 TLG Dismantling Study for Key City			-50.4%	$ 4,423,449	
		Proposed based on 100% for Remaining Life < 10 years			-50.4%		
High Bridge							
	E341	$ 70,873,656	-3.1	$ 2,197,083	-3.5	$ 2,469,060	$ 271,976
	E342	$ 65,161,180	-3.1	$ 2,019,997	-3.5	$ 2,270,051	$ 250,055
	E344	$ 189,312,241	-3.1	$ 5,868,679	-3.5	$ 6,595,162	$ 726,482
	E345	$ 51,033,267	-3.1	$ 1,582,031	-3.5	$ 1,777,871	$ 195,839
	E346	$ 7,233,190	-3.1	$ 224,229	-3.5	$ 251,986	$ 27,757
		$ 383,613,534		$ 11,892,020		$ 13,364,130	$ 1,472,110
		From 2014 TLG Dismantling Study for High Bridge			-3.5%	$ 13,364,130	
		Proposed based on 100% because TLG calculated rate < 5%			-3.5%		
Inver Hills							
	E341	$ 1,412,246	-11.0	$ 155,700	-13.7	$ 193,393	$ 37,693
	E342	$ 2,903,525	-11.0	$ 320,114	-13.7	$ 397,609	$ 77,496
	E344	$ 50,365,644	-11.0	$ 5,552,812	-13.7	$ 6,897,082	$ 1,344,270
	E345	$ 3,414,158	-11.0	$ 376,411	-13.7	$ 467,536	$ 91,125
	E346	$ 619,054	-11.0	$ 68,251	-13.7	$ 84,773	$ 16,523
		$ 58,714,628		$ 6,473,288		$ 8,040,394	$ 1,567,106
		From 2014 TLG Dismantling Study for Inver Hills			-18.3%	$ 10,720,525	
		Proposed based on 75% for Remaining Life > 10 years but < 20 years			-13.7%		

Electric Other Production

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Key City							
	E341	$ 1,002,265	-38.6	$ 386,874	-47.6	$ 477,388	$ 90,514
	E342	$ 242,384	-38.6	$ 93,560	-47.6	$ 115,450	$ 21,890
	E344	$ 5,374,748	-38.6	$ 2,074,653	-47.6	$ 2,560,045	$ 485,392
	E345	$ 1,702,722	-38.6	$ 657,251	-47.6	$ 811,023	$ 153,772
	E346	$ 277,794	-38.6	$ 107,228	-47.6	$ 132,316	$ 25,087
		$ 8,599,913		$ 3,319,566		$ 4,096,222	$ 776,655
		From 2014 TLG Dismantling Study for Key City			-47.6%	$ 4,096,222	
		Proposed based on 100% for Remaining Life < 10 years			-47.6%		
Nobles Wind Project							
	E341	$ 13,536,911	-8.7	$ 1,177,711	-6.0	$ 811,995	$ (365,716)
	E344	$ 469,273,168	-8.7	$ 40,826,766	-6.0	$ 28,148,773	$ (12,677,993)
	E345	$ 29,931,151	-8.7	$ 2,604,010	-6.0	$ 1,795,383	$ (808,627)
	E346	$ 627,971	-8.7	$ 54,633	-6.0	$ 37,668	$ (16,965)
		$ 513,369,201		$ 44,663,121		$ 30,793,819	$ (13,869,302)
		From 2014 TLG Dismantling Study for Nobles Wind Project			-6.0%	$ 30,793,819	
		Proposed based on 100% due to Leased Land			-6.0%		
Riverside							
	E341	$ 52,358,980	-5.0	$ 2,591,770	-5.7	$ 2,968,276	$ 376,507
	E342	$ 887,545	-5.0	$ 43,933	-5.7	$ 50,316	$ 6,382
	E344	$ 200,845,106	-5.0	$ 9,941,833	-5.7	$ 11,386,084	$ 1,444,251
	E345	$ 40,246,066	-5.0	$ 1,992,180	-5.7	$ 2,281,585	$ 289,404
	E346	$ 9,049,921	-5.0	$ 447,971	-5.7	$ 513,048	$ 65,077
		$ 303,387,618		$ 15,017,687		$ 17,199,309	$ 2,181,622
		From 2014 TLG Dismantling Study for Riverside			-11.3%	$ 34,398,617	
		Proposed based on 50% for Remaining Life > 20 years			-5.7%		
Total Other Production		$ 1,857,318,612		$ 116,842,550		$ 132,752,199	$ 13,664,673

Gas Production and Storage

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Maplewood							
	G305	$ 952,430	-17.0	$ 161,913	-70.3	$ 669,182	$ 507,269
	G311	$ 3,715,761	8.0	$ (297,261)	-70.3	$ 2,610,710	$ 2,907,971
	G320	$ 203,004	0.0	$ -	-70.3	$ 142,632	$ 142,632
		$ 4,871,196		$ (135,348)		$ 3,422,524	$ 3,557,872
				From 2014 Dismantling Study for Maplewood	-93.7%	$ 4,563,365	
				Proposed based on 75% for Remaining Life > 10 years but < 20 years	-70.3%		
Sibley							
	G305	$ 776,690	-1.0	$ 7,767	-59.6	$ 463,253	$ 455,486
	G311	$ 3,926,187	8.0	$ (314,095)	-59.6	$ 2,341,753	$ 2,655,848
	G320	$ 496,538	-1.0	$ 4,965	-59.6	$ 296,158	$ 291,192
		$ 5,199,416		$ (301,363)		$ 3,101,164	$ 3,402,526
				From 2014 TLG Dismantling Study for Sibley	-79.53%	$ 4,134,885	
				Proposed based on 75% for Remaining Life > 10 years but < 20 years	-59.6%		
Wescott							
	G305	$ 1,048,359	-3.0	$ 31,451	-14.4	$ 151,240	$ 119,790
	G311	$ 4,662,451	1.0	$ (46,625)	-14.4	$ 672,623	$ 719,248
	G320	$ 228,070	3.0	$ (6,842)	-14.4	$ 32,902	$ 39,744
	G361	$ 4,798,574	-10.0	$ 479,857	-14.4	$ 692,261	$ 212,404
	G362	$ 8,169,167	5.0	$ (408,458)	-14.4	$ 1,178,516	$ 1,586,974
	G363	$ 1,020,951	1.0	$ (10,210)	-14.4	$ 147,286	$ 157,496
	G363.1	$ 2,852,841	2.0	$ (57,057)	-14.4	$ 411,562	$ 468,619
	G363.2	$ 9,256,561	2.0	$ (185,131)	-14.4	$ 1,335,388	$ 1,520,519
	G363.3	$ 23,486,534	2.0	$ (469,731)	-14.4	$ 3,388,259	$ 3,857,990
	G363.4	$ 44,503	6.0	$ (2,670)	-14.4	$ 6,420	$ 9,090
	G363.5	$ 3,797,877	0.0	$ -	-14.4	$ 547,897	$ 547,897
		$ 59,365,889		$ (675,415)		$ 8,564,356	$ 9,239,771
				From 2014 TLG Dismantling Study for Sibley	-19.24%	$ 11,419,141	
				Proposed based on 75% for Remaining Life > 10 years but < 20 years	-14.43%		

Gas Production and Storage

FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
	(1)	(2)	(3)	(4)	(5)	(6)
Total Gas Production and Storage	$ 69,436,500		$ (1,112,126)		$ 15,088,044	$ 16,200,169

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Allen S. King							
	E311	$ 38,745,715	-5.5	$ 2,131,014	-8.2	$ 3,169,641	$ 1,038,626
	E312	$ 504,006,208	-5.5	$ 27,720,341	-8.2	$ 41,230,847	$ 13,510,505
	E314	$ 92,980,018	-5.5	$ 5,113,901	-8.2	$ 7,606,345	$ 2,492,444
	E315	$ 43,404,998	-5.5	$ 2,387,275	-8.2	$ 3,550,799	$ 1,163,524
	E316	$ 7,876,988	-5.5	$ 433,234	-8.2	$ 644,387	$ 211,152
		$ 687,013,927		$ 37,785,766		$ 56,202,018	$ 18,416,252
	From 2014 Dismantling Study for King				-8.2%	$ 56,202,018	
Black Dog Units 2, 3, & 4							
	E312	$ 56,060,968	-29.7	$ 16,650,108	-27.3	$ 15,303,979	$ (1,346,128)
	E314	$ 39,055,694	-29.7	$ 11,599,541	-27.3	$ 10,661,741	$ (937,800)
	E315	$ 14,812,768	-29.7	$ 4,399,392	-27.3	$ 4,043,710	$ (355,682)
	E316	$ 3,153,700	-29.7	$ 936,649	-27.3	$ 860,923	$ (75,726)
		$ 113,083,130		$ 33,585,690		$ 30,870,353	$ (2,715,337)
	From 2014 Dismantling Study after Allocation to Black Dog Units 2, 3, & 4				-27.3%	$ 30,870,353	
Minnesota Valley							
	E311	$ 4,047,924	N/A	$ 4,046,262	-163.6	$ 6,622,058	$ 2,575,796
	E312	$ 6,380,531	N/A	$ 10,087,346	-163.6	$ 10,438,004	$ 350,658
	E314	$ 2,156,244	N/A	$ 3,332,035	-163.6	$ 3,527,431	$ 195,396
	E315	$ 597,520	N/A	$ 926,163	-163.6	$ 977,491	$ 51,328
	E316	$ 304,630	N/A	$ 500,057	-163.6	$ 498,349	$ (1,708)
		$ 13,486,848		$ 18,891,863		$ 22,063,335	$ 3,171,472
	From 2014 Dismantling Study for Minnesota Valley				-163.6%	$ 22,063,335	

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Red Wing							
	E311	$ 12,541,195	-23.3	$ 2,922,099	-27.8	$ 3,484,498	$ 562,400
	E312	$ 39,941,887	-23.3	$ 9,306,460	-27.8	$ 11,097,622	$ 1,791,162
	E314	$ 2,931,531	-23.3	$ 683,047	-27.8	$ 814,509	$ 131,462
	E315	$ 1,821,364	-23.3	$ 424,378	-27.8	$ 506,055	$ 81,678
	E316	$ 1,007,544	-23.3	$ 234,758	-27.8	$ 279,940	$ 45,182
		$ 58,243,520		$ 13,570,740		$ 16,182,625	$ 2,611,884
		From 2014 Dismantling Study for Red Wing			-27.8%	$ 16,182,625	
Sherco Units 1 & 2							
	E311	$ 91,678,021	-5.1	$ 4,675,579	-17.0	$ 15,625,701	$ 10,950,122
	E312	$ 393,827,768	-5.1	$ 20,085,216	-17.0	$ 67,124,432	$ 47,039,215
	E314	$ 98,551,343	-5.1	$ 5,026,118	-17.0	$ 16,797,198	$ 11,771,079
	E315	$ 50,332,906	-5.1	$ 2,566,978	-17.0	$ 8,578,795	$ 6,011,817
	E316	$ 11,901,988	-5.1	$ 607,001	-17.0	$ 2,028,588	$ 1,421,586
		$ 646,292,026		$ 32,960,893		$ 110,154,713	$ 77,193,820
		From 2014 Dismantling Study for Sherco 1 & 2			-17.0%	$ 110,154,713	
Sherco Unit 3 (*)							
	E311	$ 132,175,992	-4.3	$ 5,683,568	-6.0	$ 7,982,499	$ 2,298,931
	E312	$ 397,716,678	-4.3	$ 17,101,817	-6.0	$ 24,019,285	$ 6,917,468
	E314	$ 89,533,194	-4.3	$ 3,849,927	-6.0	$ 5,407,174	$ 1,557,247
	E315	$ 81,922,467	-4.3	$ 3,522,666	-6.0	$ 4,947,540	$ 1,424,874
	E316	$ 31,543,737	-4.3	$ 1,356,381	-6.0	$ 1,905,019	$ 548,639
		$ 732,892,069		$ 31,514,359		$ 44,261,517	$ 12,747,158
		From 2014 Dismantling Study for Sherco 3			-6.0%	$ 44,261,517	

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Wilmarth							
	E311	$ 8,056,263	-23.0	$ 1,852,940	-26.8	$ 2,161,252	$ 308,312
	E312	$ 37,416,781	-23.0	$ 8,605,860	-26.8	$ 10,037,794	$ 1,431,934
	E314	$ 3,500,717	-23.0	$ 805,165	-26.8	$ 939,137	$ 133,972
	E315	$ 1,456,195	-23.0	$ 334,925	-26.8	$ 390,653	$ 55,728
	E316	$ 782,144	-23.0	$ 179,893	-26.8	$ 209,826	$ 29,933
		$ 51,212,100		$ 11,778,783		$ 13,738,662	$ 1,959,879
		From 2014 Dismantling Study for Wilmarth			-26.8%	$ 13,738,662	
Total Steam Production		$ 2,302,223,621		$ 180,088,094		$ 293,473,223	$ 113,385,128

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

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Monticello							
	E302	$ 119,009,309	0.0	$ -	0.0	$ -	$ -
	E321	$ 184,488,826	0.0	$ -	0.0	$ -	$ -
	E322	$ 518,102,665	0.0	$ -	0.0	$ -	$ -
	E323	$ 352,746,334	0.0	$ -	0.0	$ -	$ -
	E324	$ 219,102,009	0.0	$ -	0.0	$ -	$ -
	E325	$ 77,464,799	0.0	$ -	0.0	$ -	$ -
		$ 1,470,913,941		$ -		$ -	$ -
Monticello Interim Storage							
	E321	$ 23,617,479	0.0	$ -	0.0	$ -	$ -
	E322	$ 15,132,425	0.0	$ -	0.0	$ -	$ -
		$ 38,749,905		$ -		$ -	$ -
Prairie Island Units 1 & 2							
	E302	$ 109,455,602	0.0	$ -	0.0	$ -	$ -
	E321	$ 260,831,974	0.0	$ -	0.0	$ -	$ -
	E322	$ 840,535,408	0.0	$ -	0.0	$ -	$ -
	E323	$ 189,210,935	0.0	$ -	0.0	$ -	$ -
	E324	$ 223,393,092	0.0	$ -	0.0	$ -	$ -
	E325	$ 84,317,626	0.0	$ -	0.0	$ -	$ -
		$ 1,707,744,637		$ -		$ -	$ -
Prairie Island Interim Storage							
	E321	$ 11,938,940	0.0	$ -	0.0	$ -	$ -
	E322	$ 136,224,110	0.0	$ -	0.0	$ -	$ -
		$ 148,163,051		$ -		$ -	$ -
Total Nuclear Production		$ 3,365,571,533		$ -		$ -	$ -

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Hennepin Island							
	E331	$ 1,349,723	-30.0	$ 404,917	-26.4	$ 356,079	$ (48,838)
	E332	$ 4,045,484	-30.0	$ 1,213,645	-26.4	$ 1,067,264	$ (146,381)
	E333	$ 10,038,996	-30.0	$ 3,011,699	-26.4	$ 2,648,449	$ (363,250)
	E334	$ 3,256,972	-30.0	$ 977,092	-26.4	$ 859,242	$ (117,850)
	E335	$ 37,779	-30.0	$ 11,334	-26.4	$ 9,967	$ (1,367)
		$ 18,728,954		$ 5,618,686		$ 4,941,000	$ (677,686)
	From 2014 TLG Dismantling Study for Hennepin Island				-26.4%	$ 4,941,000	
Upper Dam							
	E332	$ 4,491,476	-30.0	$ 1,347,443	-26.4	$ 1,184,924	$ (162,519)
	E335	$ 23,046	-30.0	$ 6,914	-26.4	$ 6,080	$ (834)
		$ 4,514,522		$ 1,354,357		$ 1,191,004	$ (163,353)
	From 2014 TLG Dismantling Study for Upper Dam				-26.4%	$ 1,191,004	
Total Hydro Production		**$ 23,243,475**		**$ 6,973,043**		**$ 6,132,004**	**$ (841,039)**

			Present		Proposed		
	FERC Account	Plant Balance 1/1/2015	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)
Angus C. Anson Units 2 & 3							
	E341	$ -	-4.4	$ -	-9.6	$ -	$ -
	E342	$ 1,104,673	-4.4	$ 48,606	-9.6	$ 105,544	$ 56,938
	E344	$ 68,468,442	-4.4	$ 3,012,611	-9.6	$ 6,541,695	$ 3,529,083
	E345	$ 3,335,587	-4.4	$ 146,766	-9.6	$ 318,693	$ 171,927
	E346	$ 2,667,289	-4.4	$ 117,361	-9.6	$ 254,841	$ 137,481
		$ 75,575,991		$ 3,325,344		$ 7,220,773	$ 3,895,429
	From 2014 TLG Dismantling Study for Angus C. Anson Units 2 & 3				-9.6%	$ 7,220,773	
Angus C. Anson Unit 4							
	E341	$ 7,521,063	-4.5	$ 338,448	-6.5	$ 491,358	$ 152,910
	E342	$ -	-4.5	$ -	-6.5	$ -	$ -
	E344	$ 32,741,391	-4.5	$ 1,473,363	-6.5	$ 2,139,026	$ 665,663
	E345	$ 4,621,874	-4.5	$ 207,984	-6.5	$ 301,951	$ 93,967
	E346	$ -	-4.5	$ -	-6.5	$ -	$ -
		$ 44,884,328		$ 2,019,795		$ 2,932,335	$ 912,540
	From 2014 TLG Dismantling Study for Angus C. Anson Unit 4				-6.5%	$ 2,932,335	
Black Dog Unit 5							
	E311	$ 32,535,884	-1.7	$ 553,110	-11.4	$ 3,721,193	$ 3,168,083
	E341	$ 15,361,662	-1.7	$ 261,148	-11.4	$ 1,756,944	$ 1,495,795
	E342	$ 3,542,706	-1.7	$ 60,226	-11.4	$ 405,186	$ 344,960
	E344	$ 103,811,625	-1.7	$ 1,764,798	-11.4	$ 11,873,140	$ 10,108,342
	E345	$ 9,889,980	-1.7	$ 168,130	-11.4	$ 1,131,136	$ 963,007
	E346	$ 1,356,629	-1.7	$ 23,063	-11.4	$ 155,160	$ 132,098
		$ 166,498,486		$ 2,830,474		$ 19,042,760	$ 13,044,202
	From 2014 TLG Dismantling Study for Black Dog Unit 5				-11.4%	$ 19,042,760	

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Blue Lake Units 1 thru 4							
	E341	$ -	-11.9	$ -	-22.9	$ -	$ -
	E342	$ 1,311,529	-11.9	$ 156,072	-22.9	$ 300,261	$ 144,189
	E344	$ 21,198,509	-11.9	$ 2,522,623	-22.9	$ 4,853,181	$ 2,330,559
	E345	$ 1,369,569	-11.9	$ 162,979	-22.9	$ 313,549	$ 150,570
	E346	$ 424,921	-11.9	$ 50,566	-22.9	$ 97,281	$ 46,716
		$ 24,304,528		$ 2,892,239		$ 5,564,272	$ 2,672,034
	From 2014 TLG Dismantling Study for Blue Lake Units 1 - 4				-22.9%	$ 5,564,272	
Blue Lake Units 7 & 8							
	E341	$ 1,587,263	-5.2	$ 82,538	-11.7	$ 184,937	$ 102,399
	E342	$ 45,374	-5.2	$ 2,359	-11.7	$ 5,287	$ 2,927
	E344	$ 60,450,578	-5.2	$ 3,143,430	-11.7	$ 7,043,284	$ 3,899,854
	E345	$ 7,849,102	-5.2	$ 408,153	-11.7	$ 914,523	$ 506,370
	E346	$ 32,958	-5.2	$ 1,714	-11.7	$ 3,840	$ 2,126
		$ 69,965,275		$ 3,638,194		$ 8,151,871	$ 4,513,677
	From 2014 TLG Dismantling Study for Blue Lake Units 7 & 8				-11.7%	$ 8,151,871	
Grand Meadow Wind Project							
	E341	$ 4,750,902	-8.7	$ 413,329	-11.1	$ 528,047	$ 114,719
	E342	$ -	-8.7	$ -	-11.1	$ -	$ -
	E344	$ 182,650,050	-8.7	$ 15,890,554	-11.1	$ 20,300,955	$ 4,410,401
	E345	$ 12,027,032	-8.7	$ 1,046,352	-11.1	$ 1,336,765	$ 290,413
	E346	$ 207,761	-8.7	$ 18,075	-11.1	$ 23,092	$ 5,017
		$ 199,635,745		$ 17,368,310		$ 22,188,859	$ 4,820,549
	From 2014 TLG Dismantling Study for Grand Meadow Wind Project				-11.1%	$ 22,188,859	

