November 26, 2014

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VIA ELECTRONIC FILING

Dr. Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101-2147

Re: In the Matter of Minnesota Power's Rider for Boswell Unit 4 Emission Reduction (BEC4 Rider) and 2015 Factor Docket No. E015/M-14-___

Dear Dr. Haar:

Minnesota Power hereby electronically submits the attached Petition seeking Minnesota Public Utilities Commission approval of its 2015 Boswell Unit 4 Emission Reduction Factor. This Petition is filed pursuant to Minn. Stat. § 216B.1692 for cost recovery of investments, expenditures and costs related to the Boswell Energy Center Unit 4 mercury emission reduction project through Minnesota Power's Rider for Boswell Unit 4 Emission Reduction.

Minnesota Power has included a Summary with this filing. As reflected in the attached Affidavit of Service, the Summary has been filed on the official general service list utilized by Minnesota Power.

Please contact me at (218) 355-3601 or <u>lhoyum@mnpower.com</u> with any questions related to this matter.

Yours truly,

Lori Hoyum Policy Manager

Gori Hoyum

LH Enc.

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's Rider for Boswell Unit 4 Emission Reduction (BEC4 Rider) and 2015 Factor

Docket No. E015/M-14

SUMMARY OF FILING

Minnesota Power submits this Petition to the Minnesota Public Utilities Commission ("Commission") pursuant to Minn. Stat. § 216B.1692 seeking Commission approval to update cost recovery of investments, expenditures and costs related to the Boswell Energy Center Unit 4 mercury emission reduction project through Minnesota Power's Commission-approved Rider for Boswell Unit 4 Emission Reduction.

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STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's Rider for Boswell Energy Center Unit 4 Emission Reduction (BEC4 Rider) and 2015 Factor Docket No. E015/M-14-____

I. INTRODUCTION

Minnesota Power submits this Petition to the Minnesota Public Utilities Commission ("Commission") pursuant to Minn. Stat. § 216B.1692 seeking Commission approval to update cost recovery of investments, expenditures and costs related to the Boswell Energy Center Unit 4 ("BEC4") mercury emission reduction project ("BEC4 Project") through Minnesota Power's Commission-approved Rider for Boswell Unit 4 Emission Reduction ("BEC4 Rider"). Upon Commission approval, Minnesota Power will adjust the line item on customers' monthly electric bills under the Boswell 4 Plan Adjustment.

On August 31, 2012, Minnesota Power submitted its Boswell Energy Center Unit 4 mercury emission reduction plan petition ("BEC4 Plan") in compliance with Minn. Stat. § 216B.6851 to the Commission and Minnesota Pollution Control Agency ("MPCA"). The BEC4 Plan is a multi-pollutant solution for reducing mercury, particulate matter ("PM"), sulfur dioxide ("SO2"), and other hazardous air pollutants being addressed by United States Environmental Protection Agency ("EPA") regulations while also reducing plant wastewater. Minnesota Power is installing a semi-dry flue gas desulfurization system, fabric filter and powder activated carbon ("PAC") injection system to help achieve compliance with the Minnesota Mercury Emissions Reduction Act ("MERA"), the EPA Mercury and Air Toxics Rule ("MATS"), and other enacted or pending federal and state environmental rulemakings regulating air and water emissions and solid byproducts from coal-fired power plants. Through multi-pollutant control technology, Minnesota Power will cost-effectively achieve the mercury reduction goals under MERA while ensuring compliance with other regulatory programs over the long term.

On March 7, 2013, Minnesota Power submitted its Petition seeking Commission approval pursuant to Minn. Stat. §§ 216B.683, subd. 1; 216B.686, subd. 2; and 216B.1692, subd. 3 to recover investments and expenditures associated with the BEC4 Project through the BEC4 Rider.

On November 5, 2013, the Commission approved Minnesota Power's BEC4 Project and established the BEC4 Rider through an order approving recovery of investments and expenditures for the BEC4 Project in Docket No. E015/M-12-920.

On December 20, 2013, Minnesota Power filed a Petition with the Commission requesting approval of its proposed rates for the BEC4 Rider. On July 2, 2014, the Commission issued an order approving Minnesota Power's proposed rates through the BEC4 Rider. On August 1, 2014, Minnesota Power began implementing Boswell 4 Plan Adjustment factors and recovering costs on customers' bills.

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¹ See Docket No. E015/M-13-1166.

II. PROCEDURAL MATTERS

Pursuant to Minn. Stat. §§ 216B.683; 216B.1692; 216B.6851, 216B.686; and 216B.16, subd. 1, and Minn. Rule 7829.1300, Minnesota Power provides the following required general filing information.

1. Summary of Filing (Minn. Rule 7829.1300, subp. 1)

A one-paragraph summary accompanies this petition.

2. Service on Other Parties (Minn. Rule 7829.1300, subp. 2)

Pursuant to Minn. Stat. § 216.17, subd. 3 and Minn. Rules 7829.1300, subp. 2, Minnesota Power eFiles a copy of this Petition on the Department of Commerce - Division of Energy Resources, and the Minnesota Office of the Attorney General – Antitrust and Utilities Division. A summary of the filing prepared in accordance with Minn. Rules 7829.1300, subp. 1 is being served on Minnesota Power's general service list.

3. Name, Address and Telephone Number of Utility (Minn. Rule 7829.1300, subp. 4(A))

Minnesota Power 30 West Superior Street Duluth, MN 55802 (218) 722-2641

4. Name, Address and Telephone Number of Utility Attorney (Minn. Rule 7829.1300, subp. 4(B))

David Moeller Senior Attorney Minnesota Power 30 West Superior Street Duluth, MN 55802 (218) 723-3963 dmoeller@allete.com

5. Date of Filing and Date Proposed Rate Takes Effect (Minn. Rule 7829.1300, subp.

4(C))

This Petition is being filed on November 26, 2014. The proposed effective date of the BEC4 Plan Adjustment is June 1, 2015.

6. Statute Controlling Schedule for Processing the Filing (Minn. Rule 7829.1300, subp. 4(D))

This Petition is made pursuant to Minn. Stat. §§ 216B.683, 216B.1692, 216B.6851, 216B.686 and 216B.16. Minn. Stat. § 216B.1692 allows Minnesota Power to recover the costs of the BEC4 Plan through the Commission-approved BEC4 Rider. Minn. Stat. § 216B.16, subd. 1 requires a 60 day notice to the Commission of a proposed rate change, after which time the proposed rate change takes effect unless suspended.

This Petition falls within the definition of a "Miscellaneous Tariff Filing" under Minn. Rule 7829.0100, subp. 11 since no determination of Minnesota Power's general revenue requirement is necessary. Minn. Rule 7829.1400, subp. 1 and 4 respectively, permit comments in response to a miscellaneous filing to be filed within 30 days, and reply comments to be filed 10 days thereafter.

7. Utility Employee Responsible for Filing (Minn. Rule 7829.1300, subp. 4(E))

Lori Hoyum Policy Manager Minnesota Power 30 West Superior Street Duluth, MN 55802 (218) 355-3601 lhoyum@mnpower.com

8. Impact on Rates and Services (Minn. Rule 7829.1300, subp. 4(F))

The Boswell 4 Plan Adjustment will have no effect on Minnesota Power's base rates. The impact of the Boswell 4 Plan Adjustment miscellaneous rate change on customer rates is described in section V.C., pages 16-18.

9. Service List (Minn. Rule 7829.0700)

David Moeller Senior Attorney Minnesota Power 30 West Superior Street Duluth, MN 55802 (218) 723-3963 dmoeller@allete.com Lori Hoyum Policy Manager Minnesota Power 30 West Superior Street Duluth, MN 55802 (218) 355-3601 lhoyum@mnpower.com

10. Modified Rates (Minn. Rule 7825.3600)

Minn. Rule 7825.3600 requires all proposed changes in rates be shown by filing revised or new pages to the rate book and by identifying those pages which were not changed. See Exhibit A for redlined and clean versions of the tariff page showing the proposed revised Boswell 4 Plan Adjustment factors. No other rate book pages are changing as a result of this filing. Upon approval of the requested rate adjustment, Minnesota Power will submit a compliance filing containing the final approved tariff page.

III. EMISSIONS-REDUCTION RIDER AUTHORIZATION

Minn. Stat. § 216B.1692, subd. 5(b) allows the Commission to approve an emissions-reduction rider to recover the costs of a qualifying emissions-reduction project outside of a general rate case proceeding under Minn. Stat. § 216B.16. The Commission may approve a rider that:

- (1) allows the utility to recover costs of qualifying emissions-reduction projects net of revenues attributable to the project;
- (2) allows an appropriate return on investment associated with qualifying emissionsreduction projects at the level established in the public utility's last general rate case;
- (3) allocates project costs appropriately between wholesale and retail customers;
- (4) provides a mechanism for recovery above cost, if necessary to improve the overall economics of the qualifying projects to ensure implementation;
- (5) recovers costs from retail customer classes in proportion to class energy consumption; and
- (6) terminates recovery once the costs of qualifying projects have been fully recovered.

The term of the rider shall extend for the period approved by the commission regardless of any subsequent state or federal requirement affecting any pollutant addressed by the approved emissions-reduction project and regardless of the sunset date in Minn. Stat. § 216B.1692, subd. 8.

IV. PROJECT STATUS AND REQUIRED UPDATES

A. Project Update

Minnesota Power is installing Alstom's circulating dry scrubber ("CDS") technology,² referred to as the NID system ("NID"), for the removal of PM, SO₂, acid gases including hydrochloric acid and trace metals, and other hazardous air pollutants being addressed by EPA regulations, while also reducing plant wastewater. In addition to the NID system, Minnesota Power is installing a PAC system to capture flue gas mercury, in combination with the fabric filter integral to the NID to control PM. The PAC system and fabric filter are key components to achieving compliance with MERA, MATS, and other enacted or pending federal and state environmental rulemakings regulating air and water emissions and solid byproducts from coal-fired power plants. Through multi-pollutant control technology, Minnesota Power will cost effectively achieve the mercury reduction required by MERA while ensuring compliance with other regulatory programs over the long term.

Construction activities have been proceeding well. Erection of the NID building is underway, as well as fabrication of the fabric filter components. The NID equipment is nearly all on site. The elevator foundation, silo foundation, and compressor building foundation and floor slab are complete. Overall, construction is approximately 37 percent complete, engineering is more than 96 percent complete and the project stands at more than 54 percent complete.

Construction activities were halted in late November 2013 until spring 2014, while engineering and purchasing efforts continued through the winter. Construction activities resumed at the site in April 2014. Progress made since construction resumed includes:

- Completed all NID area foundations
- Installed outlet duct sections 1 & 2 along with all supporting steel
- Installed inlet duct plenum sections 1-9 with all supporting steel
- Erected all major building steel sections 1 − 9 up to penthouse³
- Fabricated and hung all venturi and J duct sections
- Fabricated nine hopper sections and hung five in place

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² See http://www.alstom.com/Global/Power/Resources/Documents/Brochures/circulating-fluidised-bed-boiler-technology-coal-oil-power.pdf for information on NID system.

³ Penthouse is a term used to describe the equipment enclosure on top of the silo.

- All 9 baghouse compartments fabricated and in place
- Weld-out completed on sections 1-3 baghouse compartments
- Reactor ducts 1- 3 fabricated and in place
- Reactor ducts 4-9 fabricated
- Fabricated nine hopper sections and hung in place
- Waste ash silo wall pour complete and penthouse set
- Erected and enclosed NID electrical building, and turned it over to electrical contractor
- All cable tray set in NID electrical building and conduit near completion
- All NID electrical room switchgear in place
- Pulled 13.8KV cables from the Boswell Energy Center switchyard to NID electrical building
- All motor control centers set
- Building siding near complete for heat in lower NID building

Exhibit C contains pictures of the construction work at various stages of the project. Minnesota Power can report that through October 2014, with more than 362,000 hours worked on the project; there have been three OSHA (Occupational Safety and Health Administration) recordable injuries and no lost time injuries.

B. Project Schedule

Construction work is progressing on schedule as presented in the BEC4 Plan Petition (see Table 2, page 29) submitted on August 31, 2012, and the subsequent March 7, 2013 Petition seeking Commission approval to establish the BEC4 Rider (see Table 1, page 9).

Table 1 presents the projected schedules for implementation activities and status for activities to date.

Table 1 - Project Implementation Activity Update

Activity – Project Implementation	Timeline
Phase 1 – Conceptual Engineering	
Target Procurement Activities – Environmental	Apr 2012 – Dec 2012
Equipment *Completed	
Phase 2 – Final Design & Procurement	
Fabricate/Deliver – Fabric Filter/CDS *In Progress	Jul 2012 – May 2015
Phase 3 – Construction	
Site Preparation *Completed	Apr 2013 – Jul 2013
Pile construction *Completed	Jul 2013 – Nov 2013
Construction – Civil & Foundations *Completed	Apr 2013 – Sep 2014
Construction – CDS/Fabric Filter and Ash Silo *In	Apr 2014 – Jul 2015
Progress	
Construction – Electrical and Controls *In Progress	Nov 2014 – Jul 2015
Phase 4 – Start-Up	
Checkout & Commission for Tuning	Apr 2015 – Oct 2015
Final Plant Start-Up and Tuning	Oct 2015 – Jan 2016

Air and wetland/water permits from federal, state and local agencies, identified in Tables 3 and 4 on page 30 of the BEC4 Plan Petition, were required to begin construction of the BEC4 Project. Minnesota Power received all necessary permits.

C. Cost Containment Measures and Budget Estimate Update

The BEC4 Project is a complex multi-year project. A rigorous technology evaluation, as well as a feasibility study, was conducted over an approximate five-year period to determine the most cost-effective path forward for retrofitting BEC4. To ensure the lowest overall cost for the BEC4 Project, Minnesota Power uses best practices in industry supply chain management. The Company uses its purchasing procedures to obtain competitive bids for as many purchases as possible, including equipment and labor packages, and award contracts to bidder(s) based on the best overall economic value for its customers. The Company also includes an appropriate contingency amount to cover costs of direct project related items such as bids coming in higher than estimated, change orders for items not included in the specifications, and scope items added to the project that weren't considered during the initial concept. Minnesota Power is pleased to report that the BEC4 Project total anticipated project cost has decreased to a current estimate of approximately \$260 million from an originally estimated approximately \$350 million. The total project cost reflects Minnesota Power's 80 percent⁴ ownership interest in the equipment and facilities that comprise the BEC4 Project. The reasons for the decrease in total project cost for the BEC4 Project are discussed below.

First, the initial Project cost estimates from April 2012 were based upon the design and footprint for a recent installation of a specific CDS technology at another utility's facility similar to BEC4. Through the request for proposal process that took place in the first half of 2012, it was determined that Alstom's NID layout fit the BEC4 site much better, with the constraints created by the location of Blackwater Lake, than the CDS technology used in the initial estimate. The NID layout offers many advantages including:

- Reducing the impact to wetlands by approximately 50 percent from the initial estimate;
- Reducing the amount of steel and erection costs due to the smaller footprint; and
- Creating additional engineering opportunities to reduce other costs.

These advantages led to Alstom being awarded the contract in August 2012.

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⁴ BEC4 is jointly owned by Minnesota Power and WPPI Energy. As a co-owner of BEC4, WPPI Energy will pay a proportionate share of the required capital and O&M (operations & maintenance) associated with the BEC4 Project. Amounts reflected are net of WPPI's 20% ownership interest in BEC4. Amounts include approximately \$3.6 million of AFUDC (Allowance for Funds Used During Construction) net of contra.

Second, over the past two-plus years Minnesota Power was able to refine its engineering of the project as the Company has progressed from the initial design stage through the planning, procurement and initial construction stages. Over the course of the project, Minnesota Power will put out for bid thirty (30) contracts associated with the BEC4 Project. Similar to the CDS technology, as the other contracts were either awarded or were in a bid evaluation process, the Company acquired the detailed knowledge and specifications needed to refine its engineering. As the percentage of engineering completed increased, the project cost values became more certain. As previously stated, approximately 95 percent of the contracts have currently been awarded and engineering is more than 96 percent complete. Many of these contracts were awarded for less than the estimated amounts. Moreover, the due diligence performed by the project team helped to minimize the incidents where the contractor hadn't included all of the necessary scope prior to awarding the bid. Over the past year, the Company has taken the opportunity to provide updated project cost estimates to its stakeholders through various filings submitted to the Commission that are associated with the BEC4 Project.

Finally, because approximately 95 percent of the contracts are awarded and costs determined, Minnesota Power is able to carry a lower contingency on the Project than what was included in the original estimate. The BEC4 Project cost updates the Company has provided in the past year each reflect a gradual decrease in the amount of contingency on the Project. Through the diligent efforts of Minnesota Power, and those working on behalf of Minnesota Power, the Company has been successful to this point in working towards achieving the lowest overall cost for the BEC4 Project on behalf of its customers.

Figure 1 illustrates the span of time and sequence for the project-cost related activities associated with the BEC4 Project.

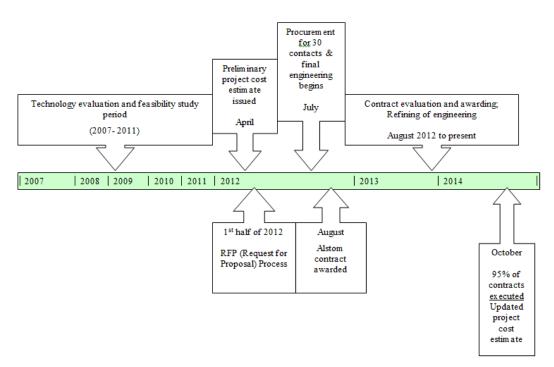


Figure 1 - Timeline of Project-cost Related Activities

D. Notice of Violation Update

Minnesota Power provides the following project update in compliance with Order Point 1.b. of the Commission's November 5, 2013 Order in Docket No. E015/M-12-920 that requires Minnesota Power to "include in its annual rate factor adjustment filing an update on its discussions with the EPA to resolve the notice of violation and shall identify and explain any costs related to the notice of violation included in its rate factor adjustment filings or other rate proceeding." On July 16, 2014, Minnesota Power reached a settlement agreement with the EPA and the MPCA related to alleged violations of the New Source Review requirements of the Clean Air Act at the Boswell Energy Center. The settlement is compatible with Minnesota Power's long term Energy Forward strategy to reduce emissions, diversify its energy mix and advance renewables; however, it does not include any admission of wrongdoing on the part of the company. The settlement agreement was approved by the U.S. District Court for the District of Minnesota and became effective September 29, 2014.

The BEC4 Project, as approved by the Commission in an Order dated November 5, 2013, will comply with the terms of the settlement, including the permissible level of SO₂ emissions at the completion of the BEC4 Project. The equipment requirements to meet the SO₂ emission limits specified in the settlement are the same as those required to meet the SO₂ emission limits under MATS and other enacted or pending federal and state air regulations; therefore, there are no incremental capital costs associated with settlement compliance. Minnesota Power will need to increase the amount of lime used in order to achieve compliance with the settlement terms for SO₂ emissions. Based on current engineering estimates, the projected cost differential for the additional lime usage is estimated to be less than \$150,000 annually. The cost differential is based on the pre-project baseline emission reduction level identified in the BEC4 Plan Petition. The small additional cost each year to reduce SO₂ emission to a level lower than what is required under other enacted or pending federal and state air regulations delivers further environmental value to Minnesota Power customers and other residents in northeastern Minnesota. These operating costs will not be incurred until the facility becomes operational. There are no costs related to the settlement of the notice of violation included in this Petition.

V. COST RECOVERY

A. BEC4 Rider - Revenue Requirements

Based upon the current estimated costs, the revenue requirements for the BEC4 Project have been calculated according to the cost recovery terms detailed in Minnesota Power's Petition as approved by the November 5, 2013 Order. Subsequent to the November 5, 2013 Order, the Commission approved Minnesota Power's 2013 Renewable Resources Rider Adjustment Factors in Docket No. E015/M-13-410. In its Order dated December 3, 2013, the Commission, "Directed the Company for all future Renewable Resources Rider and other rider recovery filings, to remove capitalized internal costs when calculating the amount of AFUDC (allowance for funds used during construction) included in the rate base for rider recovery purposes, consistent with the terms of its prior rider filings." Consistent with this directive, Minnesota Power has excluded internal capitalized labor and the AFUDC on internal capitalized labor from the project costs and overall revenue requirements calculations for the BEC4 Project. Refer to Exhibit B-3 for these specific deductions from the project costs.

In addition to the adjustments discussed in the above paragraph, another adjustment has been made to future revenue requirements. Equipment with Original Installed Cost ("OIC") of approximately \$40 million will be retired from BEC4 prior to the BEC4 Project being placed into service. When this occurs, Minnesota Power will deduct the estimated revenue requirements associated with this equipment that is currently in base rates from the BEC4 rider revenue requirements. This credit includes a return on average rate base, depreciation expense and associated O&M (operations & maintenance) expenses. This credit is applied beginning in October 2015 in this Petition and will continue until the BEC4 Project is rolled into base rates in Minnesota Power's subsequent rate case. Refer to Exhibit B-1, page 5 of 5, row E5 for the application of this expected credit, and to Exhibit B-2, page 11 of 11, for the calculation of this credit.

As part of a power sales agreement to Basin Electric Power Cooperative ("Basin"), Minnesota Power is allowed to collect costs associated with new emission control additions to BEC4 over a specified period from Basin. Minnesota Power is passing the benefits of this agreement directly to customers through crediting the revenue requirements by Basin's specified

share of the costs for a portion of the contract. Refer to Exhibit B-1, page 5, row E4 for Basin's total 2015 share.

Minnesota Power proposes to include a total of \$22.7 million in jurisdictional revenue requirements in the BEC4 Rider Adjustment Factors. The total revenue requirements for the BEC4 Rider Adjustment Factors consist of the projected 2014 year-end Tracker Balance of \$5.7 million and 2015 revenue requirements of \$17 million. As discussed below, the BEC4 Rider Adjustment Factors are calculated to recover the revenue requirements over a twelve-month period. Refer to Exhibit B-1 for a summary of the revenue requirements and to Exhibit B-2 for the detailed revenue requirement calculations.

B. Cost Allocation and Rate Design

1. Jurisdictional and Class Allocation

The jurisdictional and class allocations of revenue requirements for the BEC4 Project have been calculated based on the methodology detailed in Minnesota Power's Petition and the subsequent Order. Specifically, the revenue requirements have been allocated between jurisdictions using the Power Supply Production Demand (D-01) allocators as approved in Minnesota Power's 2009 rate case (Docket No. E015/GR-09-1151). Once revenue requirements are brought to jurisdiction, Minnesota Power utilized the Power Supply Production Demand (Peak & Average D-01) allocators, also approved in Minnesota Power's 2009 rate case (Docket No. E015/GR-09-1151), to allocate the revenue requirements to class. See Exhibit B-5 for further detail on these allocators.