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Granite City							
	E341	$ 1,241,718	-38.8	$ 481,787	-50.4	$ 626,348	$ 144,562
	E342	$ 416,373	-38.8	$ 161,553	-50.4	$ 210,027	$ 48,474
	E344	$ 6,468,402	-38.8	$ 2,509,740	-50.4	$ 3,262,796	$ 753,056
	E345	$ 629,592	-38.8	$ 244,282	-50.4	$ 317,579	$ 73,298
	E346	$ 13,279	-38.8	$ 5,152	-50.4	$ 6,698	$ 1,546
		$ 8,769,364		$ 3,402,513		$ 4,423,449	$ 1,020,936
		From 2014 TLG Dismantling Study for Key City			-50.4%	$ 4,423,449	
High Bridge							
	E341	$ 70,873,656	-3.1	$ 2,197,083	-3.5	$ 2,469,060	$ 271,976
	E342	$ 65,161,180	-3.1	$ 2,019,997	-3.5	$ 2,270,051	$ 250,055
	E344	$ 189,312,241	-3.1	$ 5,868,679	-3.5	$ 6,595,162	$ 726,482
	E345	$ 51,033,267	-3.1	$ 1,582,031	-3.5	$ 1,777,871	$ 195,839
	E346	$ 7,233,190	-3.1	$ 224,229	-3.5	$ 251,986	$ 27,757
		$ 383,613,534		$ 11,892,020		$ 13,364,130	$ 1,472,110
		From 2014 TLG Dismantling Study for High Bridge			-3.5%	$ 13,364,130	
Inver Hills							
	E341	$ 1,412,246	-11.0	$ 155,700	-18.3	$ 257,858	$ 102,158
	E342	$ 2,903,525	-11.0	$ 320,114	-18.3	$ 530,146	$ 210,032
	E344	$ 50,365,644	-11.0	$ 5,552,812	-18.3	$ 9,196,110	$ 3,643,297
	E345	$ 3,414,158	-11.0	$ 376,411	-18.3	$ 623,381	$ 246,970
	E346	$ 619,054	-11.0	$ 68,251	-18.3	$ 113,031	$ 44,781
		$ 58,714,628		$ 6,473,288		$ 10,720,525	$ 4,247,237
		From 2014 TLG Dismantling Study for Inver Hills			-18.3%	$ 10,720,525	

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Key City							
	E341	$ 1,002,265	-38.6	$ 386,874	-47.6	$ 477,388	$ 90,514
	E342	$ 242,384	-38.6	$ 93,560	-47.6	$ 115,450	$ 21,890
	E344	$ 5,374,748	-38.6	$ 2,074,653	-47.6	$ 2,560,045	$ 485,392
	E345	$ 1,702,722	-38.6	$ 657,251	-47.6	$ 811,023	$ 153,772
	E346	$ 277,794	-38.6	$ 107,228	-47.6	$ 132,316	$ 25,087
		$ 8,599,913		$ 3,319,566		$ 4,096,222	$ 776,655
	From 2014 TLG Dismantling Study for Key City				-47.6%	$ 4,096,222	
Nobles Wind Project							
	E341	$ 13,536,911	-8.7	$ 1,177,711	-6.0	$ 811,995	$ (365,716)
	E344	$ 469,273,168	-8.7	$ 40,826,766	-6.0	$ 28,148,773	$ (12,677,993)
	E345	$ 29,931,151	-8.7	$ 2,604,010	-6.0	$ 1,795,383	$ (808,627)
	E346	$ 627,971	-8.7	$ 54,633	-6.0	$ 37,668	$ (16,965)
		$ 513,369,201		$ 44,663,121		$ 30,793,819	$ (13,869,302)
	From 2014 TLG Dismantling Study for Nobles Wind Project				-6.0%	$ 30,793,819	
Riverside							
	E341	$ 52,358,980	-5.0	$ 2,591,770	-11.3	$ 5,936,553	$ 3,344,783
	E342	$ 887,545	-5.0	$ 43,933	-11.3	$ 100,631	$ 56,698
	E344	$ 200,845,106	-5.0	$ 9,941,833	-11.3	$ 22,772,168	$ 12,830,336
	E345	$ 40,246,066	-5.0	$ 1,992,180	-11.3	$ 4,563,169	$ 2,570,989
	E346	$ 9,049,921	-5.0	$ 447,971	-11.3	$ 1,026,096	$ 578,125
		$ 303,387,618		$ 15,017,687		$ 34,398,617	$ 19,380,930
	From 2014 TLG Dismantling Study for Riverside				-11.3%	$ 34,398,617	
Total Other Production		$ 1,857,318,612		$ 116,842,550		$ 162,897,632	$ 42,886,999

	FERC Account	Plant Balance 1/1/2015	Present Net Salv %	Present Estimated Net Salvage in Reserve at End-of Life	Proposed Net Salv %	Proposed Estimated Net Salvage in Reserve at End-of Life	Proposed Less Present
		(1)	(2)	(3)	(4)	(5)	(6)
Maplewood							
	G305	$ 952,430	-17.0	$ 161,913	-93.7	$ 892,242	$ 730,329
	G311	$ 3,715,761	8.0	$ (297,261)	-93.7	$ 3,480,947	$ 3,778,208
	G320	$ 203,004	0.0	$ -	-93.7	$ 190,176	$ 190,176
		$ 4,871,196		$ (135,348)		$ 4,563,365	$ 4,698,713
		From 2014 Dismantling Study for Maplewood			-93.7%	$ 4,563,365	
Sibley							
	G305	$ 776,690	-1.0	$ 7,767	-79.5	$ 617,670	$ 609,903
	G311	$ 3,926,187	8.0	$ (314,095)	-79.5	$ 3,122,338	$ 3,436,433
	G320	$ 496,538	-1.0	$ 4,965	-79.5	$ 394,877	$ 389,912
		$ 5,199,416		$ (301,363)		$ 4,134,885	$ 4,436,248
		From 2014 TLG Dismantling Study for Sibley			-79.5%	$ 4,134,885	
Wescott							
	G305	$ 1,048,359	-3.0	$ 31,451	-19.2	$ 201,654	$ 170,203
	G311	$ 4,662,451	1.0	$ (46,625)	-19.2	$ 896,831	$ 943,456
	G320	$ 228,070	3.0	$ (6,842)	-19.2	$ 43,870	$ 50,712
	G361	$ 4,798,574	-10.0	$ 479,857	-19.2	$ 923,015	$ 443,157
	G362	$ 8,169,167	5.0	$ (408,458)	-19.2	$ 1,571,355	$ 1,979,813
	G363	$ 1,020,951	1.0	$ (10,210)	-19.2	$ 196,382	$ 206,591
	G363.1	$ 2,852,841	2.0	$ (57,057)	-19.2	$ 548,749	$ 605,806
	G363.2	$ 9,256,561	2.0	$ (185,131)	-19.2	$ 1,780,517	$ 1,965,648
	G363.3	$ 23,486,534	2.0	$ (469,731)	-19.2	$ 4,517,679	$ 4,987,410
	G363.4	$ 44,503	6.0	$ (2,670)	-19.2	$ 8,560	$ 11,230
	G363.5	$ 3,797,877	0.0	$ -	-19.2	$ 730,529	$ 730,529
		$ 59,365,889		$ (675,415)		$ 11,419,141	$ 12,094,556
		From 2014 TLG Dismantling Study for Sibley			-19.24%	$ 11,419,141	
Total Gas Production and Storage		$ 69,436,500		$ (1,112,126)		$ 20,117,391	$ 21,229,517

Electric Steam Production

Account	Description	Current Approved Remaining Life 01/01/14 (Yrs)	Proposed Remaining Life 01/01/16 (Yrs)	Current Approved Net Salvage 01/01/14 (%)	Proposed Net Salvage 01/01/16 (%)	Latest Life Change (Docket #)	Life Change (Yrs)	Latest Net Salvage Change (Docket #)	Net Salvage Change (%)	Number of Life Changes in the Last Five Years	Number of Net Salvage Changes in the Last Five Years
Black Dog											
E311	Structures & Improvements	18.0	16.0	-1.7	-8.6	EG002-D-99-173	4.9	EG002-D-13-1158	6.6	0	2
E312	Boiler Plant Equipment	2.0	-	-29.7	-27.3	EG002-D-11-144	3.0	EG002-D-13-1158	-11.7	1	2
E314	Turbogenerator Units	2.0	-	-29.7	-27.3	EG002-D-11-144	3.0	EG002-D-13-1158	-11.7	1	2
E315	Accessory Electric Equipment	2.0	-	-29.7	-27.3	EG002-D-11-144	3.0	EG002-D-13-1158	-11.7	1	2
E316	Miscellaneous Power Plant Equipment	2.0	-	-29.7	-27.3	EG002-D-11-144	3.0	EG002-D-13-1158	-11.7	1	2
Allen S. King											
E311	Structures & Improvements	23.5	21.5	-5.5	-8.2	EG002-D-07-251	23.5	EG002-D-10-173	34.5	0	1
E312	Boiler Plant Equipment	23.5	21.5	-5.5	-8.2	EG002-D-07-251	23.5	EG002-D-10-173	-5.5	0	1
E314	Turbogenerator Units	23.5	21.5	-5.5	-8.2	EG002-D-07-251	23.5	EG002-D-10-173	-5.5	0	1
E315	Accessory Electric Equipment	23.5	21.5	-5.5	-8.2	EG002-D-07-251	23.5	EG002-D-10-173	-5.5	0	1
E316	Miscellaneous Power Plant Equipment	23.5	21.5	-5.5	-8.2	EG002-D-07-251	23.5	EG002-D-10-173	-5.5	0	1
Minnesota Valley											
E311	Structures & Improvements	0.0	0.0	N/A	N/A	E002-GR-12-961	N/A	E002-GR-12-961	N/A	1	2
E312	Boiler Plant Equipment	0.0	0.0	N/A	N/A	E002-GR-12-961	N/A	E002-GR-12-961	N/A	1	2
E314	Turbogenerator Units	0.0	0.0	N/A	N/A	E002-GR-12-961	N/A	E002-GR-12-961	N/A	1	2
E315	Accessory Electric Equipment	0.0	0.0	N/A	N/A	E002-GR-12-961	N/A	E002-GR-12-961	N/A	1	2
E316	Miscellaneous Power Plant Equipment	0.0	0.0	N/A	N/A	E002-GR-12-961	N/A	E002-GR-12-961	N/A	1	2
Red Wing											
E311	Structures & Improvements	4.0	12.0	-23.3	-20.8	EG002-D-10-173	5.0	EG002-D-10-173	11.7	1	1
E312	Boiler Plant Equipment	4.0	12.0	-23.3	-20.8	EG002-D-10-173	5.0	EG002-D-10-173	-23.3	1	1
E314	Turbogenerator Units	4.0	12.0	-23.3	-20.8	EG002-D-10-173	5.0	EG002-D-10-173	-23.3	1	1
E315	Accessory Electric Equipment	4.0	12.0	-23.3	-20.8	EG002-D-10-173	5.0	EG002-D-10-173	-23.3	1	1
E316	Miscellaneous Power Plant Equipment	4.0	12.0	-23.3	-20.8	EG002-D-10-173	5.0	EG002-D-10-173	-23.3	1	1

Electric Steam Production

Account	Description	Current Approved Remaining Life 01/01/14 (Yrs)	Proposed Remaining Life 01/01/16 (Yrs)	Current Approved Net Salvage 01/01/14 (%)	Proposed Net Salvage 01/01/16 (%)	Latest Life Change (Docket #)	Life Change (Yrs)	Latest Net Salvage Change (Docket #)	Net Salvage Change (%)	Number of Life Changes in the Last Five Years	Number of Net Salvage Changes in the Last Five Years
Sherco Unit 1 & 2											
E311	Structures & Improvements	9.0	7.0	-5.1	-17.0	EG002-D-08-189	3.0	EG002-D-10-173	24.9	0	1
E312	Boiler Plant Equipment	9.0	7.0	-5.1	-17.0	EG002-D-08-189	3.0	EG002-D-10-173	-5.1	0	1
E314	Turbogenerator Units	9.0	7.0	-5.1	-17.0	EG002-D-08-189	3.0	EG002-D-10-173	-5.1	0	1
E315	Accessory Electric Equipment	9.0	7.0	-5.1	-17.0	EG002-D-08-189	3.0	EG002-D-10-173	-5.1	0	1
E316	Miscellaneous Power Plant Equipment	9.0	7.0	-5.1	-17.0	EG002-D-08-189	3.0	EG002-D-10-173	-5.1	0	1
Sherco Unit 3											
E311	Structures & Improvements	21.0	19.0	-4.3	-3.0	EG002-D-14-181	2.0	EG002-D-10-173	15.7	2	1
E312	Boiler Plant Equipment	21.0	19.0	-4.3	-3.0	EG002-D-14-181	2.0	EG002-D-10-173	-4.3	2	1
E314	Turbogenerator Units	21.0	19.0	-4.3	-3.0	EG002-D-14-181	2.0	EG002-D-10-173	-4.3	2	1
E315	Accessory Electric Equipment	21.0	19.0	-4.3	-3.0	EG002-D-14-181	2.0	EG002-D-10-173	-4.3	2	1
E316	Miscellaneous Power Plant Equipment	21.0	19.0	-4.3	3.0	EG002-D-14-181	2.0	EG002-D-10-173	-4.3	2	1
Wilmarth											
E311	Structures & Improvements	4.0	12.0	-23.0	-20.1	EG002-D-10-173	5.0	EG002-D-10-173	12.0	1	1
E312	Boiler Plant Equipment	4.0	12.0	-23.0	-20.1	EG002-D-10-173	5.0	EG002-D-10-173	-23.0	1	1
E314	Turbogenerator Units	4.0	12.0	-23.0	-20.1	EG002-D-10-173	5.0	EG002-D-10-173	-23.0	1	1
E315	Accessory Electric Equipment	4.0	12.0	-23.0	-20.1	EG002-D-10-173	5.0	EG002-D-10-173	-23.0	1	1
E316	Miscellaneous Power Plant Equipment	4.0	12.0	-23.0	-20.1	EG002-D-10-173	5.0	EG002-D-10-173	-23.0	1	1

Electric Nuclear Production

Account	Description	Current Approved Remaining Life 01/01/14 (Yrs)	Proposed Remaining Life 01/01/16 (Yrs)	Current Approved Net Salvage 01/01/14 (%)	Proposed Net Salvage 01/01/16 (%)	Latest Life Change (Docket #)	Life Change (Yrs)	Latest Net Salvage Change (Docket #)	Net Salvage Change (%)	Number of Life Changes in the Last Five Years	Number of Net Salvage Changes in the Last Five Years
Monticello											
E302	Franchises & Consents	16.8	14.8	0.0	0.0	EG002-D-07-251	20.0	N/A	N/A	0	N/A
E321	Structures & Improvements	16.8	14.8	0.0	0.0	EG002-D-07-251	20.0	N/A	N/A	0	N/A
E322	Reactor Plant Equipment	16.8	14.8	0.0	0.0	EG002-D-07-251	20.0	N/A	N/A	0	N/A
E323	Turbogenerator Units	16.8	14.8	0.0	0.0	EG002-D-07-251	20.0	N/A	N/A	0	N/A
E324	Accessory Electric Equipment	16.8	14.8	0.0	0.0	EG002-D-07-251	20.0	N/A	N/A	0	N/A
E325	Miscellaneous Power Plant Equipment	16.8	14.8	0.0	0.0	EG002-D-07-251	20.0	N/A	N/A	0	N/A
Monticello - Interim Storage Facility											
E321	Structures and Improvements	16.8	14.8	0.0	0.0	EG002-D-07-251	20.0	N/A	N/A	0	N/A
E322	Reactor Plant Equipment	16.8	14.8	0.0	0.0	EG002-D-07-251	20.0	N/A	N/A	0	N/A
Prairie Island											
E321	Structures & Improvements	20.3	18.3	0.0	0.0	EG002-D-11-144	10.0	N/A	N/A	1	N/A
E322	Reactor Plant Equipment	20.3	18.3	0.0	0.0	EG002-D-11-144	10.0	N/A	N/A	1	N/A
E323	Turbogenerator Units	20.3	18.3	0.0	0.0	EG002-D-11-144	10.0	N/A	N/A	1	N/A
E324	Accessory Electric Equipment	20.3	18.3	0.0	0.0	EG002-D-11-144	10.0	N/A	N/A	1	N/A
E325	Miscellaneous Power Plant Equipment	20.3	18.3	0.0	0.0	EG002-D-11-144	10.0	N/A	N/A	1	N/A
Prairie Island - Interim Storage Facility											
E321	Structures and Improvements	20.3	18.3	0.0	0.0	EG002-D-11-144	10.0	N/A	N/A	1	N/A
E322	Reactor Plant Equipment	20.3	18.3	0.0	0.0	EG002-D-11-144	10.0	N/A	N/A	1	N/A

Electric Hydro Production

Account	Description	Current Approved Remaining Life 01/01/14 (Yrs)	Proposed Remaining Life 01/01/16 (Yrs)	Current Approved Net Salvage 01/01/14 (%)	Proposed Net Salvage 01/01/16 (%)	Latest Life Change (Docket #)	Life Change (Yrs)	Latest Net Salvage Change (Docket #)	Net Salvage Change (%)	Number of Life Changes in the Last Five Years	Number of Net Salvage Changes in the Last Five Years
Hennepin Island											
E302	Franchises & Consents	20.2	18.2	0.0	0.0	EG002-D-05-288	2.2	EG002-D-05-288	N/A	0	N/A
E331	Structures & Improvements	20.2	18.2	-30.0	-26.4	EG002-D-05-288	2.2	EG002-D-05-288	-20.0	0	0
E332	Reservoirs, Dams & Waterways	20.2	18.2	-30.0	-26.4	EG002-D-05-288	2.2	EG002-D-05-288	-15.0	0	0
E333	Water Wheels, Turbines & Generators	20.2	18.2	-30.0	-26.4	EG002-D-05-288	2.2	EG002-D-05-288	-35.0	0	0
E334	Accessory Electric Equipment	20.2	18.2	-30.0	-26.4	EG002-D-05-288	2.2	EG002-D-05-288	-35.0	0	0
E335	Miscellaneous Power Plant Equipment	20.2	18.2	-30.0	-26.4	EG002-D-05-288	2.2	EG002-D-05-288	-35.0	0	0
Upper Dam											
E332	Reservoirs, Dams & Waterways	20.2	18.2	-30.0	-26.4	EG002-D-05-288	2.2	EG002-D-05-288	-15.0	0	0
E335	Miscellaneous Power Plant Equipment	20.2	18.2	-30.0	-26.4	EG002-D-05-288	2.2	EG002-D-05-288	-35.0	0	0