Order Point 4 of the November 5, 2013 Order requires Minnesota Power to make annual rate factor adjustment filings, including adjusted retail allocation factors if any Large Power or wholesale customer's load changes by 10 megawatts ("MW") or more. In the present filing no adjustment has been made to the allocation factors, although it is anticipated this will be required in the 2016 Factor Filing if expected large load changes actually occur. Minnesota Power's anticipates a new retail Large Power customer with a demand of approximately 20 MW in 2015. While the additional billing units for this expected new customer are included in the billing units used to calculate the proposed Large Power Billing Factors, the allocation factors will be adjusted in the 2016 Factor Filing. In the 2016 Factor Filing, Minnesota Power will also

incorporate the 2014 loss of a firm Wholesale customer with an average 2013 load of approximately 19 MW. Assuming all else equal, these two load changes are anticipated to slightly increase the allocation to the Minnesota retail jurisdiction and to the Large Power class. There are no other known or anticipated current load changes of 10 MW or more associated with any retail Large Power or firm wholesale customer.

2. Rate Design

Consistent with the terms of the BEC4 Rider, the Large Power ("LP") rate design for the Boswell 4 Plan Adjustment incorporates demand (\$/kW-month) and energy (¢/kWh) adders that recover the costs in a manner that preserves LP base rate design. Specifically, the LP revenue requirements are split between demand and energy based on LP's 2010 base rate demand and energy revenue split of approximately 60 percent demand and 40 percent energy from the Company's most recent rate case (Docket No. E015/GR-09-1151). The LP demand rate adder is calculated as 60 percent of the projected LP revenue requirement divided by the LP class Billing Demand (kW-month) from the 2015 budget. The LP energy rate adder is calculated as 40 percent of the projected LP revenue requirement divided by the annual LP energy sales (kWh) from the 2015 budget. See Exhibit B-1, page 1 of 5, for further detail.

Also consistent with the terms of the BEC4 Rider, the rate design for the Boswell 4 Plan Adjustment for the remaining retail rate classes (non-LP) is an average energy-based (kWh) rate adder. This energy adder is calculated as an average energy (¢/kWh) charge consisting of the projected non-LP revenue requirements divided by the annual non-LP energy (kWh) sales from the 2015 budget. See Exhibit B-1, page 1 of 5, for further detail. Also, refer to Exhibit A for the proposed Rider for Boswell Unit 4 Emission Reduction tariff page.

C. Customer Impact

Assuming the effective date is June 1, 2015, the rate impact for the average residential customer will be approximately \$0.86 per month or a 1.06 percent increase during the first twelve months of cost recovery.

For Large Power customers, the rate impact will be approximately 0.093¢ per kWh of energy or an increase of 1.61 percent during the first twelve months of cost recovery.

Table 2 summarizes the estimated revenue requirements and rate impacts by customer class for the twelve months beginning June 1, 2015.

Table 2--Estimated Customer Impact

Proposed Billing Factor Effective	6/1/2015
Retail Revenue Requirements	\$22,693,774
Rate Class Impacts 1/	
Residential	
Average Current Rate (¢/kWh)	9.995
Increase (¢/kWh)	0.106
Increase (%)	1.06
Average Impact (\$/month)	0.86
General Service	
Average Current Rate (¢/kWh)	9.990
Increase (¢/kWh)	0.106
Increase (%)	1.06
Average Impact (\$/month)	2.95
Large Light & Power	
Average Current Rate (¢/kWh)	8.081
Increase (¢/kWh)	0.106
Increase (%)	1.31
Average Impact (\$/month)	241.64
Large Power	7.7.10
Average Current Rate (¢/kWh)	5.740
Increase (demand + energy combined) (¢/kWh)	0.093
Increase (%)	1.61
Average Impact (\$/month)	46,554
Municipal Pumping	
Average Current Rate (¢/kWh)	9.149
Increase (¢/kWh)	0.106
Increase (%)	1.16
Average Impact (\$/month)	11.43
Tiob4in a	
Average Current Pate (4/kWh)	15 657
Average Current Rate (¢/kWh)	15.657
Increase (¢/kWh)	0.106
Increase (%)	0.68
Average Impact (\$/month)	0.39

Notes:

1/ Average current rates are 2015 estimated rates based on Final 2010 TY General Rates in 2009 Rate Case (E015/GR-09-1151) without riders, adjusted to include current rider rates. Current rider rates include Renewable Resources Rider rates, Transmission Cost Recovery Rider rates, BEC4 Rider rates, Conservation Program Adjustment, and estimated 2015 Fuel and Purchased Energy Adjustment. Average \$/month impact based on 2015 budgeted billing units.

VI. CONCLUSION

Minnesota Power respectfully requests that the Commission approve Minnesota Power's rate adjustment under its Rider for Boswell Unit 4 Emission Reduction. Additionally, Minnesota Power appreciates the opportunity to update the Commission and its stakeholders on the progress of the BEC4 Project and the Company's efforts to reduce the overall cost of the project on behalf of its customers.

Dated: November 26, 2014 Respectfully submitted,

Bv:

Lori Hoyum Policy Manager Minnesota Power 30 West Superior Street Duluth, MN 55802 (218) 355-3601 lhoyum@mnpower.com

Gori Hoyum

EXHIBIT A

MINNESOTA POWER ELECTRIC RATE BOOK - VOLUME I

SECTION _	V	PAGE NO.	93	
REVISION		Original 1		

RIDER FOR BOSWELL UNIT 4 EMISSION REDUCTION

Applicable to electric service under all Company's Retail Rate Schedules except Competitive Rate Schedules - Rate Codes 73 and 79. In addition, this Rider is applicable to service under Company's Rider for Large Power Interruptible Service and Rider for Large Power Incremental Production Service.

The following charges are applicable in addition to all charges for service being taken under Company's standard rate schedules:

Rate Class _arge Power	Boswell 4 Plan Adjustment
Large Power	\$ <u>0.99</u> 0.60 per kW-month of Billing Demand
	and
	<u>0.094</u> 0.057 ¢/kWh
All other applicable Retail Rate Customers	<u>0.262<mark>0.156</mark>¢/kWh</u>

Filing Date	February 26, 2013	MPUC Docket No.	E-015/M-13-1166
Effective Date _	August 1, 2014	Order Date	July 2, 2014

Approved by: Marcia A. Podratz

MINNESOTA POWER	SECTION V	PAGE NO. 93
ELECTRIC RATE BOOK - VOLUME I	REVISION	1

RIDER FOR BOSWELL UNIT 4 EMISSION REDUCTION

Applicable to electric service under all Company's Retail Rate Schedules except Competitive Rate Schedules - Rate Codes 73 and 79. In addition, this Rider is applicable to service under Company's Rider for Large Power Interruptible Service and Rider for Large Power Incremental Production Service.

The following charges are applicable in addition to all charges for service being taken under Company's standard rate schedules:

of Billing Demand and 0.094¢/kWh other applicable Retail Rate Customers 0.262¢/kWh	
Large Power	
	and
	0.094¢/kWh
All other applicable Retail Rate Customers	0.262¢/kWh
Filing Date	MPUC Docket No

Approved by: Marcia A. Podratz

Marcia A. Podratz Director - Rates

EXHIBIT B

Exhibit B-1 1 of 5

Minnesota Power BEC4 Rider: 2015 Factor Filing Summary: Revenue Requirements, Cost Allocation and Rate Design

				М	N Jurisdictional Amounts Total	
Projected Year End 2015 Net Revenue	2014 Tracker Baland Requirements 2/	ce 1/		\$ \$	5,667,325 17,026,449	
Total 2015 Factor F	Revenue Requiremen	ts		\$	22,693,774	
			Allocators 3/			
MN Jurisdictional 8	& Class Revenue Red	quirements	100.00%	\$	22,693,774	
Large Power			62.51%	\$	14,185,926	
All Other Retail Cla	asses		37.49%	\$	8,507,848	
Billing Units 4/						
Large Power			kW - month		716,608	
			kWh		6,037,136,000	
All Other Retail Cla	asses		kWh		3,245,508,000	
Billing Factors 5/					Proposed 6/1/2015	
Large Power			\$/kW - month	_	0.99	
Large Fower			¢/kWh		0.094	
All Other Retail Cla	asses		¢/kWh		0.262	
			O was t Dat		Daniel	
		(A) (1) 1.1.1	Current Rate		Proposed	Increase
	Large Power	(\$/kW - month)	0.60		0.99	0.390
	All Other Classes	(¢/kWh) s (¢/kWh)	0.057 0.156		0.094 0.262	0.037 0.106
	2 2 2	(21.00			21700

Notes:

- 1/ Refer to Exhibit B-1, page 3 of 5, row G3.
- 2/ Refer to Exhibit B-1, page 5 of 5, row E8.
- 3/ Jurisdictional Power Supply Demand (D-01) allocator and Peak & Average (P&A) class allocators from 2009 MPUC rate case Docket No. E-015/GR-09-1151. Refer to Exhibit B-5, line 11. 4/ 2015 Budget.
- 5/ The LP rate design is a demand rate adder (\$/kW-month) and an energy adder (\$\phi/kWh\$). The LP allocated costs are to be split between demand and energy on the 2010 base rate demand and energy revenue split of approximately 60% demand and 40% energy per results of MP's most recent MPUC rate case (Docket No. E015/GR-09-1151). All other retail classes will have an energy adder (\$\phi/kWh\$).

Minnesota Power BEC4 Rider 2014 Revenue Requirements: Total Sum All Projects

Exhibit B-1 Page 2 of 5

2014 Revenue Requirements

Section	Line D	es-13 Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Total Year Dec-14
A	Book Basis of Property 0 CWIP (net of contra AFUDC & internal costs) 1/ 1 Plant in Service (net of contra AFUDC & Internal co	60,653,45	1 67,309,385	74,393,761	84,019,187	91,690,914	99,185,813	104,779,955	110,611,126	119,381,370	130,694,623	138,808,812	146,950,210	146,950,210
	2 Total Accumulated Depreciation	313)		_	_	-	-	-	-	-	-	-	_	-
	3 Net Plant			_	_	_	_	-	_	_	-	-	_	_
	4 Total Depreciation			-	-	-	-	-	-	-	-	-	-	-
В	Tax Basis of Property													
	1 Plant in Service			-	-	-	-	-	-	-	-	-	-	-
	2 Accumulated Depreciation			-	-	-	-	-	-	-	-	-	-	-
	3 Net Plant		-	-	-	-	-	-	-	-	-	-	-	-
	4 Bonus Depreciation			-	-	-	-	-	-	-	-	-	-	-
	5 Total Tax Depreciation (including bonus)		-	-	-	-	-	-	-	-	-	-	-	-
	6 Tax Book Difference			-	-	-	-	-	-	-	-	-	-	-
	7 Income Tax Rate	41.37	% 41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
	8 Accumulated Deferred Income Tax Liability			-	-	-	-	-	-	-	-	-	-	-
	9 Deferred Tax Expense debit / (Credit)		-	-	-	-	-	-	-	-	-	-	-	-
C-1	Revenue Requirements - Consolidated NOL													
	1 Net Plant			-	-	-	-	-	-	-	-	-	-	-
	2 Less: ADITL - Def Taxes			-	-	-	-	-	-	-	-	-	-	-
	3 Rate Base			-	-	-	-	-	-	-	-	-	-	-
	4 Average Rate Base		-	-	-	-	-	-	-	-	-	-	-	
	5 Current Return on CWIP 1/	605,31	4 647,812	717,372	801,966	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	11,992,667
	6 Return on Average Rate Base			-	-	-	-	-	-	-	-	-	-	
	7 After Tax Return on Equity			-	-	-	-	-	-	-	-	-	-	-
	8 Income Tax Component			-	-	-	-	-	-	-	-	-	-	-
	9 Interest Expense Component	-	<u> </u>				<u>-</u>							
	10 Total Return on Average Rate Base			-	-	-	-	-	-	-	-	-	-	-
	11 Operation & Maintenance Expense			-	-	-	-	-	-	-	-	-	-	-
	12 Depreciation Expense		-	-	-	-	-	-	-	-	-	-	-	-
	13 Property Tax													
	14 Revenue Requirements	605,31	4 647,812	717,372	801,966	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	11,992,667

^{1/} Refer to Exhibit B-3, page 2.

Minnesota Power BEC4 Rider 2014 Revenue Requirements: Total Sum All Projects

Exhibit B-1 Page 3 of 5

2014 Revenue Requirements

Section	Line	Des-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Total Year Dec-14
C-2	Revenue Requirements - Stand Alone NOL														
	1 Net Plant		-	-	-	-	-	-	-	-	-	-	-	-	-
	2 Less: ADITL - Def Taxes		-	-	-	-	-	-	-	-	-	-	-	-	-
	3 Rate Base		-	-	-	-	-	-	-	-	-	-	-	-	-
	4 Average Rate Base		-	-	-	-	-	-	-	-	-	-	-	-	
	5 Current Return on CWIP /1		605,314	647,812	717,372	801,966	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	11,992,667
	6 Return on Average Rate Base		-	-	-	-	-	-	-	-	-	-	-	-	
	7 After Tax Return on Equity		-	-	-	-	-	-	-	-	-	-	-	-	-
	8 Income Tax Component		-	-	-	-	-	-	-	-	-	-	-	-	-
	9 Interest Expense Component						<u> </u>			<u> </u>	<u> </u>	<u>-</u> .	<u> </u>		
	10 Total Return on Average Rate Base		-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Operation & Maintenance Expense		-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Depreciation Expense		-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Property Tax						<u> </u>	<u>-</u> .	<u>-</u> .	<u> </u>	<u>-</u> .	<u> </u>	<u>-</u> .		
	14 Revenue Requirements		605,314	647,812	717,372	801,966	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	11,992,667
	Stand Alone Taxable Income or Loss (NOL)														
	1 Revenue Requirements		605,314	647,812	717,372	801,966	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	11,992,667
	2 Tax Depreciation 3 Property Tax		-	-	-	-	-	-	-	-	-	-	-	-	-
	4 Interest Expense (including on CWIP) /1		126,543	135,427	149,969	167,654	185,960	202,011	215,864	227,956	243,409	264,664	285,224	302,428	2,507,109
	5 Operation & Maintenance Expense		120,545	133,427	149,909	107,034	105,900	202,011	213,004	221,930	243,409	204,004	205,224	302,420	2,307,109
	6 Total Tax Deduction		126,543	135,427	149,969	167,654	185,960	202,011	215,864	227,956	243,409	264,664	285,224	302,428	2,507,109
	7 Taxable Income (NOL)		478,771	512,385	567,403	634,312	703,573	764,302	816,713	862,462	920,928	1,001,346	1,079,137	1,144,227	9,485,558
	0.00		400.000	044.070	004.705	000 445	204.000	316.192	337.874	356.800	380.988	414.257	440,400	470.007	2 004 470
	8 Current tax expense		198,068	211,973	234,735	262,415	291,068	316,192	337,874	356,800	380,988	414,257	446,439	473,367	3,924,176
•	Summary: Revenue Requirements														
	1 Revenue Requirement: Consolidated		605,314	647,812	717,372	801,966	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	11,992,667
	2 Revenue Requirement: Stand Alone		605,314	647,812	717,372	801,966	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	11,992,667
	3 Revenue Requirement: Rider 2/		605,314	647,812	717,372	801,966	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	11,992,667
	4 Revenue Credit for Basin's Share /3		-	-	-	-	-	-	-	-	-	-	-	-	-
	5 BEC 4 Base Rate Revenue Credit 3/		-	_	-	_	_	-	_	-	-	_	-	_	_
	6 Total Net Revenue Requirements		605,314	647,812	717,372	801,966	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	11,992,667
	7 MN Jurisdictional Allocator /4		0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017
	8 MN Jurisdictional Revenue Requirement		496,461	531,316	588,367	657,748	729,568	792,541	846,888	894,328	954,954	1,038,343	1,119,008	1,186,503	9,836,025
	Monthly Entry														
	1 Monthly Entry needed		496,461	531,316	588,367	657,748	729,568	792,541	846,888	894,328	954,954	1,038,343	1,119,008	1,186,503	
	2 Cumulative Year		496,461	1,027,776	1,616,144	2,273,892	3,003,459	3,796,001	4,642,889	5,537,217	6,492,171	7,530,514	8,649,522	9,836,025	
	3 Booked YTD		496,461	1,027,776	1,616,144	2,273,892	3,003,459	3,796,001	4,642,889	5,537,217	6,492,171	7,530,514	8,649,522	9,836,025	
	4 Entry Needed		496,461	531,316	588,367	657,748	729,568	792,541	846,888	894,328	954,954	1,038,343	1,119,008	1,186,503	
	Tracker									===== actu	al =====	=======	== estimated ====	======	
	1 Cash Collections /5		-	-	-	-	-	-	-	906,960	1,091,041	1,148,945	1,148,945	1,148,945	
	2 Monthly (Over)/Under collection		496,461	531,316	588,367	657,748	729,568	792,541	846,888	(12,633)	(136,087)	(110,602)	(29,937)	37,558	
	Cumulative (Over)/Under Balance Refer to Exhibit B-3, starting on page 10.	1,276,136	1,772,597	2,303,913	2,892,280	3,550,028	4,279,596	5,072,137	5,919,025	5,906,393	5,770,306	5,659,704	5,629,767	5,667,325	

^{1/} Refer to Exhibit B-3, starting on page 10. 2/ Lesser of E1 or E2.

^{3/} Details to follow as applicable.

^{4/} Refer to Exhibit B-5, page 1, line 11.

^{5/} Estimated cash collections (2014 BEC Factor effective 8-1-14; revenue requirements \$13,787,338 divided by 12 months = \$1,148,945/month).

Minnesota Power BEC4 Rider 2015 Revenue Requirements: Total Sum All Projects

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2015 Revenue Requirements

Section	Line Dec-1	4 Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Total Year Dec-15
Α	Book Basis of Property													
	CWIP (net of contra AFUDC & internal costs) 1/	154,344,870	160,233,939	166,016,010	174,758,568	181,160,534	187,305,068	195,665,965	204,009,930	210,640,161	215,194,261	218,440,562	2,362,033	2,362,033
	1 Plant in Service (net of contra AFUDC & Internal costs)	-	-	-	-	-	-	-	-	-	-	-	234,166,221	234,166,221
	2 Total Accumulated Depreciation	-	-	-	-	-	-	-	-	-	-	-	487,846	487,846
	3 Net Plant	-	-	-	-	-	-	-	-	-	-	-	233,678,375	233,678,375
	4 Total Depreciation	-	-	-	-	-	-	-	-	-	-	-	487,846	487,846
	5 Book Depreciation Rate													
В	Tax Basis of Property													
	1 Plant in Service	-	-	-	-	-	-	-	-	-	-	-	234,166,221	234,166,22
	2 Accumulated Depreciation	-	-	-	-	-	-	-	-	-	-	-	2,551,208	2,551,208
	3 Net Plant	-	-	-	-	-	-	-	-	-	-	-	231,615,014	231,615,014
	4 Bonus Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-
	5 Total Tax Depreciation (including bonus)	-	-	-	-	-	-	-	-	-	-	-	2,551,208	2,551,208
	6 Accumulated Tax Depreciation	-	-	-	-	-	-	-	-	-	-	-	2,551,208	2,551,20
	6 Tax Book Difference	-	-	-	-	-		-	-	-	-	-	2,063,361	2,063,36
	7 Income Tax Rate	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.379
	8 Accumulated Deferred Income Tax Liability	-	-	-	-	-	-	-	-	-	-	-	853,613	853,613
	9 Deferred Tax Expense debit / (Credit)	-	-	-	-	-	-	-	-	-	-	-	853,613	853,613
	10 ADITA for NOL Carryforward	-	-	-	-	-	-	-	-	-		-	-	-
	11 Carryforeward utilized	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 ADITA - NOL	-	-	-	-	-	-	-	-	-	-	-	-	-
C-1	Revenue Requirements - Consolidated NOL													
	1 Net Plant	_	_	_	_	_	_	_	_	_	_	_	233,678,375	233.678.375
	2 Less: ADITL - Def Taxes	-	_	-	-	-	-	_	_	_	-	_	(853,613)	(853,613
	3 Plus: ADITA - NOL		_	-	-	-	-	_	_	_	-	_	-	-
	3 Rate Base		_	-	-	-	-	_	_	_	-	_	232,824,762	232,824,76
	4 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	116,412,381	
	5 Current Return on CWIP 1/	1,525,306	1,592,555	1,651,640	1,725,171	1,801,840	1,865,357	1,938,791	2,023,359	2,099,166	2,155,787	2,195,276	1,117,813	21,692,06
	6 Return on Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-	
	7 After Tax Return on Equity	-	-	-	-	-	-	-	-	-	-	-	546,589	546,589
	8 Income Tax Component	-	-	-	-	-	-	-	-	-	-	-	385,680	385,680
	9 Interest Expense Component												246,406	246,406
	10 Total Return on Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	1,178,675	1,178,67
	11 Operation & Maintenance Expense	-	-	-	-	-	-	-	-	-	-	810,000	810,000	1,620,000
	12 Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	487,846	487,846
	13 Property Tax													
	14 Revenue Requirements	1,525,306	1,592,555	1,651,640	1,725,171	1,801,840	1,865,357	1,938,791	2,023,359	2,099,166	2,155,787	3,005,276	3,594,335	24,978,58

^{1/} Refer to Exhibit B-3, page 11.