Electric Other Production

Account	Description	Current Approved Remaining Life 01/01/14 (Yrs)	Proposed Remaining Life 01/01/16 (Yrs)	Current Approved Net Salvage 01/01/14 (%)	Proposed Net Salvage 01/01/16 (%)	Latest Life Change (Docket #)	Life Change (Yrs)	Latest Net Salvage Change (Docket #)	Net Salvage Change (%)	Number of Life Changes in the Last Five Years	Number of Net Salvage Changes in the Last Five Years
Alliant Tech											
E344	Generators	0.0	0.0	0.0	0.0	EG002-D-07-251	3.0	N/A	N/A	0	N/A
Angus C. Anson Unit 2 & 3											
E341	Structures & Improvements	21.4	19.4	-4.5	-3.3	EG002-D-05-288	15.6	EG002-D-10-173	5.5	0	1
E342	Fuel Holders, Producers & Accessories	5.8	3.8	-4.4	-9.6	EG002-D-93-1247	25.0	EG002-D-10-173	-4.4	0	1
E344	Generators	5.8	3.8	-4.4	-9.6	EG002-D-93-1247	25.0	EG002-D-10-173	-4.4	0	1
E345	Accessory Electric Equipment	5.8	3.8	-4.4	-9.6	EG002-D-93-1247	25.0	EG002-D-10-173	-4.4	0	1
E346	Miscellaneous Power Plant Equipment	5.8	3.8	-4.4	-9.6	EG002-D-93-1247	25.0	EG002-D-10-173	-4.4	0	1
Angus C. Anson Unit 4											
E341	Structures & Improvements	21.4	19.4	-4.5	-3.3	EG002-D-05-288	15.6	EG002-D-10-173	5.5	0	1
E342	Fuel Holders, Producers & Accessories	21.4	19.4	-4.5	-3.3	EG002-D-05-288	30.0	EG002-D-10-173	-4.5	0	1
E344	Generators	21.4	19.4	-4.5	-3.3	EG002-D-05-288	30.0	EG002-D-10-173	-4.5	0	1
E345	Accessory Electric Equipment	21.4	19.4	-4.5	-3.3	EG002-D-05-288	30.0	EG002-D-10-173	-4.5	0	1
E346	Miscellaneous Power Plant Equipment	21.4	19.4	-4.5	-3.3	EG002-D-05-288	30.0	EG002-D-10-173	-4.5	0	1
Black Dog Unit 5											
E341	Structures & Improvements	18.0	16.0	-1.7	-8.6	EG002-D-02-214	30.0	EG002-D-13-1158	6.6	0	2
E342	Fuel Holders, Producers & Accessories	18.0	16.0	-1.7	-8.6	EG002-D-02-214	30.0	EG002-D-13-1158	6.6	0	2
E344	Generators	18.0	16.0	-1.7	-8.6	EG002-D-02-214	30.0	EG002-D-13-1158	6.6	0	2
E345	Accessory Electric Equipment	18.0	16.0	-1.7	-8.6	EG002-D-02-214	30.0	EG002-D-13-1158	6.6	0	2
E346	Miscellaneous Power Plant Equipment	18.0	16.0	-1.7	-8.6	EG002-D-02-214	30.0	EG002-D-13-1158	6.6	0	2
Blue Lake Units 1 thru 4											
E341	Structures & Improvements	21.4	19.4	-5.2	-5.8	EG002-D-05-288	27.5	EG002-D-10-173	19.8	0	1
E342	Fuel Holders, Producers & Accessories	0.0	8.0	-11.9	-22.9	EG002-D-08-189	2.0	EG002-D-10-173	-11.9	0	1
E344	Generators	0.0	8.0	-11.9	-22.9	EG002-D-08-189	2.0	EG002-D-10-173	-11.9	0	1
E345	Accessory Electric Equipment	0.0	8.0	-11.9	-22.9	EG002-D-08-189	2.0	EG002-D-10-173	-11.9	0	1
E346	Miscellaneous Power Plant Equipment	0.0	8.0	-11.9	-22.9	EG002-D-08-189	2.0	EG002-D-10-173	-11.9	0	1
Blue Lake Units 7 & 8											
E341	Structures & Improvements	21.4	19.4	-5.2	-5.8	EG002-D-06-227	0.1	EG002-D-10-173	19.8	0	1
E342	Fuel Holders, Producers & Accessories	21.4	19.4	-5.2	-5.8	EG002-D-06-227	0.1	EG002-D-10-173	-5.2	0	1
E344	Generators	21.4	19.4	-5.2	-5.8	EG002-D-06-227	0.1	EG002-D-10-173	-5.2	0	1
E345	Accessory Electric Equipment	21.4	19.4	-5.2	-5.8	EG002-D-06-227	0.1	EG002-D-10-173	-5.2	0	1
E346	Miscellaneous Power Plant Equipment	21.4	19.4	-5.2	-2.8	EG002-D-06-227	0.1	EG002-D-10-173	-5.2	0	1
Grand Meadow Wind Project											
E340.1	Wind Rights	19.9	17.9	0.0	0.0	EG002-D-08-189	25.0	N/A	N/A	0	N/A
E341	Structures & Improvements	19.9	17.9	-8.7	-11.1	EG002-D-08-189	25.0	EG002-D-10-173	1.3	0	1
E342	Fuel Holders, Producers & Accessories	19.9	17.9	-8.7	-11.1	EG002-D-08-189	25.0	EG002-D-10-173	1.3	0	1
E344	Generators	19.9	17.9	-8.7	-11.1	EG002-D-08-189	25.0	EG002-D-10-173	1.3	0	1
E345	Accessory Electric Equipment	19.9	17.9	-8.7	-11.1	EG002-D-08-189	25.0	EG002-D-10-173	1.3	0	1
E346	Miscellaneous Power Plant Equipment	19.9	17.9	-8.7	-11.1	EG002-D-08-189	25.0	EG002-D-10-173	1.3	0	1

Electric Other Production

Account	Description	Current Approved Remaining Life 01/01/14 (Yrs)	Proposed Remaining Life 01/01/16 (Yrs)	Current Approved Net Salvage 01/01/14 (%)	Proposed Net Salvage 01/01/16 (%)	Latest Life Change (Docket #)	Life Change (Yrs)	Latest Net Salvage Change (Docket #)	Net Salvage Change (%)	Number of Life Changes in the Last Five Years	Number of Net Salvage Changes in the Last Five Years
Granite City											
E341	Structures & Improvements	5.4	3.4	-38.8	-50.4	E002-GR-12-961	6.0	EG002-D-10-173	21.2	1	1
E342	Fuel Holders, Producers & Accessories	5.4	3.4	-38.8	-50.4	E002-GR-12-961	6.0	EG002-D-10-173	-38.8	1	1
E344	Generators	5.4	3.4	-38.8	-50.4	E002-GR-12-961	6.0	EG002-D-10-173	-38.8	1	1
E345	Accessory Electric Equipment	5.4	3.4	-38.8	-50.4	E002-GR-12-961	6.0	EG002-D-10-173	-38.8	1	1
E346	Miscellaneous Power Plant Equipment	5.4	3.4	-38.8	-50.4	E002-GR-12-961	6.0	EG002-D-10-173	-38.8	1	1
High Bridge											
E341	Structures & Improvements	34.4	32.4	-3.1	-3.5	E002-GR-10-971	10.0	EG002-D-10-173	6.9	1	1
E342	Fuel Holders, Producers & Accessories	34.4	32.4	-3.1	-3.5	E002-GR-10-971	10.0	EG002-D-10-173	6.9	1	1
E344	Generators	34.4	32.4	-3.1	-3.5	E002-GR-10-971	10.0	EG002-D-10-173	6.9	1	1
E345	Accessory Electric Equipment	34.4	32.4	-3.1	-3.5	E002-GR-10-971	10.0	EG002-D-10-173	6.9	1	1
E346	Miscellaneous Power Plant Equipment	34.4	32.4	-3.1	-3.5	E002-GR-10-971	10.0	EG002-D-10-173	6.9	1	1
Inver Hills											
E341	Structures & Improvements	13.0	11.0	-11.0	-13.7	EG002-D-10-173	10.0	EG002-D-10-173	19.0	1	1
E342	Fuel Holders, Producers & Accessories	13.0	11.0	-11.0	-13.7	EG002-D-10-173	10.0	EG002-D-10-173	-11.0	1	1
E344	Generators	13.0	11.0	-11.0	-13.7	EG002-D-10-173	10.0	EG002-D-10-173	-11.0	1	1
E345	Accessory Electric Equipment	13.0	11.0	-11.0	-13.7	EG002-D-10-173	10.0	EG002-D-10-173	-11.0	1	1
E346	Miscellaneous Power Plant Equipment	13.0	11.0	-11.0	-13.7	EG002-D-10-173	10.0	EG002-D-10-173	-11.0	1	1
Key City											
E341	Structures & Improvements	0.0	0.0	-38.6	-47.6	EG002-D-08-189	3.0	EG002-D-10-173	-18.6	0	1
E342	Fuel Holders, Producers & Accessories	0.0	0.0	-38.6	-47.6	EG002-D-08-189	3.0	EG002-D-10-173	-18.6	0	1
E344	Generators	0.0	0.0	-38.6	-47.6	EG002-D-08-189	3.0	EG002-D-10-173	-18.6	0	1
E345	Accessory Electric Equipment	0.0	0.0	-38.6	-47.6	EG002-D-08-189	3.0	EG002-D-10-173	-18.6	0	1
E346	Miscellaneous Power Plant Equipment	0.0	0.0	-38.6	-47.6	EG002-D-08-189	3.0	EG002-D-10-173	-18.6	0	1
Nobles Wind Project											
E340.1	Wind Rights	21.9	19.9	0.0	0.0	EG002-D-10-173	25.0	N/A	-8.7	1	N/A
E341	Structures & Improvements	21.9	19.9	-8.7	-6.0	EG002-D-10-173	25.0	EG002-D-10-173	-8.7	1	1
E342	Fuel Holders, Producers & Accessories	21.9	19.9	-8.7	-6.0	EG002-D-10-173	25.0	EG002-D-10-173	-8.7	1	1
E344	Generators	21.9	19.9	-8.7	-6.0	EG002-D-10-173	25.0	EG002-D-10-173	-8.7	1	1
E345	Accessory Electric Equipment	21.9	19.9	-8.7	-6.0	EG002-D-10-173	25.0	EG002-D-10-173	-8.7	1	1
E346	Miscellaneous Power Plant Equipment	21.9	19.9	-8.7	-6.0	EG002-D-10-173	25.0	EG002-D-10-173	-8.7	1	1
Riverside											
E341	Structures & Improvements	35.2	33.2	-5.0	-5.7	E002-GR-10-971	10.0	EG002-D-10-173	5.0	1	1
E342	Fuel Holders, Producers & Accessories	35.2	33.2	-5.0	-5.7	E002-GR-10-971	10.0	EG002-D-10-173	5.0	1	1
E344	Generators	35.2	33.2	-5.0	-5.7	E002-GR-10-971	10.0	EG002-D-10-173	5.0	1	1
E345	Accessory Electric Equipment	35.2	33.2	-5.0	-5.7	E002-GR-10-971	10.0	EG002-D-10-173	5.0	1	1
E346	Miscellaneous Power Plant Equipment	35.2	33.2	-5.0	-5.7	E002-GR-10-971	10.0	EG002-D-10-173	5.0	1	1
United Hospital											
E344	Generators	3.7	1.7	0.0	0.0	N/A	N/A	N/A	N/A	0	N/A
Wind-to-Battery System											
E348.1	Fuel Holders, Producers & Accessories	10.0	8.0	0.0	0.0	EG002-D-09-160	15.0	N/A	N/A	1	N/A

Gas Production

Account	Description	Current Approved Remaining Life 01/01/14 (Yrs)	Proposed Remaining Life 01/01/16 (Yrs)	Current Approved Net Salvage 01/01/14 (%)	Proposed Net Salvage 01/01/16 (%)	Latest Life Change (Docket #)	Life Change (Yrs)	Latest Net Salvage Change (Docket #)	Net Salvage Change (%)	Number of Life Changes in the Last Five Years	Number of Net Salvage Changes in the Last Five Years
Maplewood											
G305	Structures & Improvements	6.0	14.0	-17.0	-70.3	EG002-D-10-173	4.0	EG002-D-05-288	-7.0	1	0
G311	LP Gas Equipment	6.0	14.0	8.0	-70.3	EG002-D-10-173	4.0	EG002-D-05-288	-7.0	1	0
G320	Other Equipment	6.0	14.0	0.0	-70.3	EG002-D-10-173	4.0	EG002-D-05-288	-10.0	1	0
Sibley											
G305	Structures & Improvements	6.0	14.0	-1.0	-59.6	EG002-D-10-173	4.0	EG002-D-05-288	9.0	1	0
G311	LP Gas Equipment	6.0	14.0	8.0	-59.6	EG002-D-10-173	4.0	EG002-D-05-288	-7.0	1	0
G320	Other Equipment	6.0	14.0	-1.0	-59.6	EG002-D-10-173	4.0	EG002-D-05-288	-11.0	1	0
Wescott											
G305	Structures & Improvements	6.0	14.0	-3.0	-14.4	EG002-D-10-173	2.0	EG002-D-05-288	7.0	1	0
G311	LP Gas Equipment	6.0	14.0	1.0	-14.4	EG002-D-10-173	2.0	EG002-D-05-288	-9.0	1	0
G320	Other Equipment	6.0	14.0	3.0	-14.4	EG002-D-10-173	2.0	EG002-D-05-288	3.0	1	0

Gas Storage

Account	Description	Current Approved Remaining Life 01/01/14 (Yrs)	Proposed Remaining Life 01/01/16 (Yrs)	Current Approved Net Salvage 01/01/14 (%)	Proposed Net Salvage 01/01/16 (%)	Latest Life Change (Docket #)	Life Change (Yrs)	Latest Net Salvage Change (Docket #)	Net Salvage Change (%)	Number of Life Changes in the Last Five Years	Number of Net Salvage Changes in the Last Five Years
Wescott											
G361	Structures & Improvements	10.0	8.0	-10.0	-14.4	EG002-D-14-181	6.0	EG002-D-79-851	-10.0	1	0
G362	Gas Holders	10.0	8.0	5.0	-14.4	EG002-D-14-181	6.0	EG002-D-79-852	5.0	1	0
G363	Purification Equipment	10.0	8.0	1.0	-14.4	EG002-D-14-181	6.0	EG002-D-05-288	-4.0	1	0
G363.1	Liquefaction Equipment	10.0	8.0	2.0	-14.4	EG002-D-14-181	6.0	EG002-D-05-288	-3.0	1	0
G363.2	Vaporizing Equipment	14.0	12.0	2.0	-14.4	EG002-D-98-221	30.0	EG002-D-05-288	-3.0	0	0
G363.3	Compressor Equipment	19.0	17.0	2.0	-14.4	EG002-D-13-1158	15.0	EG002-D-05-288	-8.0	1	0
G363.4	Measuring & Regulating Equipment	10.0	8.0	6.0	-14.4	EG002-D-14-181	6.0	EG002-D-05-288	6.0	1	0
G363.5	Other Equipment	10.0	8.0	0.0	-14.4	EG002-D-14-181	6.0	EG002-D-79-852	0.0	1	0

DISMANTLING COST STUDY

for

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

Stations

prepared for

Xcel Energy

prepared by

TLG Services, Inc.
An Entergy Company

148 New Milford Road East
Bridgewater, CT

May 2015

APPROVALS

Project Engineer	Benjamin J. Stochmal	5/12/15 Date
Project Manager	Francis. W. Seymore	5/12/15 Date
Technical Manager	Geoffrey M. Griffiths	5/12/15 Date

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REVISION LOG

Rev. No.	CRA No.	Date	Item Revised	Reason for Revision
0		05/12/2015		Original Issue

ACRONYMS / DEFINITIONS

- AIF Atomic Industrial Forum
- CT Combustion Turbine
- CCT Combined Cycle Turbine
- DOC Decommissioning Operations Contractor
- DOE Department of Energy
- HRSG Heat Recovery Steam Generator
- Mw Megawatt
- MWe Megawatt (electric)
- NESP National Environmental Studies Project
- NG Natural Gas
- NRC Nuclear Regulatory Commission
- OSHA Occupational Safety & Health Administration
- RDF Refuse Derived Fuel
- TLG TLG Services, Inc.

EXECUTIVE SUMMARY

This report, prepared by TLG Services, Inc. (TLG), provides estimated costs for the complete dismantling of the following electric generating stations, gas storage and production plants operated by Xcel Energy, which either owns or has a share in ownership in each of these facilities:

Generating Stations Located In Minnesota:

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

Generating Station Located In South Dakota:

- Angus Anson

Gas production and storage plants (all located in Minnesota):

- Maplewood
- Sibley
- Wescott

The dismantling estimate includes the cost of removing the equipment and structures for each of the above-referenced facilities and limited restoration of the sites. 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 work activities and labor, equipment, material, and waste disposal cost elements:

- Preparation of the units for safe dismantling

- Abatement of asbestos containing materials prior to dismantling (where applicable)
- Removal and disposition of all installed equipment
- Demolition and disposition of subsurface utilities and buildings and foundations
- Removal of below grade foundations (Minnesota facilities only)
- Coal yard and ash pond remediation (Sherburne County, King, and Minnesota Valley)
- Limited site restoration (grading and seeding for drainage and erosion control)
- 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

The general approach in assembling the estimate was to develop an inventory of equipment and structures designated to be removed for each facility. This inventory was established using site walk-downs (including discussions with the Operations & Maintenance staff), station-provided equipment databases, and plant drawings. This inventory accounted for similarities between facilities.

The abatement, removal, demolition and restoration activity costs are estimated by applying unit factors (developed for each inventory item) against the 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). The potential value of scrap from materials generated in dismantling the 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.

OSHA states that demolition involves additional hazards due to unknown factors which make demolition work particularly dangerous. OSHA states that the hazards of demolition work can be controlled and eliminated with the proper planning, the right personal protective equipment, necessary training, and compliance with OSHA standards. This cost estimate is intended to provide sufficient monies to allow Xcel management to perform the project using these principles and standards.

The dismantling costs, expressed in thousands of 2014 dollars, are provided in the following table.

SUMMARY OF DISMANTLING COSTS

(All costs are in thousands of 2014 dollars)

Station	Unit	MWe rating	Type	Fuel	In Service	Station Cost
Electric Generation Facilities						
Allen S. King	1	588	Steam	Coal	1968	56,202
Angus Anson	1		Steam	N/A	1966	10,179
	2	106	CT	NG/Oil	1994	
	3	110	CT	NG/Oil	1994	
	4	165	CT	NG/Oil	2005	
Black Dog	2	98	Steam	Coal/NG	1952	48,458
	3	108	Steam	Coal/NG	1955	
	4	170	Steam	Coal/NG	1960	
	5	162	CT	Coal/NG	2002	
Blue Lake	1	45	CT	NG/Oil	1974	13,716
	2	45	CT	NG/Oil	1974	
	3	45	CT	NG/Oil	1974	
	4	45	CT	NG/Oil	1974	
	7	165	CT	NG/Oil	2005	
	8	165	CT	NG/Oil	2005	
Grand Meadow	1-67	101	Wind	Wind	2008	22,189
Granite City	1	18	CT	NG/Oil	1969	4,423
	2	18	CT	NG/Oil	1969	
	3	18	CT	NG/Oil	1969	
	4	18	CT	NG/Oil	1969	
Hennepin Island	1-5	14	Hydro	Water	1882	6,133
High Bridge	1	160	CT	NG/Oil	2008	13,364
	2	160	CT	NG/Oil	2008	
	3	250	Steam	(note 1)	2008	
Inver Hills	1	60	CT	NG/Oil	1972	10,721
	2	60	CT	NG/Oil	1972	
	3	60	CT	NG/Oil	1972	
	4	60	CT	NG/Oil	1972	
	5	60	CT	NG/Oil	1972	
	6	60	CT	NG/Oil	1972	

SUMMARY OF DISMANTLING COSTS
(continued)

(All costs are in thousands of 2014 dollars)

Station	Unit	MWe rating	Type	Fuel	In Service	Station Cost
Key City	1	18	CT	NG/Oil	1970	4,096
	2	18	CT	NG/Oil	1970	
	3	18	CT	NG/Oil	1970	
	4	18	CT	NG/Oil	1970	
Minnesota Valley	1	10	Steam	Coal	1949	22,063
	2	10	Steam	Coal	1949	
	3	44	Steam	Coal	1953	
Nobles	1-134	201	Wind	Wind	2011	30,794
Red Wing	1	10	Steam	RDF	1949	16,183
	2	10	Steam	RDF	1949	
Riverside	7	165	CCT	(note 2)	1964	34,399
	8	231	Steam	Coal	2009	
	9	173	CT	NG/Oil	2009	
	10	173	CT	NG/Oil	2009	
Sherco	1	750	Steam	Coal	1976	154,416
	2	750	Steam	Coal	1977	
	3	900	Steam	Coal	1987	
Wilmarth	1	10	Steam	RDF	1948	14,195
	2	10	Steam	RDF	1951	
Gas Production/Storage Facilities						
Maplewood					1957	4,563
Sibley					1953	4,135
Wescott					1962	11,419
Fleet Totals		**6,741**				**$481,649**

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-fueled and wind farm generating electrical generating facilities, plus their gas production and storage facilities, 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 FACILITY DESCRIPTIONS

Electric Generation Facilities

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. Units 1 and 2 were placed in service in 1994. Unit 3 was placed in service in 2005. 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. The existing Pathfinder facility holds the remnants of the test nuclear power plant (minus the reactor) built in 1965.

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 and powers the original Unit 2 steam turbine that was installed in the 1950's. Units 3 and 4 were dual fuel boilers with steam turbines, using coal as a primary fuel and natural gas for back up. 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. Units 3 and 4 were retired in April, 2015. The station generating capacity is currently 260 MWe, the generating

equipment assumed in place for this estimate had a combined capacity of 538 MWe.

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.

Hennepin Island is a hydroelectric power plant located on the Mississippi River in Minneapolis MN, on the west side of Hennepin Island. The station consists of five turbine-generator sets, and has a combined generating capacity is 13.9 megawatts. The plant was installed in 1882; it was last refurbished in 1954.

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 was a four unit simple cycle combustion gas turbine peaking facility, capable of firing on oil or natural gas. The station generating capacity was 72 megawatts with Units 1-4 at 18 MWe each. The station is located in Mankato, Minnesota. The units were installed in 1970, and retired in March of 2015.

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.

Nobles is a 134 unit wind turbine complex located in the Buffalo Ridge area of Minnesota. The wind farm is spread out over roughly 42 square miles in Nobles County, Minnesota, in Olney, Dewald, Larkin, and Summit Lake townships. Each wind turbine / generator set has a rated capacity of 1.5 MWe, for a complex total of 201 MWe. The units were placed in service in 2011.

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 in 1976, 1977, 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 were installed in the early 1950's and modified in 1987 to burn RDF.

Gas Production/Storage Facilities

Maplewood is a propane storage facility with an effective propane storage capacity of 1.355 million gallons. The plant, located in Maplewood, Minnesota, was placed in-service in 1957.

Sibley is a propane storage facility used to supplement natural gas supplies during peak demand periods, with an effective propane storage capacity of 1.2 million gallons. The plant, located in Mendota Heights, Minnesota, was placed in service in 1953.

Wescott is a liquefied natural gas and propane peak-shaving plant. The facility collects and stores propane and natural gas for future supply to the local propane and natural gas distribution systems during cold winter periods when regional natural gas and propane supplies may not meet the increased demand. The facility is located in Inver Grove Heights, Minnesota, and was completed in 2000.

1.3 SCOPE

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

- Preparation for safe dismantling;
    - 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 generating station or facility, 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 2014 dollars.

1.4 GENERAL APPROACH

The general approach in assembling the estimate was to develop an inventory of equipment and structures designated to be removed for each facility. This inventory was established using site walk-downs (including discussions with the Operations & Maintenance staff), station-provided equipment databases, and plant drawings. This inventory accounted for similarities between facilities.

The abatement, removal, demolition and restoration activity costs are estimated by applying unit factors (developed for each inventory item) against the 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). The potential value of scrap from materials generated in dismantling the 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.

OSHA states that demolition involves additional hazards due to unknown factors which make demolition work particularly dangerous. OSHA states that the hazards of demolition work can be controlled and eliminated with the

proper planning, the right personal protective equipment, necessary training, and compliance with OSHA standards. The cost estimate is intended to provide sufficient monies to allow Xcel management to perform the project using these principles and standards.

Limited site landscaping is included, which covers 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. 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.

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.

2.1 PRE-SHUTDOWN ACTIVITIES

The estimates include a planning staff for a year prior to final shutdown to plan for the dismantling program. A staff of seven full-time equivalent personnel is included in this estimate; smaller stations will have a reduced staffing amount.

2.2 POST-SHUTDOWN PLANT STAFF TRANSITION 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

- Disposition of surplus bulk chemicals and gas storage containers
- Removal of miscellaneous hazardous wastes and combustible materials
- Installation of any appropriate physical barriers (sealing circulating water system) and/or security barriers

The estimate does not account for an extended period of time between final shutdown of the unit(s) and onset of the dismantling program. As such, the plant operations and maintenance staff would be expected to perform the following activities in the interval of time between final plant shutdown, and the onset of the dismantling program.

- 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
- Maintenance of the facility (maintaining roofs and windows, drain systems, and electrical systems to preclude creating hazardous working conditions in the future)

2.3 DISMANTLING ENGINEERING / PLANNING AND ASBESTOS ABATEMENT

When the decision is made to begin physical dismantling of a station, Xcel Energy will begin field dismantling activities, beginning with engineering and planning, and removal of asbestos and other hazardous materials from the station.

2.3.1 Engineering and 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.

Xcel Energy 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
- Documenting hazardous materials location and inventory

2.3.2 Asbestos / Hazardous Material Abatement (as 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.
- Clean coal-fired boilers by washing down all surfaces interior to the boilers.
- Clean fly-ash handling equipment, e.g., filters and holding tanks.
- De-water ash settling ponds and/or basins.

2.3.3 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

2.4 DISMANTLING OPERATIONS

Dismantling activities are initiated after completing the engineering and planning process, and after asbestos abatement and removal of hazardous materials is complete. The sequence of activities will be determined at the time of dismantling, but typically a sequence would include the following items. Dismantling sequences are presented for each of the Xcel Energy facility types. In all types the station is electrically disconnected from all power sources; the Dismantling Contractor will provide temporary power as needed to support the removal activities.

2.4.1 Steam Plants

- 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 remove reinforcing steel
- Removing any temporary services used to support the dismantling effort (lighting / ventilation / electrical / groundwater management)

2.4.2 Combustion Turbines

- Removing above-ground storage tanks
- Removing large equipment from rooftops or at higher elevations
- Disassembling the turbine and generator
- Removing all other equipment and components required prior to building demolition
- Blasting/dismantling the concrete turbine-generator foundation(s)
- Demolishing remaining concrete
- Removing cooling tower(s) and / or cooling water intake and discharge structures (High Bridge only)
- 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 remove reinforcing steel

2.4.3 Internal Combustion Plants

Not applicable for Xcel Energy.

2.4.4 Hydroelectric Plants

- Installing cofferdams at inlet to power channel and discharge channel
- Removing large equipment from rooftops or at higher elevations
- Disassembling and removing the generators

- Disassembling and removing the water turbines
- Removing all other equipment and components required prior to structures demolition
- Removing the powerhouse structure and interior floors
- Blasting/dismantling the concrete turbine-generator foundations
- Dismantling steel framing
- Demolishing brick walls and structural concrete
- 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 remove reinforcing steel

2.4.5 Wind Turbines

- Removing turbine blades from turbine shaft
- Removing turbine-generator housings from towers
- Removing towers from foundations
- Removing all other equipment and components required prior to structures demolition
- Blasting/dismantling the concrete tower foundations
- Excavating and removing all buried electrical cables
- 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

2.4.6 Photovoltaic Plants

Not applicable for Xcel Energy.

2.5 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:

- Crush all concrete rubble and remove reinforcing steel. Concrete debris will be shipped off site for disposal as construction debris. Reinforcing steel will be recycled
- Backfill below grade voids with clean compactible fill as 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

3. 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. In the same manner, non-steam power facilities were also used as reference units for other, similar Xcel Energy facilities. The inventory was adjusted to reflect the difference between the rating of the Xcel Energy reference unit and the rating of the comparable unit.

There are expected differences in other facilities, even if the power generating equipment 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 2014 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.

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 3.1 and

3.2 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, and Key City).

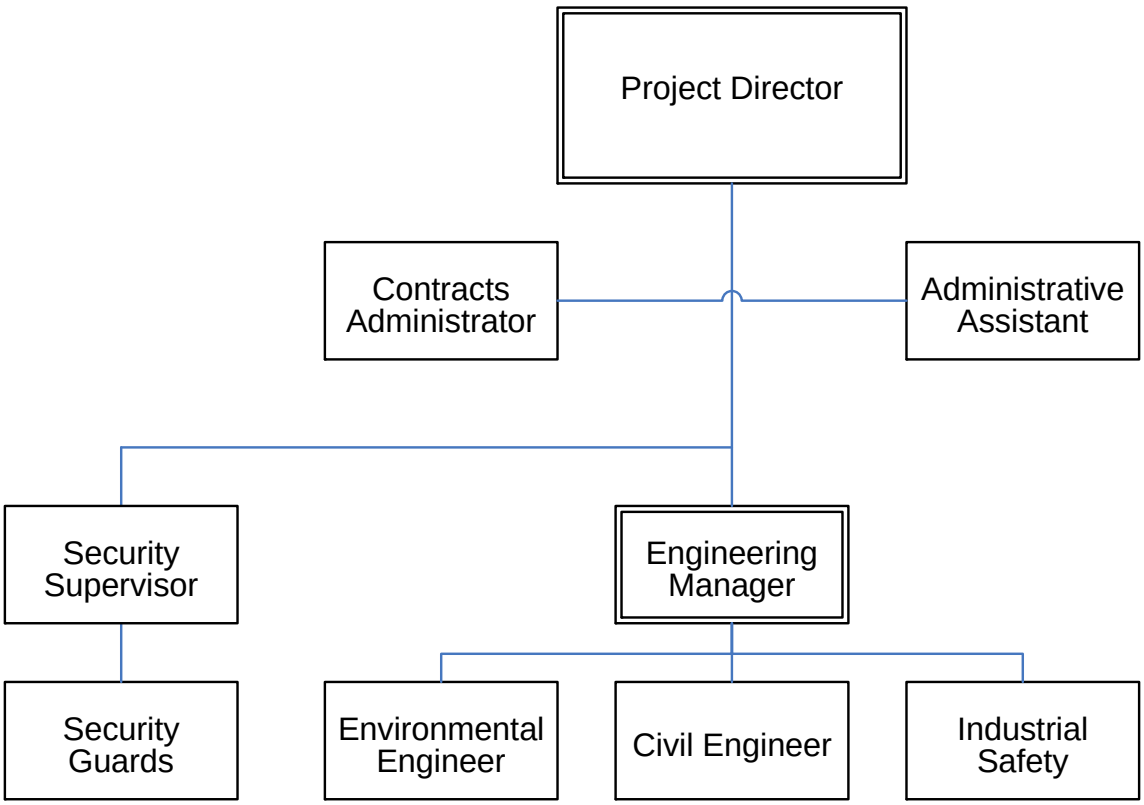
3.2 METHODOLOGY

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.

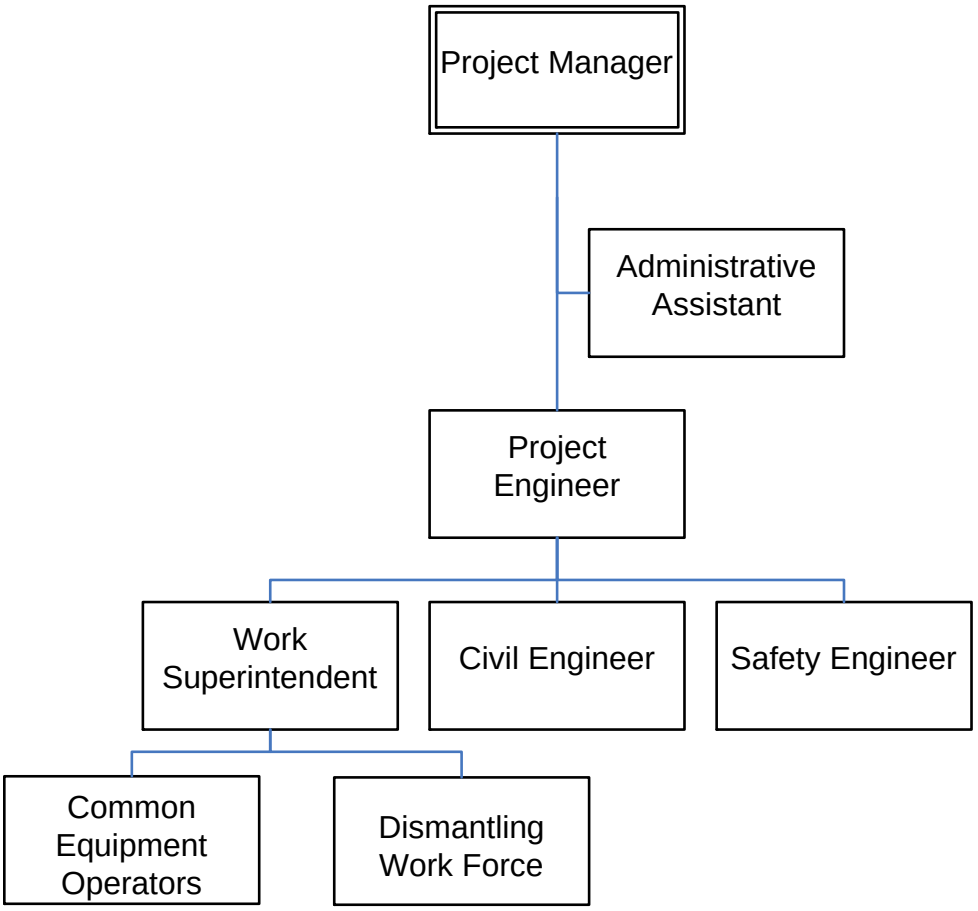
The unit cost factor method provides a demonstrable basis for establishing reliable cost estimates. The detail of activities for labor costs, equipment and consumables costs provide assurance that cost elements have not been omitted. Detailed unit cost factors, coupled with the site-specific inventory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

FIGURE 3.1
DISMANTLING PROJECT ORGANIZATION
UTILITY STAFF



For a large station such as Sherburne County, this represents a full-time equivalent staffing level of six personnel. This value is reduced for smaller stations.

FIGURE 3.2
DISMANTLING PROJECT ORGANIZATION
DECOMMISSIONING CONTRACTOR STAFF



For a large station such as Sherburne County, this represents a full-time equivalent staffing level of 11.5 personnel. This value is reduced for smaller stations.

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 2014 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 occupational (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 2014.
7. All power to the structures will be disconnected prior to beginning removal activities ("Cold and Dark"). The Decommissioning Contractor

will provide for temporary power as needed to support dismantling activities.

8. Ash ponds will be dewatered and closed after shutdown.
9. 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.

<u>Economic Assumptions</u>

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 An allowance of 2% of craft labor costs is used for small tools.

19. A 12.5% fee is added to the Demolition Contractor's cost to account for its overhead and profit.
20. A 25% contingency is applied to asbestos remediation activities.
21. A 15% contingency is applied to all remaining dismantling-related costs.
22. An allowance has been included for post-dismantling environmental monitoring costs (where applicable).
23. 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

24. 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.
25. Large equipment and components will be removed prior to structures demolition.
26. 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).
27. Turbine pedestals and powerhouse building foundations will be removed by controlled blasting and back-filled to grade.
28. Structures and foundations will be removed to a depth of three feet below grade, with any resulting voids back-filled to grade level.
29. 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.
30. The dismantling of the electrical equipment terminates at the switch yard boundary. The switch yard is left intact.
31. Concrete rubble generated during dismantling will be crushed, reinforcing steel removed, and the concrete disposed of offsite as construction debris.
32. 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.

33. Roads, parking lots, etc., are removed after the facility is dismantled (with the exception of the immediate area around the switchyard).

Scheduling Assumptions

34. All work is performed during an eight-hour workday, five days per week, with no overtime.
35. 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.
36. 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.
- The boiler and precipitator will be cleaned prior to dismantling.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.
- Rockbestos-insulated electrical cabling and other ACM in cable trays (all cable trays & cabling disposed of as ACM).
- The soil beneath the area of the coal pile will be removed to a depth of five feet; the soil will be disposed of offsite as hazardous material.
- The ash pond will be backfilled with clean fill prior to placement of the closure cap.

3.4.2 Angus Anson

- The Pathfinder Unit 1 building has been included in this estimate.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.
- Concrete will be removed to three feet below grade.
- Four 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. Cleaning of these tanks is included.

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. Cleaning of these tanks is included.

3.4.7 Hennepin Island

- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.
- The estimate does not include dam or earthworks.
- Inlet channel to turbines will be backfilled.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.

3.4.8 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.

3.4.9 Inver Hills

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

3.4.10 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. Cleaning of these tanks is included.

3.4.11 Maplewood Gas Plant

- Facility includes multiple liquefied natural gas storage tanks.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.12 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.
- The boiler and precipitator will be cleaned prior to dismantling.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.
- Rockbestos-insulated electrical cabling and other ACM in cable trays (all cable trays & cabling disposed of as ACM).
- The soil beneath the area of the coal pile will be removed to a depth of five feet; the soil will be disposed of offsite as hazardous material.
- The ash pond will be backfilled with clean fill prior to placement of the closure cap.

3.4.13 Nobles 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.

3.4.14 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 in not included in the estimate.
- The boiler and precipitator will be cleaned prior to dismantling.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.

- Rockbestos-insulated electrical cabling and other ACM in cable trays (all cable trays & cabling disposed of as ACM).

3.4.15 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.
- Includes barge unloading dock and concrete piles.
- Rockbestos-insulated electrical cabling and other ACM in cable trays (all cable trays & cabling disposed of as ACM).

3.4.16 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.
- The boiler and precipitator/baghouse will be cleaned prior to dismantling.
- Rockbestos-insulated electrical cabling and other ACM in cable trays (all cable trays & cabling disposed of as ACM) – Units 1 and 2 only.
- The soil beneath the area of the coal pile will be removed to a depth of five feet; the soil will be disposed of on site in the ash pond.
- The ash pond will be backfilled with coal yard soil prior to placement of the closure cap.
- Some of the planning for Sherburne County includes a unit shutdown with the other units remaining in operation for a number of years. In this event, the costs in Table 5.2p, for the shutdown unit only, should be increased by some fraction to allow for constraints on demolition activities on the shutdown with the other units operational. Based

upon discussions with Xcel Energy personnel, an increase of 20% can be used for planning purposes.

3.4.17 Sibley Gas Plant

- Facility includes multiple liquefied natural gas storage tanks.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.18 Wescott Gas Plant

- Facility includes two large insulated liquefied natural gas storage tanks, and two large propane storage tank.
- There is a reduced decommissioning management and contractor staff due to the smaller size of this facility.

3.4.19 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.
- The boiler and precipitator will be cleaned prior to dismantling.
- Lead paint on concrete surfaces will be removed prior to demolition of the concrete structures.
- Rockbestos-insulated electrical cabling and other ACM in cable trays (all cable trays & cabling disposed of as ACM).