Minnesota Power BEC4 Rider 2015 Revenue Requirements: Total Sum All Projects

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2015 Revenue Requirements

Section		Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Total Year Dec-15
-2	Revenue Requirements - Stand Alone NOL 1 Net Plant													233.678.375	233.678.37
	2 Less: ADITL - Def Taxes		-	-	-	-	-	-	-	-	-	-	-		
			-	-	-	-	-	-	-	-	-	-	-	(853,613)	(853,61
	3 Rate Base		-	-	-	-	-	-	-	-	-	-	-	232,824,762	232,824,76
	4 Average Rate Base		-	-	-	-	-	-	-	-	-	-	-	116,412,381	
	5 Current Return on CWIP /1		1,525,306	1,592,555	1,651,640	1,725,171	1,801,840	1,865,357	1,938,791	2,023,359	2,099,166	2,155,787	2,195,276	1,117,813	21,692,0
	6 Return on Average Rate Base		-	-	-	-	-	-	-	-	-	-	-	-	
	7 After Tax Return on Equity		-	-	-	-	-	-	-	-	-	-	-	546,589	546,5
	8 Income Tax Component		-	-	-	-	-	-	-	-	-	-	-	385,680	385,6
	9 Interest Expense Component		_	_	_	_	_	_	_	_	_	_	_	246,406	246,4
	10 Total Return on Average Rate Base								_					1,178,675	1,178,6
			-	-	-	-	-	-	-	-	-	-	040.000		
	11 Operation & Maintenance Expense		-	-	-	-	-	-	-	-	-	-	810,000	810,000	1,620,
	12 Depreciation Expense		-	-	-	-	-	-	-	-	-	-	-	487,846	487,
	13 Property Tax			<u>-</u>		-	<u> </u>								
	14 Revenue Requirements		1,525,306	1,592,555	1,651,640	1,725,171	1,801,840	1,865,357	1,938,791	2,023,359	2,099,166	2,155,787	3,005,276	3,594,335	24,978,5
	Stand Alone Taxable Income or Loss (NOL)														
	1 Revenue Requirements		1,525,306	1.592.555	1,651,640	1,725,171	1,801,840	1,865,357	1.938.791	2,023,359	2.099.166	2,155,787	3,005,276	3,594,335	24.978.
	2 Tax Depreciation		.,,	-,,	.,,	.,,	-	-,,	.,,	_,,,	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_,,	-,,	2,551,208	2,551,
	3 Property Tax		_	_	_	_	_	_	_	_	_	_	_	2,001,200	2,001,
	4 Interest Expense (including on CWIP) /1		318,871	332,929	345,281	360,653	376,681	389.959	405,311	422.990	438,838	450.675	458.930	480.089	4.781.
	5 Operation & Maintenance Expense		310,071	332,323	343,201	300,033	370,001	309,939	405,511	422,550	430,030	450,075	810.000	810.000	
										-	-			,	1,620,
	6 Total Tax Deduction		318,871	332,929	345,281	360,653	376,681	389,959	405,311	422,990	438,838	450,675	1,268,930	3,841,296	8,952,4
	7 Taxable Income (NOL)		1,206,436	1,259,626	1,306,359	1,364,518	1,425,159	1,475,398	1,533,480	1,600,369	1,660,328	1,705,112	1,736,346	(246,962)	16,026,1
	8 Current tax expense		499,102	521,108	540,441	564,502	589,589	610,372	634,401	662,072	686,878	705,405	718,327	(102,168)	6,630,0
	9 Taxable Income (NOL)		1,206,436	1,259,626	1,306,359	1,364,518	1,425,159	1,475,398	1,533,480	1,600,369	1,660,328	1,705,112	1,736,346	(246,962)	16,026,1
	10 NOL carryforward		-	-	-	-	-	-	-	-	-	-	-	-	
	11 Taxable Income after NOL carryforward		1,206,436	1,259,626	1,306,359	1,364,518	1,425,159	1,475,398	1,533,480	1,600,369	1,660,328	1,705,112	1,736,346	15,920,705	16,026,
	12 Expected stand alone ADITA NOL		-	-	-	-	-	-	-	-	-	-	-	-	
	Commence Barrers Barrers and														
	Summary: Revenue Requirements														
	1 Revenue Requirement: Consolidated		1,525,306	1,592,555	1,651,640	1,725,171	1,801,840	1,865,357	1,938,791	2,023,359	2,099,166	2,155,787	3,005,276	3,594,335	24,978,
	2 Revenue Requirement: Stand Alone		1,525,306	1,592,555	1,651,640	1,725,171	1,801,840	1,865,357	1,938,791	2,023,359	2,099,166	2,155,787	3,005,276	3,594,335	24,978,
	3 Revenue Requirement: Rider 2/		1,525,306	1,592,555	1,651,640	1,725,171	1,801,840	1,865,357	1,938,791	2,023,359	2,099,166	2,155,787	3,005,276	3,594,335	24,978
	4 Revenue Credit for Basin's Share /3		-	-	-	-	(357,642)	(370,157)	(384,594)	(401,190)	(416,214)	(427,645)	(587,081)	(700,289)	(3,644,
	5 BEC 4 Base Rate Revenue Credit 4/		_	_	_	_	_	_	-	-	-	(191,372)	(191,372)	(191,372)	(574,
	6 Total Net Revenue Requirements		1,525,306	1,592,555	1,651,640	1,725,171	1,444,199	1,495,200	1,554,196	1,622,169	1,682,952	1,536,770	2,226,823	2,702,674	20,759,
	7 MN Jurisdictional Allocator /5		0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82
	8 MN Jurisdictional Revenue Requirement		1,251,011	1,306,166	1,354,626	1,414,934	1,184,489	1,226,318	1,274,705	1,330,455	1,380,307	1,260,413	1,826,374	2,216,652	17,026,
	Monthly Entry														
	1 Monthly Entry needed		1,251,011	1,306,166	1,354,626	1,414,934	1,184,489	1,226,318	1,274,705	1,330,455	1,380,307	1,260,413	1,826,374	2,216,652	
	Cumulative Year														
			1,251,011	2,557,177	3,911,802	5,326,736	6,511,225	7,737,543	9,012,249	10,342,703	11,723,010	12,983,423	14,809,797	17,026,449	
	3 Booked YTD		1,251,011	2,557,177	3,911,802	5,326,736	6,511,225	7,737,543	9,012,249	10,342,703	11,723,010	12,983,423	14,809,797	17,026,449	
	4 Entry Needed		1,251,011	1,306,166	1,354,626	1,414,934	1,184,489	1,226,318	1,274,705	1,330,455	1,380,307	1,260,413	1,826,374	2,216,652	

^{1/} Refer to Exhibit B-3, page 11.

^{2/} Lesser of E1 or E2.

^{3/} Refer to Exhibit B-2, page 4, row E4 plus page 8, row E4.

^{4/} Refer to Exhibit B-2, page 11, row C14. 5/ Refer to Exhibit B-5, page 1, line 11.

Minnesota Power BEC4 Rider Revenue Requirements: Boswell 4 Environmental Retrofit

Exhibit B-2 Page 1 of 11

Section	Line	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
A	Book Basis of Property 0 CWIP (net of contra AFUDC & internal costs) 1/ 1 Plant in Service (net of contra AFUDC & Internal costs) 1/ 2 Accumulated Depreciation 12/2015 Plant	60,638,366	67,294,300	74,377,448	84,002,868	91,674,596	99,156,809	104,738,266	110,556,751	119,314,309	130,614,877	138,716,380	146,854,579
	Net Plant Total Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
	5 Book Depreciation Rate (24 yrs remaining life 2012)												
В	Tax Basis of Property 1 Plant in Service 2 Accumulated Depreciation 3 Net Plant	- -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- -	- - -	- -	- - -
	4 Bonus Depreciation 5 Net Depreciable 12/2015 Plant 6 Tax Depreciation Rate 12/2015 Plant 2/ 7 Tax Depreciation 12/2015 Plant	-	-	-	-	-	-	-	-	-	-	-	-
	8 Tax Book Difference 9 Income Tax Rate 3/ 10 Accumulated Deferred Income Tax Liability 11 Deferred Tax Expense debit / (Credit)	41.37% - -	41.37% - -	- 41.37% - -	41.37% - -	- 41.37% - -	41.37% - -	- 41.37% - -	- 41.37% - -	41.37% - -	- 41.37% - -	41.37% - -	- 41.37% - -
C-1	Revenue Requirements - Consolidated NOL 1 Net Plant 2 Less: ADITL - Def Taxes 3 Rate Base 4 Average Rate Base	- - -	- - - -	- - -	- - -	- - -	- - - -	- - -	- - -	- - - -	- - -	- - - -	- - -
	5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/ 7 After Tax Return on Equity 8 Income Tax Component 9 Interest Expense Component 10 Total Return on Average Rate Base 11 Operation & Maintenance Expense 12 Depreciation Expense	605,162	647,659	717,213	801,800	889,367 - - - - - -	966,084	1,032,219	1,089,931 - - - - - - -	1,163,722	1,265,267	1,363,489	1,445,703 - - - - - -
	13 Property Tax 5/ 14 Revenue Requirements	605,162	647,659	717,213	801,800	889,367	966,084	1,032,219	1,089,931	1,163,722	1,265,267	1,363,489	1,445,703

^{1/} Refer to Exhibit B-3.

^{2/} Refer to Exhibit B-6

^{3/} Minnesota Composite Income Tax Rate.

^{4/} Current Return on CWIP starts 10/1/13 (Avg. Monthly CWIP x ROR% / 12). Refer to Exhibit B-3 for CWIP calculations.

Pre-tax rate of return is 12.15% from 2009 MPUC rate case, Docket No. E-015/GR-09-1151. Refer to Exhibit B-4 rate of return components.

Return on Average Rate Base starts 12/31/15 (Avg. Monthly Rate Base x ROR% / 12).

^{5/} Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

Minnesota Power BEC4 Rider Revenue Requirements: Boswell 4 Environmental Retrofit

Exhibit B-2 Page 2 of 11

Section	Line	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
C-2	Revenue Requirements - Stand Alone NOL 1 Net Plant	-	-	_	-	-	-	-	-	_	-	-	-
	2 Less: ADITL - Def Taxes	-	-	-	-	-	-	-	-	-	-	-	-
	3 Plus: ADITA - NOL (Stand Alone)	-	-	-	-	-	-	-	-	-	-	-	-
	4 Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	5 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	6 Current Return on CWIP 4/ 7 Return on Average Rate Base 4/	605,162	647,659	717,213	801,800	889,367	966,084	1,032,219	1,089,931	1,163,722	1,265,267	1,363,489	1,445,703
	8 After Tax Return on Equity	-	-	-	-	-	-	-	-	-	-	-	-
	9 Income Tax Component	-	-	-	-	-	-	-	-	-	-	-	-
	10 Interest Expense Component	<u>-</u>	<u>-</u>		<u> </u>		<u>-</u>	<u> </u>	<u> </u>	<u>-</u> .	<u>-</u>		
	11 Total Return on Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	12 Operation & Maintenance Expense	-	-	-	-	-	-	-	-	-	-	-	-
	13 Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	-
	14 Property Tax 5/	-	-	-	-	-	-	-	-	-	-	-	-
	15 Revenue Requirements	605,162	647,659	717,213	801,800	889,367	966,084	1,032,219	1,089,931	1,163,722	1,265,267	1,363,489	1,445,703
D	Stand Alone Taxable Income or Loss (NOL)												
	1 Revenue Requirements	605,162	647,659	717,213	801,800	889,367	966,084	1,032,219	1,089,931	1,163,722	1,265,267	1,363,489	1,445,703
	2 Tax Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
	3 Property Tax	-	-	-	-	-	-	-	-	-	-	-	-
	4 Interest Expense (including on CWIP) 4/	126,511	135,395	149,936	167,619	185,925	201,963	215,789	227,854	243,280	264,508	285,042	302,229
	5 Operation & Maintenance Expense	-	-	-	-	-	-	-	-	-	-	-	-
	6 Total Tax Deduction	126,511	135,395	149,936	167,619	185,925	201,963	215,789	227,854	243,280	264,508	285,042	302,229
	7 Taxable Income (NOL)	478,650	512,264	567,277	634,181	703,442	764,121	816,430	862,077	920,442	1,000,758	1,078,447	1,143,474
	8 Current tax expense	198,018	211,923	234,683	262,361	291,014	316,117	337,757	356,641	380,787	414,014	446,154	473,055
	9 Taxable Income (NOL)	478,650	512,264	567,277	634,181	703,442	764,121	816,430	862,077	920,442	1,000,758	1,078,447	1,143,474
	10 NOL carryforward		-		-			.		-			
	11 Taxable Income after NOL carryforward 6/	478,650	512,264	567,277	634,181	703,442	764,121	816,430	862,077	920,442	1,000,758	1,078,447	1,143,474
	12 Expected stand alone ADITA NOL	-	-	-	-	-	-	-	-	-	-	-	-
E	Summary: Revenue Requirements												
	1 Revenue Requirement: Consolidated	605,162	647,659	717,213	801,800	889,367	966,084	1,032,219	1,089,931	1,163,722	1,265,267	1,363,489	1,445,703
	2 Revenue Requirement: Stand Alone	605,162	647,659	717,213	801,800	889,367	966,084	1,032,219	1,089,931	1,163,722	1,265,267	1,363,489	1,445,703
	3 Revenue Requirement: Rider 7/	605,162	647,659	717,213	801,800	889,367	966,084	1,032,219	1,089,931	1,163,722	1,265,267	1,363,489	1,445,703
	4 Revenue Credit for Basin's Share 8/	-	-	-	-	-	-	-	-	-	-	-	-
	5 BEC 4 Base Rate Revenue Credit 9/	-	-	-	-	-	-	-	-	-	-	-	-
	6 Total Net Revenue Requirements	605,162	647,659	717,213	801,800	889,367	966,084	1,032,219	1,089,931	1,163,722	1,265,267	1,363,489	1,445,703
	7 MN Jurisdictional Allocator 10/	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017
	8 MN Net Jurisdictional Revenue Requirement	496,335	531,191	588,237	657,613	729.432	792,353	846,595	893,929	954,450	1,037,734	1,118,293	1,185,722

^{4/} Current Return on CWIP starts 10/1/13 (Avg. Monthly CWIP x ROR% / 12). Refer to Exhibit B-3 for CWIP calculations.