4. 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
(2014 dollars)

Type of Material	Scrap Category [1]	Market Value [2]	Units	Transport Cost [3]	Scrap Metal Credit [4] (per ton)
Carbon Steel	Cast Iron	269.76	Per Ton	41.10	228.67
	No. 1	337.21	Per Ton	41.10	296.11
	Mixed Scrap	269.77	Per Ton	41.10	228.67
	Galvanized	70.24	Per Ton	41.10	0.00
Stainless Steel	SS-1	1.03	Per Pound	0.02	2,015.97
Copper	Insulated Cable	1.75	Per Pound	0.02	3,448.92
	No. 2 Copper	2.79	Per Pound	0.02	5,543.60
	Copper-Nickel	5.12	Per Pound	0.02	10,203.41
	Large Motor	0.42	Per Pound	0.02	796.51
Non-Ferrous	Aluminum	0.33	Per Pound	0.02	613.31

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. Values shown represent the average over a 5-year period from January 1, 2010 to December 31, 2014.

Note 3: The estimated cost for handling and transporting the materials to a major scrap processing center in the Twin Cities area is $41.10 / ton or $0.021 / 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)

	Carbon Steel			Stainless Steel	Galvanized	Copper			Copper		
Station Name	**Cast Iron**	**No. 1**	**Mixed Scrap**	**SS-1**	**Steel**	**Insul Cbl**	**No. 2 Cu**	**Large Mtr**	**Nickel**	**Aluminum**	**Total**
Allen S . King	2,976,846	41,253,822	53,751,220	231,075	1,010,675	157,197	590,394	1,816,821	515,763	-	102,303,814
Angus Anson	944,532	7,869,287	10,367,485	366,129	262,382	62,845	555,614	235,889	90,000	-	20,754,163
Black Dog	2,434,233	30,461,484	52,799,508	990,598	1,025,647	270,288	459,962	2,588,984	365,615	-	91,396,320
Blue Lake	562,895	7,151,454	16,794,779	471,749	151,311	66,137	534,704	167,052	-	-	25,900,081
Grand Meadow	-	3,819,000	25,238,012	-	-	-	398,519	-	-	1,562,880	31,018,411
Granite City	415,622	1,347,785	3,827,752	14,999	123,454	19,672	117,956	37,557	-	-	5,904,796
Hennepin Island	-	696,327	1,821,010	1,204	32,320	17,700	44,413	-	-	-	2,612,973
High Bridge	844,602	11,853,600	18,671,353	312,326	572,357	113,539	661,690	1,016,734	-	-	34,046,202
Inver Hills	203,824	4,123,874	17,462,898	911,580	66,005	-	537,241	6,408	-	-	23,311,831
Key City	415,622	1,000,333	3,795,209	14,999	123,454	19,672	107,108	37,557	-	-	5,513,953
Maplewood	55,689	2,277,558	514,983	109,319	31,504	6,904	16,564	374	-	-	3,012,895
Minnesota Valley	638,559	13,635,046	21,078,078	554,769	397,131	68,843	241,331	1,395,489	294,202	-	38,303,448
Nobles Wind Farm	-	7,638,000	50,476,023	-	-	-	797,039	-	-	3,125,760	62,036,822
Redwing	269,371	5,792,041	7,537,990	459,747	242,290	29,016	21,797	235,896	34,301	-	14,622,450
Riverside	717,166	26,334,947	48,412,618	275,384	437,669	61,010	596,359	1,432,370	-	-	78,267,523
Sherco	4,008,245	133,744,558	185,765,812	2,132,542	3,718,089	836,673	893,799	5,411,303	-	103	336,511,124
Sibley	53,710	1,828,422	373,174	103,107	43,503	6,703	13,829	7,250	-	-	2,429,699
Wescott	55,399	10,536,504	1,806,381	233,361	74,887	33,887	12,231	2,591	-	1,826,475	14,581,717
Wilmarth	303,646	5,170,263	7,265,649	153,131	168,520	29,016	21,797	235,896	80,000	-	13,427,919
Total	**14,899,962**	**316,534,305**	**527,759,936**	**7,336,019**	**8,481,199**	**1,799,103**	**6,622,348**	**14,628,171**	**1,379,881**	**6,515,217**	**905,956,140**

TABLE 4.3
SCRAP METAL CREDITS BY STATION
(thousands of 2014 dollars)

	Carbon Steel			Stainless Steel	Galvanized	Copper			Copper		
Station Name	**Cast Iron**	**No. 1**	**Mixed Scrap**	**SS-1**	**Steel**	**Insul Cbl**	**No. 2 Cu**	**Large Mtr**	**Nickel**	**Aluminum**	**Total**
Allen S . King	$ 340	$ 6,108	$ 6,146	$ 233	$ 0	$ 271	$ 1,636	$ 724	$ 2,631	$ -	$ 18,089
Angus Anson	$ 108	$ 1,165	$ 1,185	$ 369	$ 0	$ 108	$ 1,540	$ 94	$ 459	$ -	$ 5,029
Black Dog	$ 278	$ 4,510	$ 6,037	$ 999	$ 0	$ 466	$ 1,275	$ 1,031	$ 1,865	$ -	$ 16,461
Blue Lake	$ 64	$ 1,059	$ 1,920	$ 476	$ 0	$ 114	$ 1,482	$ 67	$ -	$ -	$ 5,182
Grand Meadow	$ -	$ 565	$ 2,886	$ -	$ -	$ -	$ 1,105	$ -	$ -	$ 479	$ 5,035
Granite City	$ 48	$ 200	$ 438	$ 15	$ 0	$ 34	$ 327	$ 15	$ -	$ -	$ 1,076
Hennepin Island	$ -	$ 103	$ 208	$ 1	$ 0	$ 31	$ 123	$ -	$ -	$ -	$ 466
High Bridge	$ 97	$ 1,755	$ 2,135	$ 315	$ 0	$ 196	$ 1,834	$ 405	$ -	$ -	$ 6,736
Inver Hills	$ 23	$ 611	$ 1,997	$ 919	$ 0	$ -	$ 1,489	$ 3	$ -	$ -	$ 5,041
Key City	$ 48	$ 148	$ 434	$ 15	$ 0	$ 34	$ 297	$ 15	$ -	$ -	$ 990
Maplewood	$ 6	$ 337	$ 59	$ 110	$ 0	$ 12	$ 46	$ 0	$ -	$ -	$ 571
Minnesota Valley	$ 73	$ 2,019	$ 2,410	$ 559	$ 0	$ 119	$ 669	$ 556	$ 1,501	$ -	$ 7,905
Nobles Wind Farm	$ -	$ 1,131	$ 5,771	$ -	$ -	$ -	$ 2,209	$ -	$ -	$ 959	$ 10,070
Redwing	$ 31	$ 858	$ 862	$ 463	$ 0	$ 50	$ 60	$ 94	$ 175	$ -	$ 2,593
Riverside	$ 82	$ 3,899	$ 5,535	$ 278	$ 0	$ 105	$ 1,653	$ 570	$ -	$ -	$ 12,123
Sherco	$ 458	$ 19,802	$ 21,240	$ 2,150	$ 0	$ 1,443	$ 2,477	$ 2,155	$ -	$ 0	$ 49,724
Sibley	$ 6	$ 271	$ 43	$ 104	$ 0	$ 12	$ 38	$ 3	$ -	$ -	$ 476
Wescott	$ 6	$ 1,560	$ 207	$ 235	$ 0	$ 58	$ 34	$ 1	$ -	$ 560	$ 2,662
Wilmarth	$ 35	$ 765	$ 831	$ 154	$ 0	$ 50	$ 60	$ 94	$ 408	$ -	$ 2,398
Total	**$ 1,704**	**$ 46,864**	**$ 60,341**	**$ 7,395**	**$ 0**	**$ 3,102**	**$ 18,356**	**$ 5,826**	**$ 7,040**	**$ 1,998**	**$ 152,626**

5. 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 s. Note that columns may not total due to rounding.

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.

Characterization / Temporary Services – The cost associated with performing a hazardous materials survey of the site prior to beginning field activities. Includes costs associated with de-energizing systems and isolation of the electrical systems in the buildings scheduled for dismantling. Costs for installing temporary services to support the dismantling are also included.

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

Pre-Demolition Cleaning (Boiler / Precipitator / Tanks) – The cost associated with cleaning coal-fired boilers and precipitators / baghouses, and associated flue-gas emission control systems. This line item also includes costs to clean acid and caustic storage tanks.

Asbestos / Lead Paint 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. This line item also includes lead paint abatement from concrete surfaces in the buildings.

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).

Backfill / Grade / Landscaping / Well Closure – The cost associated with backfilling below grade voids, and grading and landscaping the grounds to preclude erosion of soils. This line item also includes costs to seal groundwater monitoring wells.

Coal Yard Closure – The cost associated with removal and disposal of soil waste beneath the footprint of the coal field, and backfilling the void.

Ash Landfills / Ash Ponds & Landfills Including Evaporation Ponds / Ash Pond Dewatering – The cost associated with closure of the ponds on site, including placement of a cap on the pond(s) after backfilling.

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

Demolition Contractor Mgmt. / Super. / Safety Staff – The contractor's staff assigned to manage, engineer, and supervise the dismantling project, including site safety personnel.

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

Property Taxes – Not included in this estimate.

The following six items, grouped as Project Expenses, are calculated on a station basis, but are apportioned among the generating units on site by a ratio of the craft labor hours for each generating unit.

> *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; this is consistent with R.S. Means 2014 Item 01 54 39.70-0100.
>
> *Utilities Allowance (Office Equip & Supplies / Telephone, Electric etc.)* – The cost for procuring utility services and office supplies in support of the field office for the utility management and demolition contractor staffs.
>
> *Permits* – The cost of obtaining permits; this is consistent with R.S. Means 2014 Item 01 41 26.50.

Demolition Contractors Insurance – The cost of the demolition contractors insurance; the value is consistent with the R.S. Means 2014 Item 01 31 13.30, lines 0020, 0200, and 0600.

Demolition Contractors Fee – A fee applied to contractor activities; this represents the Contractors overhead and profit payment for the project and is consistent with R.S. Means 2014 Item 01 31 13.80 lines 0350, 0400 and 0450.

Contingency – The cost to cover expenses for unforeseen events that are likely to occur. The estimate assumes 25% [consistent with TLG's experience for similarly highly regulated activities in the nuclear industry) for the asbestos remediation work, and 15% for all other project activities, consistent with the R.S. Means 2014 Item 01 21 16.50 lines 0050 and 0100.

Scrap Credit – A credit to the project for the recovery of scrap metals. This corresponds to value shown in Table 4.3.

The following is an explanation of the contents of each column in the 5.2 Tables:

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

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

Station – Costs associated with supporting the physical dismantling work for a station.

Station Total – The summation of all Unit columns, plus Common and Station columns.

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
(2014 Dollars)

Activities (Costs)	Allen S . King	Angus Anson	Black Dog	Blue Lake	Grand Meadow	Granite City	Hennepin Island	High Bridge	Inver Hills	Key City	Maplewood	Minnesota Valley	Nobles Wind Farm	Redwing	Riverside	Sherco	Sibley	Wescott	Wilmarth	Fleet Totals
Station Rating (MWe)	588	381	538	510	101	72	14	570	360	72	0	64	201	20	830	2400	0	0	20	6741
Characterization / Temporary Services	310,861	267,194	796,583	295,861	253,600	212,861	211,861	408,861	235,194	212,861	113,431	464,722	284,061	419,722	918,583	1,005,583	113,431	201,861	420,000	7,147,133
Worker Access	536,770	-	1,109,121	-	-	-	-	-	-	-	-	159,201	-	104,997	-	1,691,955	-	-	104,997	3,707,041
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	1,080,300	320,000	1,080,900	160,000	-	160,000		-	582,500	160,000	-	500,900	-	515,600	526,800	3,243,150	-	-	515,600	8,845,750
Asbestos / Lead Paint Remediation	3,899,121	128,672	5,752,025	-	-	-	131,195	-	-	-	-	3,374,329	-	1,402,685	2,996,105	4,730,768	-	-	1,402,685	23,817,585
Equipment Removal	8,149,644	4,819,480	8,243,133	5,082,832	1,510,171	750,276	272,182	3,940,502	3,878,294	750,276	1,172,429	2,501,705	3,020,341	1,740,926	3,627,608	26,097,184	972,121	5,176,749	1,495,966	83,201,821
Boiler(s)	3,047,244	-	4,359,237	-	-	-	-	-	-	-	-	1,019,305	-	460,726	2,344,537	11,403,411	-	-	736,735	23,371,195
Structures Demolition	12,359,547	1,832,319	7,113,517	2,638,766	4,760,405	894,248	1,585,150	4,263,507	2,601,870	751,462	114,455	4,544,261	9,520,809	2,466,813	9,362,586	34,509,486	82,946	1,006,271	2,010,809	102,419,229
Backfill / Grade / Landscaping / Well Closure	3,536,523	1,168,248	2,711,115	1,437,390	6,348,648	357,297	797,889	1,654,627	1,245,629	229,004	147,923	1,571,641	12,709,304	1,051,803	2,347,747	9,439,558	151,177	927,486	769,206	48,602,215
Coal Yard Closure	9,402,791	-	-	-	-	-	-	-	-	-	-	1,875,000	-	-	-	7,250,000	-	-	-	18,527,791
Ash Landfills / Ash Ponds & Landfills Including Evaporation Ponds / Ash Pond Dewatering	2,496,967	-	3,315,000	-	-	-	-	-	-	-	-	-	-	2,208,615	-	35,271,338	-	-	1,310,464	44,602,384
Utility Management / Oversight	2,916,915	907,029	3,465,413	1,520,797	2,041,297	757,105	763,130	1,561,889	1,297,074	752,268	836,153	1,903,079	1,185,115	1,075,850	3,360,001	3,723,229	807,886	974,737	1,075,850	30,924,819
Demolition Contractor Mgmt / Super. / Safety Staff	3,274,705	777,319	4,595,219	1,381,178	2,519,614	439,332	376,197	1,471,055	891,851	428,430	483,054	1,936,531	1,404,229	997,570	4,233,101	5,421,101	441,690	929,958	997,570	32,999,700
Security	686,045	173,645	898,515	174,772	303,314	103,736	135,307	184,920	119,522	101,481	170,262	262,722	303,314	240,171	854,997	1,003,469	156,731	205,216	240,171	6,318,309
Property Taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Project Expenses																				
Shared Heavy Equipment / Operating Engineers	3,321,555	931,723	4,767,615	1,508,421	2,766,361	519,346	705,581	1,607,732	967,728	506,043	911,769	2,084,313	1,696,617	1,253,672	4,339,134	5,732,502	831,954	1,117,958	1,253,672	36,823,697
Small Tool Allowance	631,257	158,781	589,083	185,560	253,456	40,756	56,428	199,813	155,683	35,335	29,196	263,629	507,153	143,879	384,032	1,764,947	24,625	142,710	129,728	5,696,052
Utilities Allowance	52,019	29,891	68,129	30,086	52,213	17,857	23,292	31,832	20,575	17,469	29,309	45,225	52,213	41,343	64,829	76,087	26,980	35,326	41,343	756,020
Permits	651,241	130,420	556,258	159,001	230,806	42,400	51,997	169,724	132,242	38,636	37,520	254,260	364,934	160,104	389,313	1,845,463	33,062	119,229	139,860	5,506,470
Demolition Contractors Insurance	1,532,403	306,886	1,308,904	374,138	543,098	99,769	122,352	399,369	311,171	90,912	88,285	598,285	858,708	376,734	916,074	4,342,468	77,795	280,552	329,097	12,957,000
Demolition Contractors Fee	6,376,031	1,261,702	5,221,327	1,484,007	2,089,845	386,851	494,741	1,584,496	1,266,361	349,000	330,540	2,407,097	3,626,768	1,543,452	3,527,169	18,550,488	289,261	1,126,018	1,332,520	53,247,673
Sub-Total	64,261,940	13,213,309	55,951,093	16,432,808	23,672,826	4,781,835	5,727,302	17,478,328	13,705,692	4,423,177	4,464,327	25,766,207	35,533,566	16,204,663	40,192,617	177,102,187	4,009,660	12,244,072	14,306,272	549,471,882
Contingency	10,029,203	1,994,864	8,967,866	2,464,921	3,550,924	717,275	872,215	2,621,749	2,055,854	663,476	669,649	4,202,364	5,330,035	2,570,968	6,328,503	27,038,405	601,449	1,836,611	2,286,209	84,802,541
Project Total (before scrap credit)	74,291,143	15,208,173	64,918,959	18,897,730	27,223,750	5,499,110	6,599,517	20,100,078	15,761,546	5,086,653	5,133,975	29,968,571	40,863,601	18,775,631	46,521,121	204,140,592	4,611,109	14,080,683	16,592,482	634,274,423
Scrap Credit	(18,089,125)	(5,029,021)	(16,460,995)	(5,181,586)	(5,034,891)	(1,075,661)	(466,139)	(6,735,948)	(5,041,021)	(990,431)	(570,610)	(7,905,236)	(10,069,782)	(2,593,006)	(12,122,503)	(49,724,362)	(476,224)	(2,661,541)	(2,397,811)	(152,625,894)
Project Total	56,202,018	10,179,152	48,457,964	13,716,144	22,188,859	4,423,449	6,133,379	13,364,130	10,720,525	4,096,222	4,563,365	22,063,335	30,793,819	16,182,625	34,398,617	154,416,230	4,134,885	11,419,141	14,194,671	481,648,529

TABLE 5.2a

ALLEN S. KING STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Common	Station	Station Total
Allen S . King Unit Rating (MWe)	588	588		
Characterization / Temporary Services	134,000	-	176,861	310,861
Worker Access	536,770	-		536,770
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	1,000,300	80,000		1,080,300
Asbestos / Lead Paint Remediation	3,899,121	-		3,899,121
Equipment Removal	6,718,423	1,431,220		8,149,644
Boiler(s)	3,047,244	-		3,047,244
Structures Demolition	9,927,726	2,431,822		12,359,547
Backfill / Grade / Landscaping / Well Closure	2,511,069	925,454	100,000	3,536,523
Coal Yard Closure		9,402,791		9,402,791
Ash Landfills / Ash Ponds & Landfills Including Evaporation Ponds		2,496,967		2,496,967
Utility Management / Oversight			2,916,915	2,916,915
Demolition Contractor Management / Supervisory / Safety Staff			3,274,705	3,274,705
Security			686,045	686,045
Property Taxes	-	-	-	0
Project Expenses				
Shared Heavy Equipment / Operating Engineers			3,321,555	3,321,555
Small Tool Allowance	535,487	95,770	n/a	631,257
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)			52,019	52,019
Permits			651,241	651,241
Demolition Contractors Insurance			1,532,403	1,532,403
Demolition Contractors Fee			6,376,031	6,376,031
Sub-Total				64,261,940
Contingency				10,029,203
Project Total (before scrap credit)				74,291,143
Scrap Credit	(16,349,511)	(1,739,614)	-	(18,089,125)
Project Total				56,202,018

TABLE 5.2b

ANGUS ANSON STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Unit 4	Common	Station	Station Total
Angus Anson Unit Rating (MWe)	0	106	110	165	381		
Characterization / Temporary Services	25,000	20,333	20,667	24,333	-	176,861	267,194
Pre-Demolition Cleaning (Tanks)	-	-	-	-	320,000		320,000
Lead Paint Remediation	128,672	-	-	-	-		128,672
Equipment Removal	2,259,688	505,332	507,846	1,255,090	291,524		4,819,480
Structures Demolition	1,102,072	166,515	169,628	332,919	61,186		1,832,319
Backfill / Grade / Landscaping / Well Closure	226,806	70,677	111,262	475,490	184,013	100,000	1,168,248
Utility Management / Oversight						907,029	907,029
Demolition Contractor Management / Supervisory / Safety Staff						777,319	777,319
Security						173,645	173,645
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						931,723	931,723
Small Tool Allowance	74,845	15,257	16,188	41,757	10,734	n/a	158,781
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						29,891	29,891
Permits						130,420	130,420
Demolition Contractors Insurance						306,886	306,886
Demolition Contractors Fee						1,261,702	1,261,702
Sub-Total							13,213,309
Contingency							1,994,864
Project Total (before scrap credit)							15,208,173
Scrap Credit	(2,024,367)	(754,277)	(765,087)	(1,367,322)	(117,968)	-	(5,029,021)
Project Total							10,179,152

TABLE 5.2c

BLACK DOG STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	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	59,000	61,000	74,000	72,000	-	530,583	796,583
Worker Access	329,423	345,822	433,876	-	-		1,109,121
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	333,633	333,633	333,633	-	80,000		1,080,900
Asbestos Remediation	1,886,017	1,898,180	1,962,994	-	4,833		5,752,025
Equipment Removal	1,961,219	1,963,405	2,380,890	1,168,331	769,288		8,243,133
Boiler(s)	1,550,318	1,244,399	1,415,698	148,822	-		4,359,237
Structures Demolition	952,825	1,412,127	2,054,476	1,220,545	1,473,544		7,113,517
Backfill / Grade / Landscaping / Well Closure	410,734	431,181	755,977	191,102	822,121	100,000	2,711,115
Ash Landfills / Ash Ponds & Landfills Including Evaporation Ponds					3,315,000		3,315,000
Utility Management / Oversight						3,465,413	3,465,413
Demolition Contractor Management / Supervisory / Safety Staff						4,595,219	4,595,219
Security						898,515	898,515
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						4,767,615	4,767,615
Small Tool Allowance	142,991	147,122	181,558	56,016	61,396	n/a	589,083
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						68,129	68,129
Permits						556,258	556,258
Demolition Contractors Insurance						1,308,904	1,308,904
Demolition Contractors Fee						5,221,327	5,221,327
Sub-Total							55,951,093
Contingency							8,967,866
Project Total (before scrap credit)							64,918,959
Scrap Credit	(3,562,849)	(4,328,957)	(5,885,729)	(1,861,776)	(821,684)	-	(16,460,995)
Project Total							48,457,964

TABLE 5.2d

BLUE LAKE STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	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	11,500	11,500	11,500	11,500	36,500	36,500	-	176,861	295,861
Pre-Demolition Cleaning (Tanks)	-	-	-	-	-	-	160,000		160,000
Equipment Removal	486,837	486,837	486,837	486,837	1,258,778	1,258,778	617,926		5,082,832
Structures Demolition	228,079	198,182	198,182	198,182	436,101	436,101	943,937		2,638,766
Backfill / Grade / Landscaping	149,426	149,426	149,426	149,426	251,288	251,288	337,112	-	1,437,390
Utility Management / Oversight								1,520,797	1,520,797
Demolition Contractor Management / Supervisory / Safety Staff								1,381,178	1,381,178
Security								174,772	174,772
Property Taxes	-	-	-	-	-	-	-	-	0
Project Expenses									
Shared Heavy Equipment / Operating Engineers					-	-		1,508,421	1,508,421
Small Tool Allowance	17,517	16,919	16,919	16,919	39,653	39,653	37,980	n/a	185,560
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)								30,086	30,086
Permits								159,001	159,001
Demolition Contractors Insurance								374,138	374,138
Demolition Contractors Fee								1,484,007	1,484,007
Sub-Total									16,432,808
Contingency (excluding activities currently under contract)									2,464,921
Project Total (before scrap credit)									18,897,730
Scrap Credit	(660,203)	(575,787)	(575,787)	(575,787)	(1,220,662)	(1,220,662)	(352,698)	-	(5,181,586)
Project Total									13,716,144

TABLE 5.2e

GRAND MEADOW STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit, each (typ. of 67)	Common	Station	Station Total
Grand Meadow Unit Rating (MWe)	1.5	100.5		
Characterization / Temporary Services	800	-	200,000	253,600
Equipment Removal	22,540	-		1,510,171
Structures Demolition	71,051	-		4,760,405
Backfill / Grade / Landscaping	29,932	4,343,212	-	6,348,648
Utility Management / Oversight			2,041,297	2,041,297
Demolition Contractor Management / Supervisory / Safety Staff			2,519,614	2,519,614
Security			303,314	303,314
Property Taxes	-	-	-	0
Project Expenses				
Shared Heavy Equipment / Operating Engineers			2,766,361	2,766,361
Small Tool Allowance	2,486	86,864	n/a	253,456
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)			52,213	52,213
Permits			230,806	230,806
Demolition Contractors Insurance			543,098	543,098
Demolition Contractors Fee			2,089,845	2,089,845
Sub-Total				23,672,826
Contingency				3,550,924
Project Total (before scrap credit)				27,223,750
Scrap Credit	(51,830)	(1,562,263)	-	(5,034,891)
Project Total				22,188,859

TABLE 5.2f

GRANITE CITY STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	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	9,000	9,000	9,000	9,000	-	176,861	212,861
Pre-Demolition Cleaning (Tanks)	-	-	-	-	160,000		160,000
Equipment Removal	187,569	187,569	187,569	187,569	-		750,276
Structures Demolition	138,680	138,680	138,680	138,680	339,530		894,248
Backfill / Grade / Landscaping	77,363	77,363	77,363	77,363	47,847	-	357,297
Utility Management / Oversight						757,105	757,105
Demolition Contractor Management / Supervisory / Safety Staff						439,332	439,332
Security						103,736	103,736
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						519,346	519,346
Small Tool Allowance	8,252	8,252	8,252	8,252	7,748	n/a	40,756
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						17,857	17,857
Permits						42,400	42,400
Demolition Contractors Insurance						99,769	99,769
Demolition Contractors Fee						386,851	386,851
Sub-Total							4,781,835
Contingency							717,275
Project Total (before scrap credit)							5,499,110
Scrap Credit	(223,217)	(223,217)	(223,217)	(223,217)	(182,793)	-	(1,075,661)
Project Total							4,423,449

TABLE 5.2g

HENNEPIN ISLAND STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1-5	Station	Station Total
Hennepin Island Unit Rating (MWe)	14		
Characterization / Temporary Services	35,000	176,861	211,861
Lead Paint Remediation	131,195		131,195
Equipment Removal	272,182		272,182
Structures Demolition	1,585,150		1,585,150
Grade / Landscaping	797,889	-	797,889
Utility Management / Oversight		763,130	763,130
Demolition Contractor Management / Supervisory / Safety Sta		376,197	376,197
Security		135,307	135,307
Property Taxes	-	-	0
Project Expenses			
Shared Heavy Equipment / Operating Engineers		705,581	705,581
Small Tool Allowance	56,428	n/a	56,428
Utilities Allowance (Office Equip & supplies / Telephone, Elec		23,292	23,292
Permits		51,997	51,997
Demolition Contractors Insurance		122,352	122,352
Demolition Contractors Fee		494,741	494,741
Sub-Total			5,727,302
Contingency			872,215
Project Total (before scrap credit)			6,599,517
Scrap Credit	(466,139)	-	(466,139)
Project Total			6,133,379

TABLE 5.2h

HIGH BRIDGE STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Common	Station	Station Total
High Bridge Unit Rating (MWe)	160	160	250	570		
Characterization / Temporary Services	72,000	72,000	88,000	-	176,861	408,861
Equipment Removal	1,191,232	1,191,232	1,244,020	314,018		3,940,502
Structures Demolition	1,016,413	1,016,413	1,702,241	528,440		4,263,507
Backfill / Grade / Landscaping / Well Closure	309,658	309,658	754,653	180,659	100,000	1,654,627
Utility Management / Oversight					1,561,889	1,561,889
Demolition Contractor Management / Supervisory / Safety Staff					1,471,055	1,471,055
Security					184,920	184,920
Property Taxes	-	-	-	-	-	0
Project Expenses						
Shared Heavy Equipment / Operating Engineers					1,607,732	1,607,732
Small Tool Allowance	51,786	51,786	75,778	20,462	n/a	199,813
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)					31,832	31,832
Permits					169,724	169,724
Demolition Contractors Insurance					399,369	399,369
Demolition Contractors Fee					1,584,496	1,584,496
Sub-Total						17,478,328
Contingency						2,621,749
Project Total (before scrap credit)						20,100,078
Scrap Credit	(1,997,606)	(1,997,606)	(2,575,061)	(165,674)	-	(6,735,948)
Project Total						13,364,130

TABLE 5.2i

INVER HILLS STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	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	8,333	8,333	8,333	8,333	8,333	8,333	8,333	176,861	235,194
Pre-Demolition Cleaning (Tanks)	-	-	-	-	-	-	582,500		582,500
Equipment Removal	598,620	598,620	598,620	598,620	598,620	598,620	286,573		3,878,294
Structures Demolition	226,898	226,898	226,898	226,898	226,898	226,898	1,240,483		2,601,870
Backfill / Grade / Landscaping	177,312	177,312	177,312	177,312	177,312	177,312	181,756	-	1,245,629
Utility Management / Oversight								1,297,074	1,297,074
Demolition Contractor Management / Supervisory / Safety Staff								891,851	891,851
Security								119,522	119,522
Property Taxes	-	-	-	-	-	-	-	-	0
Project Expenses									
Shared Heavy Equipment / Operating Engineers								967,728	967,728
Small Tool Allowance	20,223	20,223	20,223	20,223	20,223	20,223	34,343	n/a	155,683
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)								20,575	20,575
Permits								132,242	132,242
Demolition Contractors Insurance								311,171	311,171
Demolition Contractors Fee								1,266,361	1,266,361
Sub-Total									13,705,692
Contingency									2,055,854
Project Total (before scrap credit)									15,761,546
Scrap Credit	(718,958)	(718,958)	(718,958)	(718,958)	(718,958)	(718,958)	(727,272)	-	(5,041,021)
Project Total									10,720,525

TABLE 5.2j

KEY CITY STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	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	9,000	9,000	9,000	9,000	-	176,861	212,861
Pre-Demolition Cleaning (Tanks)	-	-	-	-	160,000		160,000
Equipment Removal	187,569	187,569	187,569	187,569	-		750,276
Structures Demolition	104,981	104,981	104,981	104,981	331,538		751,462
Backfill / Grade / Landscaping	47,274	47,274	47,274	47,274	39,908	-	229,004
Utility Management / Oversight						752,268	752,268
Demolition Contractor Management / Supervisory / Safety Staff						428,430	428,430
Security						101,481	101,481
Property Taxes	-	-	-	-	-	-	0
Project Expenses							
Shared Heavy Equipment / Operating Engineers						506,043	506,043
Small Tool Allowance	6,976	6,976	6,976	6,976	7,429	n/a	35,335
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)						17,469	17,469
Permits						38,636	38,636
Demolition Contractors Insurance						90,912	90,912
Demolition Contractors Fee						349,000	349,000
Sub-Total							4,423,177
Contingency							663,476
Project Total (before scrap credit)							5,086,653
Scrap Credit	(202,629)	(202,629)	(202,629)	(202,629)	(179,914)	-	(990,431)
Project Total							4,096,222

TABLE 5.2k

MAPLEWOOD GAS PLANT
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Station	Station Total
Maplewood Unit Rating (MWe)	0		
Characterization / Temporary Services	25,000	88,431	113,431
Equipment Removal	1,172,429		1,172,429
Structures Demolition	114,455		114,455
Grade / Landscaping	147,923	-	147,923
Utility Management / Oversight		836,153	836,153
Demolition Contractor Management / Supervisory / Safety Staff		483,054	483,054
Security		170,262	170,262
Property Taxes	-	-	0
Project Expenses			
Shared Heavy Equipment / Operating Engineers		911,769	911,769
Small Tool Allowance	29,196	n/a	29,196
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)		29,309	29,309
Permits		37,520	37,520
Demolition Contractors Insurance		88,285	88,285
Demolition Contractors Fee		330,540	330,540
Sub-Total			4,464,327
Contingency			669,649
Project Total (before scrap credit)			5,133,975
Scrap Credit	(570,610)	-	(570,610)
Project Total			4,563,365

TABLE 5.2l

MINNESOTA VALLEY STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Common	Station	Station Total
Minnesota Valley Unit Rating (MWe)	10	10	44	64		
Characterization / Temporary Services	33,000	33,000	45,000		353,722	464,722
Worker Access	-	-	159,201	-		159,201
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	166,967	166,967	166,967	-		500,900
Asbestos / Lead Paint Remediation	111,145	111,145	3,152,039	-		3,374,329
Equipment Removal	304,032	304,032	1,847,506	46,137		2,501,705
Boiler(s)	218,193	218,193	582,920	-		1,019,305
Structures Demolition	1,064,150	1,064,150	2,083,452	332,510		4,544,261
Backfill / Grade / Landscaping / Well Closure	393,366	393,366	376,342	308,567	100,000	1,571,641
Coal Yard Closure				1,875,000		1,875,000
Utility Management / Oversight					1,903,079	1,903,079
Demolition Contractor Management / Supervisory / Safety Staff					1,936,531	1,936,531
Security					262,722	262,722
Property Taxes	-	-	-	-	-	0
Project Expenses						
Shared Heavy Equipment / Operating Engineers					2,084,313	2,084,313
Small Tool Allowance	42,478	42,478	164,929	13,744	n/a	263,629
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)					45,225	45,225
Permits					254,260	254,260
Demolition Contractors Insurance					598,285	598,285
Demolition Contractors Fee					2,407,097	2,407,097
Sub-Total						25,766,207
Contingency						4,202,364
Project Total (before scrap credit)						29,968,571
Scrap Credit	(1,769,960)	(1,769,960)	(4,162,973)	(202,342)	-	(7,905,236)
Project Total						22,063,335

TABLE 5.2m

NOBLES STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit, each (typ. of 134)	Common	Station	Station Total
Nobles Wind Farm Unit Rating (MWe)	1.5	201		
Characterization / Temporary Services	800	-	176,861	284,061
Equipment Removal	22,540	-		3,020,341
Structures Demolition	71,051	-		9,520,809
Backfill / Grade / Landscaping	29,932	8,698,432	-	12,709,304
Utility Management / Oversight			1,185,115	1,185,115
Demolition Contractor Management / Supervisory / Safety Staff			1,404,229	1,404,229
Security			303,314	303,314
Property Taxes	-	-	-	0
Project Expenses				
Shared Heavy Equipment / Operating Engineers			1,696,617	1,696,617
Small Tool Allowance	2,486	173,969	n/a	507,153
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)			52,213	52,213
Permits			364,934	364,934
Demolition Contractors Insurance			858,708	858,708
Demolition Contractors Fee			3,626,768	3,626,768
Sub-Total				35,533,566
Contingency				5,330,035
Project Total (before scrap credit)				40,863,601
Scrap Credit	(51,830)	(3,124,525)	-	(10,069,782)
Project Total				30,793,819

TABLE 5.2n

RED WING STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Unit 2	Common	Station	Station Total
Redwing Unit Rating (MWe)	10	10	20		
Characterization / Temporary Services	33,000	33,000	-	353,722	419,722
Worker Access	52,498	52,498	-		104,997
Pre-Demolition Cleaning (Boiler / Precipitator /	257,800	257,800	-		515,600
Asbestos / Lead Paint Remediation	701,342	701,342	-		1,402,685
Equipment Removal	668,601	668,601	403,725		1,740,926
Boiler(s)	230,363	230,363	-		460,726
Structures Demolition	728,965	728,965	1,008,883		2,466,813
Backfill / Grade / Landscaping / Well Closure	217,741	217,741	516,322	100,000	1,051,803
Ash Landfills / Ash Ponds & Landfills Inculding Evaporation Ponds			2,208,615		2,208,615
Utility Management / Oversight				1,075,850	1,075,850
Demolition Contractor Management / Supervisory / Safety Staff				997,570	997,570
Security				240,171	240,171
Property Taxes	-	-	-	-	0
Project Expenses					
Shared Heavy Equipment / Operating Engineers				1,253,672	1,253,672
Small Tool Allowance	52,650	52,650	38,579	n/a	143,879
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)				41,343	41,343
Permits				160,104	160,104
Demolition Contractors Insurance				376,734	376,734
Demolition Contractors Fee				1,543,452	1,543,452
Sub-Total					16,204,663
Contingency					2,570,968
Project Total (before scrap credit)					18,775,631
Scrap Credit	(956,453)	(956,453)	(680,100)	-	(2,593,006)
Project Total					16,182,625

TABLE 5.2o

RIVERSIDE STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 6 Boiler	Unit 7 Boiler	Unit 7 Turbine	Unit 8	Unit 9	Unit 10	Commom	Station	Station Total
Riverside Unit Rating (MWe)	44	44	165	231	173	173	830		
Characterization / Temporary Services	45,000	45,000	73,000	85,000	70,000	70,000	-	530,583	918,583
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	170,600	170,600	-	170,600	-	-	15,000		526,800
Asbestos Remediation	968,955	968,955	-	1,058,195	-	-	-		2,996,105
Equipment Removal	-	-	850,207	407,541	1,177,091	1,177,091	15,679		3,627,608
Boiler(s)	769,377	769,377	-	805,783	-	-	-		2,344,537
Structures Demolition	1,049,977	1,049,977	545,313	2,639,702	872,956	872,956	2,331,705		9,362,586
Backfill / Grade / Landscaping / Well Closure	183,305	183,305	341,701	547,510	233,241	233,241	525,442	100,000	2,347,747
Utility Management / Oversight								3,360,001	3,360,001
Demolition Contractor Management / Supervisory / Safety Staff								4,233,101	4,233,101
Security								854,997	854,997
Property Taxes			-		-		-	-	0
Project Expenses									
Shared Heavy Equipment / Operating Engineers								4,339,134	4,339,134
Small Tool Allowance	60,332	60,332	36,204	110,875	29,416	29,416	57,457	n/a	384,032
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)								64,829	64,829
Permits								389,313	389,313
Demolition Contractors Insurance								916,074	916,074
Demolition Contractors Fee								3,527,169	3,527,169
Sub-Total									40,192,617
Contingency									6,328,503
Project Total (before scrap credit)									46,521,121
Scrap Credit	(1,747,647)	(1,747,647)	(1,579,572)	(3,512,820)	(1,662,032)	(1,662,032)	(210,754)	-	(12,122,503)
Project Total									34,398,617

TABLE 5.2p

SHERBURNE COUNTY STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Unit 2	Unit 3	Common	Station	Station Total
Sherco Unit Rating (MWe)	750	750	900	2,400		
Characterization / Temporary Services	153,000	153,000	169,000	-	530,583	1,005,583
Worker Access	546,595	546,595	598,765	-		1,691,955
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	1,081,050	1,081,050	1,081,050	-		3,243,150
Asbestos Remediation	2,115,384	2,115,384	-	500,000		4,730,768
Equipment Removal	4,872,060	4,872,060	5,607,769	4,004,077		19,355,966
Boiler(s)	3,673,167	3,673,167	4,057,077	-		11,403,411
Turbine Generator & Condensor	527,108	527,108	593,427			1,647,644
Exhaust Gas Treatment Equipment and Structures	3,730,433	3,730,433	4,183,087			11,643,954
Structures Demolition	7,021,259	7,021,259	7,620,758	6,295,832		27,959,107
Backfill / Grade / Landscaping / Well Closure	1,542,252	1,542,252	1,689,452	4,565,603	100,000	9,439,558
Coal Yard Closure				7,250,000		7,250,000
Ash Landfills / Ash Pounds & Landfills Including Evaporation Ponds / Ash Pond Dewate	1,860,375	1,860,375	1,900,589	29,650,000		35,271,338
Utility Management / Oversight	1,039,934	1,039,934	1,162,483	480,878		3,723,229
Demolition Contractor Management / Supervisory / Safety Staff	1,514,166	1,514,166	1,692,600	700,169		5,421,101
Security	280,279	280,279	313,307	129,604		1,003,469
Property Taxes	-	-	-	-	-	0
Project Expenses						
Shared Heavy Equipment / Operating Engineers	1,601,144	1,601,144	1,789,826	740,388		5,732,502
Small Tool Allowance	483,625	483,625	490,387	307,310	n/a	1,764,947
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)					76,087	76,087
Permits					1,845,463	1,845,463
Demolition Contractors Insurance					4,342,468	4,342,468
Demolition Contractors Fee					18,550,488	18,550,488
Sub-Total						177,102,187
Contingency (excluding activities currently under contract)						27,038,405
Project Total (before scrap credit)						204,140,592
Scrap Credit	(14,316,845)	(14,316,845)	(17,311,622)	(3,779,051)	-	(49,724,362)
Project Total						154,416,230