Pre-tax rate of return is 12.15% from 2009 MPUC rate case, Docket No. E-015/GR-09-1151. Refer to Exhibit B-4 rate of return components.

Return on Average Rate Base starts 12/31/15 (Avg. Monthly Rate Base x ROR% / 12).

^{5/} Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

^{6/} For in-service year, any positive taxable income from return of CWIP is added to first month of taxable loss to establish the first month taxable income/loss.

^{7/} Lesser of E1 or E2.

^{8/} Refer to Exhibit B-2, page 9, row C11.

^{9/} Refer to Exhibit B-2, page 11, row C14.

^{10/} Refer to Exhibit B-5, page 2.

Minnesota Power BEC4 Rider Revenue Requirements: Boswell 4 Environmental Retrofit

Exhibit B-2 Page 3 of 11

Section	n Line	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
A	Book Basis of Property 0 CWIP (net of contra AFUDC & internal costs) 1/ 1 Plant in Service (net of contra AFUDC & Internal costs) 1/ 2 Accumulated Depreciation 12/2015 Plant 3 Net Plant	154,212,688 - -	160,029,535	165,703,952 - -	174,231,737	180,221,170 - -	186,006,730	193,666,693	201,913,716	208,451,126	212,933,005	216,115,324	234,166,221 487,846 233,678,375
	4 Total Depreciation	-	-	-	-	-	-	-	-	-	-	-	487,846
	5 Book Depreciation Rate (24 yrs remaining life 2012)												0.42%
В	Tax Basis of Property 1 Plant in Service												234,166,221
	2 Accumulated Depreciation	-	-	-	-	-	-	-	-	-	-	-	2,551,208
	3 Net Plant	-	-	-	-	-	-	-	-	-	-	-	231,615,014
	4 Bonus Depreciation 5 Net Depreciable 12/2015 Plant 6 Tax Depreciation Rate 12/2015 Plant 2/ 7 Tax Depreciation 12/2015 Plant	-	-	-	-	-	-	-	-	-	-	-	234,166,221 1.089% 2,551,208
	8 Tax Book Difference	-	-	-	-	-	-	-	-	-	-	-	2,063,361
	Income Tax Rate 3/ Accumulated Deferred Income Tax Liability Deferred Tax Expense debit / (Credit)	41.37% - -	41.37% - -	41.37% - -	41.37%	41.37% - -	41.37% - -	41.37% - -	41.37% - -	41.37% - -	41.37% - -	41.37%	41.37% 853,613 853,613
C-1	Revenue Requirements - Consolidated NOL												
	1 Net Plant	-	-	-	-	-	-	-	-	-	-	-	233,678,375
	2 Less: ADITL - Def Taxes 3 Rate Base	-	-	-	-	-	-	-	-	-	-	-	(853,613) 232,824,762
	4 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	116,412,381
	5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/	1,524,153	1,590,851	1,649,026	1,720,924	1,794,418	1,854,029	1,922,097	2,002,626	2,077,472	2,133,257	2,172,057	1,094,084
	7 After Tax Return on Equity 8 Income Tax Component 9 Interest Expense Component	- -	-	-	-	- -	- - -	-	-	-	-	-	546,589 385,680 246,406
	10 Total Return on Average Rate Base 11 Operation & Maintenance Expense 12 Depreciation Expense	-	-	-	-	- - -	-	-	-	-	-	770,000	1,178,675 770,000 487,846
	13 Property Tax 5/				=								
	14 Revenue Requirements	1,524,153	1,590,851	1,649,026	1,720,924	1,794,418	1,854,029	1,922,097	2,002,626	2,077,472	2,133,257	2,942,057	3,530,605

^{2/} Refer to Exhibit B-6

^{3/} Minnesota Composite Income Tax Rate.

^{4/} Current Return on CWIP starts 10/1/13 (Avg. Monthly CWIP x ROR% / 12). Refer to Exhibit B-3 for CWIP calculations.

Pre-tax rate of return is 12.15% from 2009 MPUC rate case, Docket No. E-015/GR-09-1151. Refer to Exhibit B-4 rate of return components.

Return on Average Rate Base starts 12/31/15 (Avg. Monthly Rate Base x ROR% / 12).

^{5/} Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

Minnesota Power BEC4 Rider Revenue Requirements: Boswell 4 Environmental Retrofit

Exhibit B-2 Page 4 of 11

Section	on Line	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
C-2	Revenue Requirements - Stand Alone NOL												
	1 Net Plant	-	-	-	-	-	-	-	-	-	-	-	233,678,375
	2 Less: ADITL - Def Taxes	-	-	-	-	-	-	-	-	-	-	-	(853,613)
	3 Plus: ADITA - NOL (Stand Alone)	-	-	-	-	-	-	-	-	-	-	-	-
	4 Rate Base	-	-	-	-	-	-	-	-	-	-	-	232,824,762
	5 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	116,412,381
	6 Current Return on CWIP 4/ 7 Return on Average Rate Base 4/	1,524,153	1,590,851	1,649,026	1,720,924	1,794,418	1,854,029	1,922,097	2,002,626	2,077,472	2,133,257	2,172,057	1,094,084
	8 After Tax Return on Equity	-	-	-	-	-	-	-	-	-	-	-	546,589
	9 Income Tax Component	-	-	-	-	-	-	-	-	-	-	-	385,680
	10 Interest Expense Component	<u>-</u>						<u> </u>			<u> </u>		246,406
	11 Total Return on Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	1,178,675
	12 Operation & Maintenance Expense	-	-	-	-	-	-	-	-	-	-	770,000	770,000
	13 Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	487,846
	14 Property Tax 5/	-	-	-	-	-	-	-	-	-	-	-	-
	15 Revenue Requirements	1,524,153	1,590,851	1,649,026	1,720,924	1,794,418	1,854,029	1,922,097	2,002,626	2,077,472	2,133,257	2,942,057	3,530,605
D	Stand Alone Taxable Income or Loss (NOL)												
	1 Revenue Requirements	1,524,153	1,590,851	1,649,026	1,720,924	1,794,418	1,854,029	1,922,097	2,002,626	2,077,472	2,133,257	2,942,057	3,530,605
	2 Tax Depreciation	-	-	-	-	-	-	-	-	-	-	-	2,551,208
	3 Property Tax	-	-	-	-	-	-	-	-	-	-	-	-
	4 Interest Expense (including on CWIP) 4/	318,630	332,573	344,735	359,765	375,129	387,591	401,821	418,656	434,303	445,965	454,076	475,128
	5 Operation & Maintenance Expense	-	-	-	-	-	-	-	-	-	-	770,000	770,000
	6 Total Tax Deduction	318,630	332,573	344,735	359,765	375,129	387,591	401,821	418,656	434,303	445,965	1,224,076	3,796,336
	7 Taxable Income (NOL)	1,205,524	1,258,278	1,304,291	1,361,159	1,419,289	1,466,438	1,520,276	1,583,970	1,643,169	1,687,292	1,717,981	(265,730)
	8 Current tax expense	498,725	520,550	539,585	563,112	587,160	606,665	628,938	655,288	679,779	698,033	710,729	(109,933)
	9 Taxable Income (NOL)	1,205,524	1,258,278	1,304,291	1,361,159	1,419,289	1,466,438	1,520,276	1,583,970	1,643,169	1,687,292	1,717,981	(265,730)
	10 NOL carryforward	-	-	-	-	-	-	-	-	-	-	-	-
	11 Taxable Income after NOL carryforward 6/	1,205,524	1,258,278	1,304,291	1,361,159	1,419,289	1,466,438	1,520,276	1,583,970	1,643,169	1,687,292	1,717,981	15,901,936
	12 Expected stand alone ADITA NOL	-	-	-	-	-	-	-	-	-	-	-	-
E	Summary: Revenue Requirements												
-	1 Revenue Requirement: Consolidated	1,524,153	1,590,851	1,649,026	1,720,924	1,794,418	1,854,029	1,922,097	2,002,626	2,077,472	2,133,257	2,942,057	3,530,605
	2 Revenue Requirement: Stand Alone	1,524,153	1.590.851	1,649,026	1,720,924	1,794,418	1,854,029	1,922,097	2,002,626	2,077,472	2,133,257	2,942,057	3,530,605
	3 Revenue Requirement: Rider 7/	1,524,153	1,590,851	1,649,026	1,720,924	1,794,418	1,854,029	1,922,097	2,002,626	2,077,472	2,133,257	2,942,057	3,530,605
	4 Revenue Credit for Basin's Share 8/	-	-	-	-	(356,171)	(367,926)	(381,321)	(397,132)	(411,967)	(423,233)	(575,058)	(688,164)
	5 BEC 4 Base Rate Revenue Credit 9/	-	-	-	-	_	-	-	-	-	(191,372)	(191,372)	(191,372)
	6 Total Net Revenue Requirements	1,524,153	1,590,851	1,649,026	1,720,924	1,438,247	1,486,102	1,540,775	1,605,494	1,665,505	1,518,652	2,175,628	2,651,070
	7 MN Jurisdictional Allocator 10/	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017
	8 MN Net Jurisdictional Revenue Requirement	1,250,065	1.304.768	1.352.481	1.411.451	1,179,607	1.218.856	1,263,698	1,316,778	1,365,998	1.245.553	1.784.385	2.174.328

^{4/} Current Return on CWIP starts 10/1/13 (Avg. Monthly CWIP x ROR% / 12). Refer to Exhibit B-3 for CWIP calculations.

Pre-tax rate of return is 12.15% from 2009 MPUC rate case, Docket No. E-015/GR-09-1151. Refer to Exhibit B-4 rate of return components.

Return on Average Rate Base starts 12/31/15 (Avg. Monthly Rate Base x ROR% / 12).

^{5/} Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

^{6/} For in-service year, any positive taxable income from return of CWIP is added to first month of taxable loss to establish the first month taxable income/loss.

^{7/} Lesser of E1 or E2.

^{8/} Refer to Exhibit B-2, page 9, row C11.

^{9/} Refer to Exhibit B-2, page 11, row C14.

^{10/} Refer to Exhibit B-5, page 2.