TABLE 5.2q

SIBLEY GAS PLANT
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Station	Station Total
Sibley Unit Rating (MWe)	0		
Characterization / Temporary Services	25,000	88,431	113,431
Equipment Removal	972,121		972,121
Structures Demolition	82,946		82,946
Grade / Landscaping	151,177	-	151,177
Utility Management / Oversight		807,886	807,886
Demolition Contractor Management / Supervisory / Safety Staff		441,690	441,690
Security		156,731	156,731
Property Taxes	-	-	0
Project Expenses			
Shared Heavy Equipment / Operating Engineers		831,954	831,954
Small Tool Allowance	24,625	n/a	24,625
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)		26,980	26,980
Permits		33,062	33,062
Demolition Contractors Insurance		77,795	77,795
Demolition Contractors Fee		289,261	289,261
Sub-Total			4,009,660
Contingency			601,449
Project Total (before scrap credit)			4,611,109
Scrap Credit	(476,224)	-	(476,224)
Project Total			4,134,885

TABLE 5.2r

WESCOTT GAS PLANT
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Station	Station Total
Wescott Unit Rating (MWe)	0		
Characterization / Temporary Services	25,000	176,861	201,861
Equipment Removal	5,176,749		5,176,749
Structures Demolition	1,006,271		1,006,271
Grade / Landscaping	927,486	-	927,486
Utility Management / Oversight		974,737	974,737
Demolition Contractor Management / Supervisory / Safety Staff		929,958	929,958
Security		205,216	205,216
Property Taxes	-	-	0
Project Expenses			
Shared Heavy Equipment / Operating Engineers		1,117,958	1,117,958
Small Tool Allowance	142,710	n/a	142,710
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)		35,326	35,326
Permits		119,229	119,229
Demolition Contractors Insurance		280,552	280,552
Demolition Contractors Fee		1,126,018	1,126,018
Sub-Total			12,244,072
Contingency			1,836,611
Project Total (before scrap credit)			14,080,683
Scrap Credit	(2,661,541)	-	(2,661,541)
Project Total			11,419,141

TABLE 5.2s

WILMARTH STATION
SUMMARY OF ACTIVITY COSTS
(2014 Dollars)

Activities	Unit 1	Unit 2	Common	Station	Station Total
Wilmarth Unit Rating (MWe)	10	10	20		
Characterization / Temporary Services	33,000	33,000	-	354,000	420,000
Worker Access	52,498	52,498	-		104,997
Pre-Demolition Cleaning (Boiler / Precipitator / Tanks)	257,800	257,800	-		515,600
Asbestos / Lead Paint Remediation	701,342	701,342	-		1,402,685
Equipment Removal	668,601	668,601	158,764		1,495,966
Boiler(s)	368,367	368,367	-		736,735
Structures Demolition	640,708	640,708	729,394		2,010,809
Backfill / Grade / Landscaping / Well Closure	218,876	218,876	231,454	100,000	769,206
Ash Landfills			1,310,464		1,310,464
Utility Management / Oversight				1,075,850	1,075,850
Demolition Contractor Management / Supervisory / Safety Staff				997,570	997,570
Security				240,171	240,171
Property Taxes	-	-	-	-	0
Project Expenses					
Shared Heavy Equipment / Operating Engineers				1,253,672	1,253,672
Small Tool Allowance	53,668	53,668	22,392	n/a	129,728
Utilities Allowance (Office Equip & supplies / Telephone, Electric etc.)				41,343	41,343
Permits				139,860	139,860
Demolition Contractors Insurance				329,097	329,097
Demolition Contractors Fee				1,332,520	1,332,520
Sub-Total					14,306,272
Contingency					2,286,209
Project Total (before scrap credit)					16,592,482
Scrap Credit	(1,076,944)	(1,076,944)	(243,922)	-	(2,397,811)
Project Total					14,194,671

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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	Hennepin Island	High Bridge	Inver Hills	Key City	Maplewood	Minnesota Valley	Nobles Wind Farm	Redwing	Riverside	Sherco	Sibley	Wescott	Wilmarth
Station Rating (Mwe)		588	381	538	510	101	72	14	570	360	72	0	64	201	20	830	2400	0	0	20
2	Piping 0.25 to 2 inches diameter, linear foot	79,850	31,521	10,719	20,178	-	1,501	-	24,690	3,268	1,501	-	492	-	4,919	24,046	233,790	-	-	4,919
3	Piping >2 to 4 inches diameter, linear foot	53,123	31,014	55,395	13,452	-	1,001	-	16,460	2,579	1,001	2,195	12,745	-	3,279	16,031	157,111	2,110	-	3,279
4	Piping >4 to 8 inches diameter, linear foot	35,133	14,009	36,265	10,357	-	3,138	-	11,173	9,964	3,138	1,120	6,427	-	2,186	10,687	103,907	520	7,935	2,186
5	Piping >8 to 14 inches diameter, linear foot	30,662	8,006	24,552	6,229	-	445	-	8,015	1,348	445	330	4,978	-	1,457	7,125	89,271	385	2,385	1,457
6	Piping >14 to 20 inches diameter, linear foot	7,208	2,614	9,315	4,259	-	148	-	5,377	1,139	148	90	2,484	-	794	4,750	26,401	75	20	794
7	Piping >20 to 36 inches diameter, linear foot	9,734	1,886	5,418	2,419	-	-	-	3,971	-	-	70	1,803	-	289	3,716	37,053	16	-	289
8	Piping >36 inches diameter, linear foot	5,335	898	4,186	1,796	-	-	-	2,420	-	-	-	17	-	173	2,126	15,991	-	60	173
9	Valves <2 inches	1,373	1,308	99	144	-	108	-	-	216	108	-	54	-	540	1,418	4,118	-	-	540
10	Valves >2 to 4 inches	935	1,660	2,633	672	-	72	-	698	174	72	330	402	-	360	698	2,805	346	-	360
11	Valves >4 to 8 inches	610	592	1,226	464	-	80	-	381	264	80	78	207	-	240	369	1,830	47	136	240
12	Valves >8 to 14 inches	1,519	272	771	142	-	24	-	159	62	24	44	134	-	120	123	1,115	54	35	120
13	Valves >14 to 20 inches	158	84	132	48	-	-	-	78	-	-	2	29	-	50	66	587	-	4	50
14	Valves >20 to 36 inches	128	22	36	24	-	-	-	36	-	-	-	14	-	16	36	476	-	-	16
15	Valves >36 inches	56	6	27	12	-	-	-	26	-	-	-	1	-	14	18	104	-	-	14
24	Pipe hangers for small bore piping, each	5,018	3,641	4,375	1,449	-	81	-	1,742	246	81	88	847	-	909	1,742	14,975	84	-	909
25	Pipe hangers for large bore piping, each	3,351	1,243	2,156	1,089	-	121	-	1,249	511	121	64	401	-	543	1,237	9,618	40	416	543
26	Pump and motor set < 300 pounds	77	17	89	72	-	16	-	13	108	16	6	32	-	38	13	507	3	7	38
27	Pumps, 300-1000 pound pump	23	16	15	12	-	-	-	13	-	-	-	4	-	8	13	73	-	7	8
28	Pumps, >1000-10,000 pound pump	14	5	21	-	-	-	-	2	-	-	-	4	-	11	2	44	-	-	11
29	Pumps, >10,000 pound pump	13	5	17	4	-	-	-	8	-	-	-	5	-	8	4	9	-	-	8
32	Pump motors, 300-1000 pound pump	23	32	15	12	-	-	-	13	-	-	-	4	-	8	13	28	-	7	8
33	Pump motors, >1000-10,000 pound pump	13	5	21	-	-	-	-	3	-	-	-	4	-	11	3	68	2	-	11
34	Pump motors, >10,000 pound pump	13	5	17	4	-	-	-	8	-	-	-	5	-	4	4	18	-	-	4
37	Turbine-driven pumps > 10,000 pounds	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-
38	Main turbine-generator (pounds per MW(e) input)	1	1	3	-	-	-	-	1	-	-	-	3	-	2	2	3	-	-	2
39	Heat exchanger <3000 pound	16	12	41	101	-	-	-	6	210	-	-	15	-	12	6	60	-	-	12
40	Heat exchanger >3000 pound	-	27	14	48	-	-	-	5	96	-	-	7	-	14	5	21	-	-	14
41	Feedwater heater/deaerator	9	6	29	2	-	-	-	2	-	-	-	7	-	12	2	31	-	-	12
49	Main condenser (pounds per MW(e) input)	1	1	3	-	-	-	-	1	-	-	-	3	-	2	1	3	-	-	2
51	Tanks, <300 gallons, filters, and ion exchangers	38	33	59	20	-	16	3	10	34	16	5	39	-	12	10	66	28	33	12
52	Tanks, 300-3000 gallons	12	32	33	4	-	12	-	11	8	12	6	7	-	2	6	132	9	14	2
53	Tanks, >3000 gallons, square foot surface	27,566	75,184	14,482	62,690	-	2,847	-	23,259	7,069	2,847	101,764	87,790	-	33,585	1,859	162,458	81,889	489,542	6,871
54	Electrical equipment, <300 pound	742	686	1,207	647	-	420	54	150	846	420	21	232	-	322	128	6,686	36	-	322
55	Electrical equipment, 300-1000 pound	144	296	501	350	-	40	16	289	184	40	17	53	-	18	280	936	13	21	18
56	Electrical equipment, 1000-10,000 pound	122	190	148	280	67	80	25	207	175	80	7	39	134	56	201	122	2	41	56
57	Electrical equipment, >10,000 pound	19	99	10	128	-	28	36	16	168	28	5	4	-	16	16	30	3	-	16
59	Electrical transformers < 30 tons	3	13	31	14	-	2	-	4	18	2	2	10	-	-	4	6	2	1	-
60	Electrical transformers > 30 tons	3	9	5	12	-	2	-	5	12	2	-	4	-	2	5	3	-	-	2
61	Standby diesel-generator, <100 kW	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
62	Standby diesel-generator, 100 kW to 1 MW	-	-	-	-	-	8	-	-	-	8	-	-	-	-	-	-	-	-	-
63	Standby diesel-generator, >1 MW	2	-	-	-	-	4	-	-	-	4	-	-	-	-	2	5	-	-	-
64	Fluorescent light fixture	200	250	696	180	-	80	10	200	100	80	30	163	-	38	150	498	30	24	38
65	Incandescent light fixture	1,564	288	1,500	180	-	120	16	200	170	120	30	327	-	258	150	4,060	30	24	258
66	Electrical cable tray, linear foot	27,803	5,512	11,110	5,651	-	1,730	250	10,276	-	1,730	-	2,107	-	1,364	9,206	166,291	-	820	1,364
67	Electrical conduit, linear foot	41,992	7,922	67,220	8,631	781,440	2,471	4,790	13,688	-	2,471	2,060	18,605	1,562,880	8,658	11,905	119,404	2,000	8,500	8,658
69	Mechanical equipment, <300 pound	788	288	1,055	52	-	44	5	31	78	44	8	258	-	360	21	2,388	6	57	360
70	Mechanical equipment, 300-1000 pound	198	312	219	812	-	64	8	274	30	64	-	77	-	14	274	457	21	10	14
71	Mechanical equipment, 1000-10,000 pound	204	60	53	127	-	-	38	59	1,000	-	3	29	-	60	44	516	17	36	60
72	Mechanical equipment, >10,000 pound	68	160	89	238	603	60	26	141	219	60	20	12	1,206	45	103	90	8	78	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	Hennepin Island	High Bridge	Inver Hills	Key City	Maplewood	Minnesota Valley	Nobles Wind Farm	Redwing	Riverside	Sherco	Sibley	Wescott	Wilmarth
Station Rating (Mwe)		588	381	538	510	101	72	14	570	360	72	0	64	201	20	830	2400	0	0	20
76	HVAC equipment, <300 pound	108	14	-	16	-	-	-	-	24	-	-	4	-	10	-	328	-	-	10
77	HVAC equipment, 300-1000 pound	-	22	6	-	-	-	-	36	-	-	-	-	-	-	24	107	-	-	-
78	HVAC equipment, 1000-10,000 pound	-	5	-	-	-	-	-	14	-	-	-	2	-	4	10	6	-	-	4
79	HVAC equipment, >10,000 pound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-
82	HVAC ductwork, pound	119,977	10,000	463,253	-	-	-	8,175	142,100	-	-	-	96,406	-	18,295	38,202	439,440	-	-	18,295
201	Standard reinforced concrete, cubic yard	24,015	6,662	23,828	14,027	18,626	3,806	2,006	18,008	14,800	1,903	770	7,747	37,252	9,138	23,366	89,076	591	11,170	5,248
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	7,824	1,110	6,204	-	-	-	-	-	-	-	-	3,788	-	1,793	3,035	22,775	-	-	1,793
222	Hollow masonry block wall, cubic yard	-	1,103	614	58	-	-	-	425	-	-	-	-	-	-	2,219	-	-	-	109
224	Solid masonry block wall, cubic yard	3,788	-	6,981	-	-	-	458	-	-	-	-	8,911	-	663	3,011	14,335	-	-	663
229	Backfill of below grade voids, cubic yard	29,218	11,074	13,058	12,493	92,624	2,170	20,000	19,394	6,898	1,308	0	32,816	185,248	17,556	12,325	0	0	0	20,531
230	Excavation of clean material, cubic yard	8,747	-	13,387	-	219,531	-	-	-	-	-	-	7,307	439,061	5,760	18,507	34,560	-	-	5,760
235	Building by volume, cubic foot	5,117,058	229,493	970,141	970,228	-	189,562	-	318,816	247,411	189,562	159,000	164,740	-	321,500	597,793	9,863,100	107,000	430,217	321,500
236	Building metal siding, square foot	217,256	42,789	80,426	19,901	-	37,278	-	108,748	15,564	37,278	-	73,964	-	32,498	93,913	669,467	-	-	32,498
242	Standard asphalt roofing, square foot	47,897	22,500	53,455	-	-	-	9,375	110,000	-	-	-	23,588	-	9,129	119,469	237,266	-	-	9,129
243	Galbestos panels, square foot	-	-	8,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
245	Placement of cofferdam, linear foot	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
248	Lead paint removal from concrete surfaces, square foot	373,064	54,000	-	-	-	-	54,150	-	-	-	-	135,495	-	54,337	-	-	-	-	54,337
253	Overhead cranes/monorails < 10 ton capacity, each	14	5	2	-	-	-	-	-	-	-	-	-	-	1	-	136	-	-	1
255	Overhead cranes/monorails >10 - 50 ton capacity, each	6	2	-	4	-	-	1	5	-	-	-	2	-	2	7	21	-	1	2
258	Gantry cranes > 50 ton capacity, each	1	-	1	1	-	-	-	1	-	-	-	-	-	-	5	6	-	-	-
260	Structural steel, pounds	24,541,699	2,731,615	16,388,568	1,748,139	-	310,648	299,854	6,981,323	662,931	310,648	12,000	6,612,141	-	2,429,526	17,879,987	83,653,565	10,000	92,000	2,429,526
262	Steel floor grating, square foot	161,222	16,242	62,591	7,410	-	2,673	900	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	-	210,181	-	-	13,043
270	Landscaping with topsoil, acre	3	4	4	1	45.9	0	2	1.9	2	0	3	1	92	4	3	33	2	6	2
271	Landscaping w/o topsoil, acre	29	4	5	8	3	2	-	4	9	2	3	7	6	3	8	239	2	6	4
272	Chain link fencing, linear foot	3,372	6,800	3,000	2,880	-	995	550	3,144	2,800	995	2,460	3,859	-	8,372	5,016	20,000	3,680	4,100	995
273	Railroad track, linear foot	3,000	-	3,600	-	-	-	-	-	-	-	-	6,664	-	-	-	24,000	-	-	-
274	Asphalt pavement, square foot	220,880	91,000	122,500	78,300	-	12,000	17,650	75,171	51,000	12,000	17,750	38,225	-	-	128,241	801,500	45,625	62,700	52,000
293	Carbon steel plate 3/8 inch thick, square foot	-	8,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
294	Carbon steel plate 1/2 inch thick, square foot	66,630	7,388	42,598	14,776	798,797	75,398	12,441	14,550	261,891	75,398	-	6,959	1,597,594	17,695	78,517	219,533	-	-	17,695
359	Steam drum removal (fossil)	1	3	6	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 superheaater 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	307,617	54,416	-	470,306	-	61,481	1,009,280	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	5,528	-	1,400	-	-	-	-	-	-	-	-	900	-	625	-	5,000	-	-	625
385	Transfer Towers	100,500	-	80,400	-	-	-	-	-	-	-	-	-	-	-	-	201,000	-	-	-
386	Stacker-reclaimers	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
387	Coal crushers	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
389	Ball mills	12	-	12	-	-	-	-	-	-	-	-	4	-	-	-	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	60	60
	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 hours *****

3. LABOR REQUIRED

Crew	Number	Duration (hr)	Rate ($/hr)	Cost ($)
Laborers	3.0	4.333	51.07	663.86
Craftsmen	2.0	4.333	62.46	541.28
Foreman	1.0	4.333	63.46	274.97
General Foreman	0.25	4.333	64.46	69.83
Fire Watch	0.05	4.333	51.07	11.06
Total labor cost				1,561.00

4. EQUIPMENT & CONSUMABLES COSTS

Equipment Costs	none
Consumables/Materials Costs	
Gas torch consumables 1 @ $18.60/hr x 1 hr {1}	18.60
Subtotal cost of equipment and materials	18.60
Overhead & profit on equipment and materials @ 16.88%	3.14
Total costs, equipment & material	21.74
TOTAL COST Removal of heat exchanger <3000 pound:	**1,582.74**
Total labor cost:	1,561.00
Total equipment/material costs:	21.74
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 (2014) Division 01 54 33, Section 40-6360 Page 698

APPENDIX C

UNIT COST FACTOR LISTING

TABLE C-1

UNIT COST FACTOR LISTING
Minnesota Stations
(Costs are in 2014 dollars/Scrap Weights in pounds)