Minnesota Power BEC4 Rider Revenue Requirements: Boswell Ash Pond Phase 1 Exhibit B-2 Page 5 of 11

Boswell Ash Pond Phase 1 Project ID # 106072 In Service 12/31/2016

Book Depart	Section	Line	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
1 Plant in Service (net of contra APUDC & Internal costs) 1/ 2 Accumulated Depreciation 12/2016 Plant	Α													
2 Accumulated Depreciation 12/2016 Plant			15,085	15,085	16,312	16,318	16,318	29,004	41,689	54,375	67,061	79,746	92,432	95,632
3 Net Plant 4 Total Depreciation Rate (24 yrs remaining life 2012) 8														
4 Total Depreciation Rate (24 yrs remaining life 2012) 5 Book Depreciation Rate (24 yrs remaining life 2012) 1 Plant in Service 2 Accumulated Depreciation 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-	-	-	-	-	-	-	-	-	-	-	-
## Tax Basis of Property ## Tax Basis of Property ## 1 Plant in Service ## 2 Accumulated Depreciation ## 3 Net Plant ## 4 Bonus Depreciation ## 5 Net Depreciation Plant 12/2016 Plant 2/ ## 7 Total Tax Depreciation (including borus) ## 4 Income Tax Rate 3/ ## 10 Accumulated Depreciation Plant 2/ ## 10 Deferred Tax Expense debit / (Credit) ## 1 Deferred Tax Expense Requirements - Consolidated NOL ## 1 Note Plant ## 2 Less: ADITL - Def Tax Expense Requirements - Consolidated NOL ## 1 Note Plant ## 2 Less: ADITL - Def Tax 2s ## 3 Rate Base ## 5 Current Return on CWIP 4/ ## 6 Return on Average Rate Base 4/ ## 7 After Tax Return on Equity ## 6 Return on Average Rate Base ## 5 Current Return on Equity ## 6 Return on Average Rate Base ## 10 Total Retur			-	-	-	-	-	-	-	-	-	-	-	-
Tax Basis of Property		4 Total Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
Plant in Service		5 Book Depreciation Rate (24 yrs remaining life 2012)												
2 Accumulated Depreciation 3 Net Plant 4 Bonus Depreciation 5 Net Depreciation 5 Net Depreciation 5 Net Depreciation 6 Tax Depreciation Rate 1/2/2016 Plant 2/ 7 Total Tax Depreciation (including bonus) 8 Tax Book Difference 9 Income Tax Rate 3/ 10 Accumulated Deferred Income Tax Liability 11 Deferred Tax Expense debit / (Credit) C-1 Revenue Requirements - Consolidated NOL 1 Net Plant 2 Less: ADITL - Del Taxes 3 Rate Base 4 Average Rate Base 5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/ 7 After Tax Return on Equity 8 Income Tax Component 9 Interest Expense Component 10 Total Return on Average Rate Base 11 Operation Alwinishmenace Expense 5/ 12 Depreciation Expense 13 Popenty Tax 6/ 10 Popenty Tax 6/ 10 Description Average Rate Base 11 Operation Expense 13 Popenty Tax 6/ 13 Popenty Tax 6/ 14 Popenty Tax 6/ 15 Popenty Tax 6/ 15 Popenty Tax 6/ 15 Popenty Tax 6/ 15 Popenty Tax 6/ 16 Popenty Tax 6/ 17 Popenty Tax 6/ 18 Popenty Tax 6/ 19 Poper Tax 6/ 19 Poper Tax 6/ 19 Poper Tax 6/ 19 Poper Tax 6/ 10 Poper Tax 6/ 19 Poper Tax 6/ 10 Poper Tax 6/ 19 Poper Tax 6	В	Tax Basis of Property												
4 Borus Depreciation 5 Net Depreciation 5 Net Depreciation 7 Total Tax Depreciation (including borus) 5 Net Depreciation (including borus) 5 Net Depreciation (including borus) 5 Tax Depreciation (including borus) 5 Tax Book Difference 5 Tax Book Difference 5 Tax Book Difference 7 Total Tax Depreciation (including borus) 5 Tax Book Difference 7 Total Tax Depreciation (including borus) 7 Total Tax		1 Plant in Service	-	-	-	-	-	-	-	-	-	-	-	-
4 Bonus Depreciation 5 Net Depreciation 12/2016 Plant 1 6 Tax Depreciation Rate 12/2016 Plant 2/ 7 Total Tax Depreciation (including bonus) 8 Tax Book Difference 9 Income Tax Rate 3/ 10 Accumulated Deferred Income Tax Liability 11 Deferred Tax Expense debit / (Credit) C-1 Revenue Requirements - Consolidated NOL 1 Not Plant 2 Less: ADITL - Def Taxes 3 Rate Base 4 Average Rate Base 5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/ 7 After Tax Return on Equity 10 Total Return on Average Rate Base 11 Operation & Maintenance Expense 5/ 12 Depreciation (Expense 6/ 13 Poperty Tax 6/ 14 Poperty Tax 6/ 15 Depreciation (Expense 6/ 15 Depreciation (Including bonus)		2 Accumulated Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
5 Net Depreciable 142/2016 Plant 6 Tax Depreciation (including bonus) 8 Tax Book Difference 9 Income Tax Rate 3/ 10 Accumulated Delerred Income Tax Liability 11 Deferred Tax Expense debit / (Credit) C-1 Revenue Requirements - Consolidated NOL 1 Net Plant 2 Less: ADITL - Del Taxes 3 Rate Base 4 Average Rate Base 5 Current Return on CWIP A/ 6 Return on Average Rate Base 4/ 7 After Tax Return on Equity 8 Income Tax Component 9 Interest Expense Component 1 Operation & Maintenance Expense 5/ 1 Operation & Maintenance Expense 5/ 1 Depreciation Expense 1 Operation & Maintenance Expense 5/ 1 Depreciation Expense		3 Net Plant	-	-	-	-	-	-	-	-	-	-	-	-
6 Tax Depreciation Rate 12/2016 Plant 2/ 7 Total Tax Depreciation (including bonus) 8 Tax Book Difference 9 Income Tax Rate 3/ 10 Accumulated Deterred Income Tax Liability 11 Deferred Tax Expense debit / (Credit) C-1 Revenue Requirements - Consolidated NOL 1 Net Plant 2 Less: ADITL - Def Taxes 3 Rate Base 4 Average Rate Base 5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/ 7 After Tax Return on Equity 8 Income Tax Component 9 Income Tax Component 9 Income Tax Component 9 Income Tax Component 1 Operation & Maintenance Expense 5/ 10 Depreciation & Maintenance Expense 5/ 12 Depreciation & Maintenance Expense 5/ 13 Property Tax 6/ 8 Tax Book Difference 9 Interest Expense Component 10 Operation & Maintenance Expense 5/ 12 Depreciation Expense 13 Property Tax 6/ 14 Interest Expense Component 15 Interest Expense Component 16 Interest Expense Component 17 Interest Expense Component 18 Interest Expense Component 19 Interest Expense Component 10 Interest Expense Component 11 Operation & Maintenance Expense S/ 12 Depreciation Expense 13 Property Tax 6/ 14 Interest Expense Component 15 Interest Expense Component 16 Interest Expense Component 17 Interest Expense Component 18 Interest Expense Component 19 Interest Expense Component 10 Interest Expense Component 10 Interest Expense Component 11 Interest Expense Component 12 Interest Expense Component 13 Interest Expense Component 14 Interest Expense Component 15 Interest Expense Component 16 Interest Expense Component 17 Interest Expense Component 18 Interest Expense Component 19 Interest Expense Component 10 Interest Expense Component 10 Interest Expense Component 11 Interest Expense Component 12 Interest Expense Component 13 Interest Expe														
## Total Tax Depreciation (including bonus) ## Tax Book Difference 9 Income Tax Rate 3/														
8 Tax Book Difference 9 Income Tax Rate 3/ 41.37% 4														
9 Income Tax Rate 3/		7 Total Tax Depreciation (including bonus)	-	-	-	-	-	-	-	-	-	-	-	-
10 Accumulated Deferred Income Tax Liability 11 Deferred Tax Expense debit / (Credit) C-1 Revenue Requirements - Consolidated NOL 1 Net Plant 2 Less: ADITL - Def Taxes 3 Rate Base 4 Average Rate Base 5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/ 7 After Tax Return on Equity 8 Income Tax Component 10 Total Return on Average Rate Base 11 Operation & Maintenance Expense 6/ 11 Operation & Maintenance Expense 6/ 12 Depreciation Expense 6/ 13 Property Tax 6/				-	-	-	-	-	-	-	-	-	-	-
### C-1 Revenue Requirements - Consolidated NOL Net Plant			41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
C-1 Revenue Requirements - Consolidated NOL 1 Net Plant 2 Less: ADITL - Def Taxes 3 Rate Base 4 Average Rate Base 5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/ 7 After Tax Return on Equity 8 Income Tax Component 1 Total Return on Average Rate Base 1			-	-	-	-	-	-	-	-	-	-	-	-
1 Net Plant 2 Less: ADITL - Def Taxes 3 Rate Base 4 Average Rate Base 5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/ 7 After Tax Return on Equity 8 Income Tax Component 9 Interest Expense Component 1 Operation & Maintenance Expense 5/ 12 Depreciation Expense 13 Property Tax 6/		11 Deferred Tax Expense debit / (Credit)	-	-	-	-	-	-	-	-	-	-	-	-
2 Less: ADITL - Def Taxes	C-1													
3 Rate Base			-	-	-	-	-	-	-	-	-	-	-	-
4 Average Rate Base			-	-	-	-	-	-	-	-	-	-	-	-
5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/ 7 After Tax Return on Equity 8 Income Tax Component 9 Interest Expense Component 10 Total Return on Average Rate Base 11 Operation & Maintenance Expense 5/ 12 Depretogation Expense 13 Property Tax 6/ 153 153 159 165 165 229 358 486 615 743 872 952 165 229 358 486 615 743 872 952 165 229 358 486 615 743 872 952 165 229 358 486 615 743 872 952			-	-	-	-	-	-	-	-	-	-	-	-
6 Return on Average Rate Base 4/ 7		4 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
7 After Tax Return on Equity			153	153	159	165	165	229	358	486	615	743	872	952
8 Income Tax Component -														
9 Interest Expense Component			-	-	-	-	-	-	-	-	-	-	-	-
10 Total Return on Average Rate Base			-	-	-	-	-	-	-	-	-	-	-	-
11 Operation & Maintenance Expense 5/ -		9 Interest Expense Component				<u>-</u>				<u>-</u>				
11 Operation & Maintenance Expense 5/ -		10 Total Return on Average Rate Base												-
12 Depreciation Expense			-	-	-	-	-	-	-	-	-	-	-	-
13 Property Tax 6/			-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-
		14 Revenue Requirements	153	153	159	165	165	229	358	486	615	743	872	952

^{1/} Refer to Exhibit B-3.

^{2/} Refer to Exhibit B-6

^{3/} Minnesota Composite Income Tax Rate.

^{4/} Current Return on CWIP starts 10/1/13 (Avg. Monthly CWIP x ROR% / 12). Refer to Exhibit B-3 for CWIP calculations.

Pre-tax rate of return is 12.15% from 2009 MPUC rate case, Docket No. E-015/GR-09-1151. Refer to Exhibit B-4.

Return on Average Rate Base starts 12/31/16 (Avg. Monthly Rate Base x ROR% / 12).

^{5/} All O&M for Ash Pond projects included in Phase 1 project.