		Unit Cost Factors			Scrap Weight							
UCF #	Description	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	5.89	5.82	0.1	-	4	-	0.5	-	-	-	-
3	Piping >2 to 4 inches diameter, linear foot	8.30	8.19	0.2	-	7	-	0.9	-	-	0.4	-
4	Piping >4 to 8 inches diameter, linear foot	16.02	15.87	0.3	-	22	-	-	-	-	-	-
5	Piping >8 to 14 inches diameter, linear foot	31.14	30.96	0.6	-	57	-	-	-	-	-	-
6	Piping >14 to 20 inches diameter, linear foot	40.54	39.99	0.7	-	-	120	-	-	-	-	-
7	Piping >20 to 36 inches diameter, linear foot	59.63	58.90	1.1	-	-	221	-	-	-	-	-
8	Piping >36 inches diameter, linear foot	70.82	70.10	1.3	-	-	417	-	-	-	-	-
9	Valves <2 inches	114.52	113.81	2.0	-	-	-	-	-	-	-	-
10	Valves >2 to 4 inches	105.57	104.48	1.9	75	-	-	8.8	-	-	4.4	-
11	Valves >4 to 8 inches	160.19	158.73	2.8	510	-	-	-	-	-	-	-
12	Valves >8 to 14 inches	311.41	309.61	5.6	1,066	-	-	-	-	-	-	-
13	Valves >14 to 20 inches	405.35	399.92	7.3	-	-	2,040	-	-	-	-	-
14	Valves >20 to 36 inches	596.28	589.05	10.7	-	-	3,334	-	-	-	-	-
15	Valves >36 inches	708.24	701.01	12.7	-	-	11,535	-	-	-	-	-
24	Pipe hangers for small bore piping, each	37.26	31.83	0.6	-	10	-	-	-	-	-	-
25	Pipe hangers for large bore piping, each	133.34	122.47	2.3	-	50	-	-	-	-	-	-
26	Pump and motor set < 300 pounds	271.27	262.20	4.7	-	-	50	12.5	-	-	-	62.3
27	Pumps, 300-1000 pound pump	746.46	731.96	12.7	293	-	49	48.9	-	-	-	-
28	Pumps, >1000-10,000 pound pump	2,951.17	2,929.43	51.3	2,834	-	472	472.3	-	-	-	-
29	Pumps, >10,000 pound pump	5,711.35	5,646.13	98.9	43,693	-	7,282	7,282.1	-	-	-	-
32	Pump motors, 300-1000 pound pump	311.41	311.41	5.4	-	-	-	-	-	-	-	307.8
33	Pump motors, >1000-10,000 pound pump	1,225.22	1,225.22	21.5	-	-	-	-	-	-	-	3,531.6
34	Pump motors, >10,000 pound pump	2,756.72	2,756.72	48.3	-	-	-	-	-	-	-	42,324.5
37	Turbine-driven pumps > 10,000 pounds	7,645.01	7,572.56	132.7	20,000	-	20,000	-	-	-	-	-
38	Main turbine-generator (pounds per MW(e) input)	179,970.00	178,578.66	3,042.0	-	-	851,500	-	-	-	-	851,500.0
39	Heat exchanger <3000 pound	1,582.74	1,561.00	27.3	-	-	416	623.4	-	-	-	-
40	Heat exchanger >3000 pound	3,989.63	3,902.67	68.3	-	-	5,599	8,397.9	-	-	-	-
41	Feedwater heater/deaerator	11,260.56	11,086.64	194.2	-	-	12,000	18,000.0	-	-	-	-
49	Main condenser (pounds per MW(e) input)	496,136.69	476,317.56	8,243.6	149,400	-	149,400	199,200.0	-	-	-	-
51	Tanks, <300 gallons, filters, and ion exchangers	348.81	337.94	6.0	-	-	401	401.2	-	-	-	-
52	Tanks, 300-3000 gallons	1,097.84	1,076.10	19.1	-	-	2,700	300.0	-	-	-	-
53	Tanks, >3000 gallons, square foot surface	9.17	8.90	0.2	-	21	-	-	-	-	-	-
54	Electrical equipment, <300 pound	146.54	146.54	2.6	-	-	56	-	-	-	2.9	-
55	Electrical equipment, 300-1000 pound	507.02	507.02	8.8	-	-	624	-	-	-	32.8	-

TABLE C-1 (continued)

UNIT COST FACTOR LISTING
Minnesota Stations
(Costs are in 2014 dollars/Scrap Weights in pounds)

		Unit Cost Factors			Scrap Weight							
UCF #	Description	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
56	Electrical equipment, 1000-10,000 pound	1,014.02	1,014.02	17.6	-	-	2,212	-	-	-	116.4	-
57	Electrical equipment, >10,000 pound	2,391.76	2,391.76	41.0	-	-	19,950	-	-	-	1,050.0	-
59	Electrical transformers < 30 tons	1,661.03	1,661.03	28.4	-	-	11,250	-	-	-	3,750.0	-
60	Electrical transformers > 30 tons	4,783.50	4,783.50	81.9	-	-	375,000	-	-	-	125,000.0	-
61	Standby diesel-generator, <100 kW	1,696.60	1,696.60	29.1	2,340	-	-	-	-	-	-	260.0
62	Standby diesel-generator, 100 kW to 1 MW	3,786.94	3,786.94	64.8	9,450	-	-	-	-	-	-	1,050.0
63	Standby diesel-generator, >1 MW	7,839.73	7,839.73	134.2	47,250	-	-	-	-	-	-	5,250.0
64	Fluorescent light fixture	61.43	61.43	1.1	-	-	-	-	-	-	-	-
65	Incandescent light fixture	30.66	30.66	0.6	-	-	-	-	-	-	-	-
66	Electrical cable tray, linear foot	13.81	13.45	0.2	-	-	-	-	6.6	6.6	-	-
67	Electrical conduit, linear foot	6.04	5.86	0.1	-	-	-	-	3.4	3.4	-	-
69	Mechanical equipment, <300 pound	146.54	146.54	2.6	-	-	127	-	-	-	-	-
70	Mechanical equipment, 300-1000 pound	507.02	507.02	8.8	-	-	641	-	-	-	-	-
71	Mechanical equipment, 1000-10,000 pound	1,014.02	1,014.02	17.6	-	-	4,184	-	-	-	-	-
72	Mechanical equipment, >10,000 pound	2,391.76	2,391.76	41.0	-	-	11,938	-	-	-	-	-
76	HVAC equipment, <300 pound	177.21	177.21	3.1	-	-	184	-	-	-	-	-
77	HVAC equipment, 300-1000 pound	609.22	609.22	10.6	-	-	643	-	-	-	-	-
78	HVAC equipment, 1000-10,000 pound	1,214.16	1,214.16	21.0	-	-	3,813	-	-	-	-	-
79	HVAC equipment, >10,000 pound	2,391.76	2,391.76	41.0	-	-	19,391	-	-	-	-	-
82	HVAC ductwork, pound	0.57	0.57	0.0	-	-	-	-	1.0	-	-	-
201	Standard reinforced concrete, cubic yard	75.03	36.44	0.6	-	183	-	-	-	-	-	-
202	Grade slab concrete, cubic yard	97.90	54.65	1.0	-	183	-	-	-	-	-	-
206	Heavily rein concrete w/#9 rebar, cubic yard	119.10	46.40	0.8	-	730	-	-	-	-	-	-
222	Hollow masonry block wall, cubic yard	113.46	73.48	1.4	-	66	-	-	-	-	-	-
224	Solid masonry block wall, cubic yard	113.46	73.48	1.4	-	66	-	-	-	-	-	-
229	Backfill of below grade voids, cubic yard	33.44	3.67	0.1	-	-	-	-	-	-	-	-
230	Excavation of clean material, cubic yard	3.39	1.31	0.0	-	-	-	-	-	-	-	-
235	Building by volume, cubic foot	0.34	0.18	-	-	-	1	-	-	-	-	-
236	Building metal siding, square foot	1.51	1.07	0.0	-	-	-	-	2.4	-	-	-
242	Standard asphalt roofing, square foot	2.55	2.55	0.1	-	-	-	-	-	-	-	-
243	Galbestos panels, square foot	2.35	1.76	0.0	-	-	-	-	-	-	-	-
245	Placement of cofferdam, linear foot	-	-	-	-	-	-	-	-	-	-	-

TABLE C-1 (continued)

UNIT COST FACTOR LISTING
Minnesota Stations
(Costs are in 2014 dollars/Scrap Weights in pounds)

		Unit Cost Factors			Scrap Weight							
UCF #	Description	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
248	Lead paint removal from concrete surfaces, square foot	8.91	6.80	0.1	-	-	-	-	-	-	-	-
253	Overhead cranes/monorails < 10 ton capacity, each	701.28	701.28	11.8	-	3,700	-	-	-	-	-	-
255	Overhead cranes/monorails >10 - 50 ton capacity, each	1,683.07	1,683.07	28.3	-	-	298,832	-	-	-	3,018.5	-
258	Gantry cranes > 50 ton capacity, each	29,896.91	29,896.91	511.9	-	-	712,800	-	-	-	7,200.0	-
260	Structural steel, pounds	0.22	0.17	-	-	1	-	-	-	-	-	-
262	Steel floor grating, square foot	5.02	4.64	0.1	-	-	6	-	1.1	-	-	-
268	Placement of scaffolding in clean areas, square foot	15.94	5.42	0.1	-	-	-	-	-	-	-	-
270	Landscaping with topsoil, acre	24,697.24	3,085.72	52.6	-	-	-	-	-	-	-	-
271	Landscaping w/o topsoil, acre	1,242.11	333.10	5.3	-	-	-	-	-	-	-	-
272	Chain link fencing, linear foot	3.76	2.96	0.1	-	-	-	-	10.0	-	-	-
273	Railroad track, linear foot	26.63	12.34	0.2	-	91	-	-	-	-	-	-
274	Asphalt pavement, square foot	0.97	0.65	0.0	-	-	-	-	-	-	-	-
294	Carbon steel plate 1/2 inch thick, square foot	4.21	3.42	0.1	-	-	20	-	-	-	-	-
359	Steam drum removal (fossil)	22,056.71	21,911.77	411.6	-	-	480,000	-	-	-	-	-
360	Water drum removal (fossil)	8,184.40	8,157.23	153.2	-	-	320,000	-	-	-	-	-
361	Upper/lower waterwall headers (fossil)	6,177.23	6,150.06	115.5	-	-	120,000	-	-	-	-	-
362	Top sup boiler waterwall (8'x8' section), inches cut	0.74	0.70	0.0	-	-	11	-	-	-	-	-
369	Boiler convective superheaater platens	1,787.36	1,598.96	29.6	-	-	19,501	-	-	-	-	-
370	Boiler radiant superheater platens	756.13	676.43	12.5	-	-	51,652	-	-	-	-	-
371	Boiler reheat platens	756.13	676.43	12.5	-	-	19,501	-	-	-	-	-
372	Boiler economizer platens	962.37	860.93	15.9	-	-	11,703	-	-	-	-	-
374	Stationary soot blowers	39.04	39.04	0.7	-	-	500	-	-	-	-	50.0
375	Retractable soot blowers	369.01	369.01	6.8	-	-	11,150	-	-	-	-	100.0
376	Process ductwork (8'x8' section), inches cut	0.37	0.34	0.0	-	-	0	-	-	-	-	-
378	Non-asbestos insulated regenerative air preheaters	11,731.57	10,035.87	188.5	-	-	1,376,000	-	-	-	-	-
380	Non-asbestos insulated recuperative air preheaters	6,502.34	5,442.53	101.6	-	-	1,376,000	-	-	-	-	-
382	Induced, forced, primary draft fans	1,765.63	1,722.15	31.9	-	-	30,000	-	-	-	-	3,531.6
383	Coal car dumpers	16,091.87	13,483.11	249.4	-	-	125,000	-	-	-	-	500.0
384	Conveyors	15.04	13.95	0.3	-	-	820	-	-	-	-	-
385	Transfer Towers	0.21	0.15	-	-	-	5	-	-	-	-	-
386	Stacker-reclaimers	161,210.45	161,210.45	3,008.3	-	-	300,000	-	-	-	-	2,000.0
387	Coal crushers	1,070.04	1,059.17	19.3	-	-	36,000	-	-	-	-	250.0
389	Ball mills	1,540.33	1,540.33	28.1	-	-	360,000	-	-	-	-	7,063.1
390	Coal feeders	387.21	376.34	7.1	-	-	1,194	-	-	-	-	-

TABLE C-2

UNIT COST FACTOR LISTING
South Dakota Station
(Costs are in 2014 dollars/Scrap Weights in pounds)

		Unit Cost Factors			Scrap Weight							
UCF #	Description	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	2.53	2.46	0.1	-	4	-	0.5	-	-	-	-
3	Piping >2 to 4 inches diameter, linear foot	3.55	3.44	0.2	-	7	-	0.9	-	-	0.4	-
4	Piping >4 to 8 inches diameter, linear foot	7.11	6.97	0.3	-	22	-	-	-	-	-	-
5	Piping >8 to 14 inches diameter, linear foot	13.45	13.28	0.6	-	57	-	-	-	-	-	-
6	Piping >14 to 20 inches diameter, linear foot	17.96	17.45	0.7	-	-	120	-	-	-	-	-
7	Piping >20 to 36 inches diameter, linear foot	26.09	25.41	1.0	-	-	221	-	-	-	-	-
8	Piping >36 inches diameter, linear foot	31.03	30.35	1.3	-	-	417	-	-	-	-	-
9	Valves <2 inches	50.23	49.56	2.0	-	-	-	-	-	-	-	-
10	Valves >2 to 4 inches	46.43	45.41	1.8	75	-	-	8.8	-	-	4.4	-
11	Valves >4 to 8 inches	71.11	69.74	2.8	510	-	-	-	-	-	-	-
12	Valves >8 to 14 inches	134.50	132.80	5.5	1,066	-	-	-	-	-	-	-
13	Valves >14 to 20 inches	179.58	174.47	7.2	-	-	2,040	-	-	-	-	-
14	Valves >20 to 36 inches	260.93	254.12	10.4	-	-	3,334	-	-	-	-	-
15	Valves >36 inches	310.31	303.50	12.5	-	-	11,535	-	-	-	-	-
24	Pipe hangers for small bore piping, each	18.89	13.78	0.6	-	10	-	-	-	-	-	-
25	Pipe hangers for large bore piping, each	61.15	50.91	2.3	-	50	-	-	-	-	-	-
26	Pump and motor set < 300 pounds	124.75	116.22	4.6	-	-	50	12.5	-	-	-	62.3
27	Pumps, 300-1000 pound pump	342.65	328.99	12.5	293	-	49	48.9	-	-	-	-
28	Pumps, >1000-10,000 pound pump	1,330.17	1,309.70	50.5	2,834	-	472	472.3	-	-	-	-
29	Pumps, >10,000 pound pump	2,587.58	2,526.17	97.4	43,693	-	7,282	7,282.1	-	-	-	-
32	Pump motors, 300-1000 pound pump	140.66	140.66	5.3	-	-	-	-	-	-	-	307.8
33	Pump motors, >1000-10,000 pound pump	550.02	550.02	21.2	-	-	-	-	-	-	-	3,531.6
34	Pump motors, >10,000 pound pump	1,235.67	1,235.67	47.6	-	-	-	-	-	-	-	42,324.5
38	Main turbine-generator (pounds per MW(e) input)	83,070.00	81,759.82	2,995.2	-	-	851,500	-	-	-	-	851,500.0
39	Heat exchanger <3000 pound	720.80	700.33	26.9	-	-	416	623.4	-	-	-	-
40	Heat exchanger >3000 pound	1,832.61	1,750.72	67.2	-	-	5,599	8,397.9	-	-	-	-
41	Feedwater heater/deaerator	5,122.92	4,959.15	191.2	-	-	12,000	18,000.0	-	-	-	-
49	Main condenser (pounds per MW(e) input)	233,827.36	215,173.52	8,116.8	149,400	-	149,400	199,200.0	-	-	-	-
51	Tanks, <300 gallons, filters, and ion exchangers	159.02	148.78	5.9	-	-	401	401.2	-	-	-	-
52	Tanks, 300-3000 gallons	496.28	475.81	18.8	-	-	2,700	300.0	-	-	-	-
53	Tanks, >3000 gallons, square foot surface	4.25	3.99	0.2	-	21	-	-	-	-	-	-
54	Electrical equipment, <300 pound	65.93	65.93	2.6	-	-	56	-	-	-	2.9	-
55	Electrical equipment, 300-1000 pound	228.36	228.36	8.6	-	-	624	-	-	-	32.8	-
56	Electrical equipment, 1000-10,000 pound	456.61	456.61	17.3	-	-	2,212	-	-	-	116.4	-
57	Electrical equipment, >10,000 pound	1,093.11	1,093.11	40.3	-	-	19,950	-	-	-	1,050.0	-

TABLE C-2 (continued)

UNIT COST FACTOR LISTING
South Dakota Station
(Costs are in 2014 dollars/Scrap Weights in pounds)

		Unit Cost Factors			Scrap Weight							
UCF #	Description	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
59	Electrical transformers < 30 tons	758.76	758.76	28.0	-	-	11,250	-	-	-	3,750.0	-
60	Electrical transformers > 30 tons	2,186.33	2,186.33	80.7	-	-	375,000	-	-	-	125,000.0	-
61	Standby diesel-generator, <100 kW	772.98	772.98	28.5	2,340	-	-	-	-	-	-	260.0
64	Fluorescent light fixture	25.98	25.98	1.1	-	-	-	-	-	-	-	-
65	Incandescent light fixture	13.35	13.35	0.6	-	-	-	-	-	-	-	-
66	Electrical cable tray, linear foot	6.29	5.95	0.2	-	-	-	-	6.6	6.6	-	-
67	Electrical conduit, linear foot	2.80	2.63	0.1	-	-	-	-	3.4	3.4	-	-
69	Mechanical equipment, <300 pound	65.93	65.93	2.6	-	-	127	-	-	-	-	-
70	Mechanical equipment, 300-1000 pound	228.36	228.36	8.6	-	-	641	-	-	-	-	-
71	Mechanical equipment, 1000-10,000 pound	456.61	456.61	17.3	-	-	4,184	-	-	-	-	-
72	Mechanical equipment, >10,000 pound	1,093.11	1,093.11	40.3	-	-	11,938	-	-	-	-	-
76	HVAC equipment, <300 pound	78.15	78.15	3.1	-	-	184	-	-	-	-	-
77	HVAC equipment, 300-1000 pound	273.14	273.14	10.3	-	-	643	-	-	-	-	-
78	HVAC equipment, 1000-10,000 pound	548.35	548.35	20.7	-	-	3,813	-	-	-	-	-
82	HVAC ductwork, pound	0.25	0.25	0.0	-	-	-	-	1.0	-	-	-
201	Standard reinforced concrete, cubic yard	55.23	16.52	0.6	-	183	-	-	-	-	-	-
202	Grade slab concrete, cubic yard	68.16	24.78	1.0	-	183	-	-	-	-	-	-
206	Heavily rein concrete w/#9 rebar, cubic yard	94.27	21.34	0.8	-	730	-	-	-	-	-	-
222	Hollow masonry block wall, cubic yard	67.59	29.94	1.4	-	66	-	-	-	-	-	-
229	Backfill of below grade voids, cubic yard	29.80	1.76	0.1	-	-	-	-	-	-	-	-
235	Building by volume, cubic foot	0.23	0.09	-	-	-	1	-	-	-	-	-
236	Building metal siding, square foot	0.85	0.44	0.0	-	-	-	-	2.4	-	-	-
242	Standard asphalt roofing, square foot	1.11	1.11	0.1	-	-	-	-	-	-	-	-
248	Lead paint removal from concrete surfaces, square foot	4.59	2.75	0.1	-	-	-	-	-	-	-	-
253	Overhead cranes/monorails < 10 ton capacity, each	324.82	324.82	11.6	-	3,700	-	-	-	-	-	-
255	Overhead cranes/monorails >10 - 50 ton capacity, each	779.88	779.88	27.9	-	-	298,832	-	-	-	3,018.5	-
260	Structural steel, pounds	0.13	0.08	-	-	1	-	-	-	-	-	-
262	Steel floor grating, square foot	2.63	2.28	0.1	-	-	6	-	1.1	-	-	-
270	Landscaping with topsoil, acre	21,783.43	1,429.85	52.6	-	-	-	-	-	-	-	-
271	Landscaping w/o topsoil, acre	1,018.04	161.96	5.3	-	-	-	-	-	-	-	-
272	Chain link fencing, linear foot	2.05	1.29	0.1	-	-	-	-	10.0	-	-	-
274	Asphalt pavement, square foot	0.61	0.30	0.0	-	-	-	-	-	-	-	-
293	Carbon steel plate 3/8 inch thick, square foot	2.17	1.46	0.1	-	-	15	-	-	-	-	-
294	Carbon steel plate 1/2 inch thick, square foot	2.24	1.50	0.1	-	-	20	-	-	-	-	-
359	Steam drum removal (fossil)	9,347.41	9,210.92	405.3	-	-	480,000	-	-	-	-	-
376	Process ductwork (8'x8' section), inches cut	0.17	0.14	0.0	-	-	0	-	-	-	-	-

CERTIFICATE OF SERVICE

I, James G. Erickson, 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-15-46

Dated this 18th day of May 2015

/s/

_____

James G. Erickson
Records Analyst

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