^{6/} Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

Minnesota Power BEC4 Rider Revenue Requirements: Boswell Ash Pond Phase 1

Exhibit B-2 Page 6 of 11

Boswell Ash Pond Phase 1 Project ID # 106072 In Service 12/31/2016

Section	Line	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
C-2	Revenue Requirements - Stand Alone NOL												
	1 Net Plant	-	-	-	-	-	-	-	-	-	-	-	-
	2 Less: ADITL - Def Taxes	-	-	-	-	-	-	-	-	-	-	-	-
	3 Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	4 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	5 Current Return on CWIP 4/	153	153	159	165	165	229	358	486	615	743	872	952
	6 Return on Average Rate Base 4/												
	7 After Tax Return on Equity	-	-	-	-	-	-	-	-	-	-	-	-
	8 Income Tax Component	-	-	-	-	-	-	-	-	-	-	-	-
	9 Interest Expense Component		<u>-</u>		<u>-</u>		 -			<u> </u>			
	10 Total Return on Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	11 Operation & Maintenance Expense 5/	-	-	-	-	-	-	-	-	-	-	-	-
	12 Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	-
	13 Property Tax 6/			 .			 -	<u>-</u>	<u>-</u>	<u>-</u>			
	14 Revenue Requirements	153	153	159	165	165	229	358	486	615	743	872	952
D	Stand Alone Taxable Income or Loss (NOL)												
	1 Revenue Requirements	153	153	159	165	165	229	358	486	615	743	872	952
	2 Tax Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
	3 Property Tax	-	-	-	-	-	-	-	-	-	-	-	-
	4 Interest Expense (including on CWIP) 4/	32	32	33	35	35	48	75	102	129	155	182	199
	5 Operation & Maintenance Expense	-	-	-	-	-	-	-	-	-	-	-	-
	6 Total Tax Deduction	32	32	33	35	35	48	75	102	129	155	182	199
	7 Taxable Income (NOL)	121	121	126	131	131	181	283	385	486	588	689	753
	8 Current tax expense	50	50	52	54	54	75	117	159	201	243	285	312
	9 Taxable Income (NOL)	121	121	126	131	131	181	283	385	486	588	689	753
	10 NOL carryforward	-	-	-	-	-	-	-	-	-	-	-	-
	11 Taxable Income after NOL carryforward 7/	121	121	126	131	131	181	283	385	486	588	689	753
	12 Expected stand alone ADITA NOL	-	-	-	-	-	-	-	-	-	-	-	-
	13 Annual Fed Production Tax Credit (\$) 14 Utilized PTC 8/ 15 ADITA for PTC												
	10 ADITA IOLI 10												
E	Summary: Revenue Requirements												
	1 Revenue Requirement: Consolidated	153	153	159	165	165	229	358	486	615	743	872	952
	2 Revenue Requirement: Stand Alone	153	153	159	165	165	229	358	486	615	743	872	952
	3 Revenue Requirement: Rider 7/	153	153	159	165	165	229	358	486	615	743	872	952
	4 Revenue Credit for Basin's Share 8/	-	-	-	-	-	-	-	-	-	-	-	-
	5 Total Net Revenue Requirements	153	153	159	165	165	229	358	486	615	743	872	952
	6 MN Jurisdictional Allocator 9/	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017
	7 MN Net Jurisdictional Revenue Requirement	125	125	130	135	136	188	294	399	504	610	715	781

^{4/} Current Return on CWIP starts 10/1/13 (Avg. Monthly CWIP x ROR% / 12). Refer to Exhibit B-3 for CWIP calculations. Pre-tax rate of return is 12.15% from 2009 MPUC rate case, Docket No. E-015/GR-09-1151. Refer to Exhibit B-4.

Return on Average Rate Base starts 12/31/16 (Avg. Monthly Rate Base x ROR% / 12).

^{5/} All O&M for Ash Pond projects included in Phase 1 project.

^{6/} Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

^{7/} Lesser of E1 or E2.

^{8/} Refer to Exhibit B-2, page 10, row C11.

^{9/} Refer to Exhibit B-5, line 11.

Minnesota Power BEC4 Rider Revenue Requirements: Boswell Ash Pond Phase 1 Exhibit B-2 Page 7 of 11

Boswell Ash Pond Phase 1 Project ID # 106072 In Service 12/31/2016

Section	Line	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Α	Book Basis of Property												
	O CWIP (net of contra AFUDC & internal costs) 1/ Plant in Service (net of contra AFUDC & Internal costs) 1/	132,182	204,404	312,057	526,831	939,365	1,298,338	1,999,272	2,096,213	2,189,035	2,261,257	2,325,238	2,362,033
	2 Accumulated Depreciation 12/2016 Plant	-	-	-	-	-	-	-	-	-	-	-	-
	3 Net Plant 4 Total Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
	5 Book Depreciation Rate (24 yrs remaining life 2012)												
В	Tax Basis of Property												
	1 Plant in Service 2 Accumulated Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
	3 Net Plant	-	-	-	-	-	-	-	-	-	-	-	-
	4 Bonus Depreciation 5 Net Depreciable 12/2016 Plant 6 Tax Depreciation Rate 12/2016 Plant 2/												
	7 Total Tax Depreciation (including bonus)	-	-	-	-	-	-	-	-	-	-	-	-
	8 Tax Book Difference	-	-	-	-	-	-	-	-	-	-	-	-
	9 Income Tax Rate 3/ 10 Accumulated Deferred Income Tax Liability	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
	11 Deferred Tax Expense debit / (Credit)	-	-	-	-	-	-	-	-	-	-	-	-
C-1	Revenue Requirements - Consolidated NOL 1 Net Plant												
	2 Less: ADITL - Def Taxes	-	-	-	-			-		-	-	-	-
	3 Rate Base	-	_	-	-	-	-	-	-	-	_	-	-
	4 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	5 Current Return on CWIP 4/ 6 Return on Average Rate Base 4/	1,153	1,704	2,615	4,247	7,423	11,328	16,694	20,733	21,694	22,530	23,219	23,729
	7 After Tax Return on Equity		_	_	_	_		_		_	_	_	_
	8 Income Tax Component		-	-	-	-	-	_	-	-	-	_	-
	9 Interest Expense Component											<u>-</u>	
	10 Total Return on Average Rate Base				-	-							
	11 Operation & Maintenance Expense 5/	-	-	-	-	-	-	-	-	-	-	40,000	40,000
	12 Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	-
	13 Property Tax 6/											-	<u>-</u>
	14 Revenue Requirements	1,153	1,704	2,615	4,247	7,423	11,328	16,694	20,733	21,694	22,530	63,219	63,729

^{1/} Refer to Exhibit B-3.

^{2/} Refer to Exhibit B-6

^{3/} Minnesota Composite Income Tax Rate.

^{4/} Current Return on CWIP starts 10/1/13 (Avg. Monthly CWIP x ROR% / 12). Refer to Exhibit B-3 for CWIP calculations.

Pre-tax rate of return is 12.15% from 2009 MPUC rate case, Docket No. E-015/GR-09-1151. Refer to Exhibit B-4.

Return on Average Rate Base starts 12/31/16 (Avg. Monthly Rate Base x ROR% / 12).

^{5/} All O&M for Ash Pond projects included in Phase 1 project.

^{6/} Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

Minnesota Power BEC4 Rider Revenue Requirements: Boswell Ash Pond Phase 1

Exhibit B-2 Page 8 of 11

Boswell Ash Pond Phase 1 Project ID # 106072 In Service 12/31/2016

Section	on Line	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
C-2	Revenue Requirements - Stand Alone NOL												
	1 Net Plant	-	-	-	-	-	-	-	-	-	-	-	-
	2 Less: ADITL - Def Taxes	-	-	-	-	-	-	-	-	-	-	-	-
	3 Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	4 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	5 Current Return on CWIP 4/	1,153	1,704	2,615	4,247	7,423	11,328	16,694	20,733	21,694	22,530	23,219	23,729
	6 Return on Average Rate Base 4/ 7 After Tax Return on Equity												
	8 Income Tax Component		_		_	_	_			_	_	_	_
	9 Interest Expense Component												
	10 Total Return on Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	
	11 Operation & Maintenance Expense 5/	-	-	-	-	-	-	-	-	-	-	40,000	40,000
	12 Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	-
	13 Property Tax 6/							<u>-</u>					
	14 Revenue Requirements	1,153	1,704	2,615	4,247	7,423	11,328	16,694	20,733	21,694	22,530	63,219	63,729
D	Stand Alone Taxable Income or Loss (NOL)												
	1 Revenue Requirements	1,153	1,704	2,615	4,247	7,423	11,328	16,694	20,733	21,694	22,530	63,219	63,729
	2 Tax Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
	3 Property Tax	-	-	-	-	-	-	-	-	-	-	-	-
	4 Interest Expense (including on CWIP) 4/	241	356	547	888	1,552	2,368	3,490	4,334	4,535	4,710	4,854	4,961
	5 Operation & Maintenance Expense	-	-	-	-	-	-	-	-	-	-	40,000	40,000
	6 Total Tax Deduction	241	356	547	888	1,552	2,368	3,490	4,334	4,535	4,710	44,854	44,961
	7 Taxable Income (NOL)	912	1,348	2,068	3,359	5,871	8,960	13,204	16,399	17,159	17,820	18,365	18,769
	8 Current tax expense	377	558	856	1,390	2,429	3,707	5,463	6,784	7,099	7,372	7,598	7,765
	9 Taxable Income (NOL)	912	1,348	2,068	3,359	5,871	8,960	13,204	16,399	17,159	17,820	18,365	18,769
	10 NOL carryforward	-	-	-	-	-	-	-	-	-	-	-	-
	11 Taxable Income after NOL carryforward 7/	912	1,348	2,068	3,359	5,871	8,960	13,204	16,399	17,159	17,820	18,365	18,769
	12 Expected stand alone ADITA NOL	-	-	-	-	-	-	-	-	-	-	-	-
	13 Annual Fed Production Tax Credit (\$) 14 Utilized PTC 8/ 15 ADITA for PTC												
	13 ADITA IOI FTC												
Е	Summary: Revenue Requirements												
_	1 Revenue Requirement: Consolidated	1,153	1,704	2,615	4,247	7,423	11,328	16,694	20,733	21,694	22,530	63,219	63.729
	2 Revenue Requirement: Stand Alone	1,153	1,704	2,615	4,247	7,423	11,328	16,694	20,733	21,694	22,530	63,219	63,729
	3 Revenue Requirement: Rider 7/	1,153	1,704	2,615	4,247	7,423	11,328	16,694	20,733	21,694	22,530	63,219	63,729
	4 Revenue Credit for Basin's Share 8/	-	-	-	-	(1,471)	(2,230)	(3,273)	(4,058)	(4,247)	(4,412)	(12,024)	(12,125)
	5 Total Net Revenue Requirements	1,153	1,704	2,615	4,247	5,952	9,098	13,421	16,675	17,447	18,118	51,195	51,604
	6 MN Jurisdictional Allocator 9/	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017	0.82017
	7 MN Net Jurisdictional Revenue Requirement	946	1,398	2,144	3,483	4,881	7,462	11,008	13,676	14,310	14,860	41,989	42,324
	•			•	, -	•							

^{4/} Current Return on CWIP starts 10/1/13 (Avg. Monthly CWIP x ROR% / 12). Refer to Exhibit B-3 for CWIP calculations.

Pre-tax rate of return is 12.15% from 2009 MPUC rate case, Docket No. E-015/GR-09-1151. Refer to Exhibit B-4.

Return on Average Rate Base starts 12/31/16 (Avg. Monthly Rate Base x ROR% / 12).

^{5/} All O&M for Ash Pond projects included in Phase 1 project.

^{6/} Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

^{7/} Lesser of E1 or E2.

^{8/} Refer to Exhibit B-2, page 10, row C11.

^{9/} Refer to Exhibit B-5, line 11.

Minnesota Power BEC 4 Rider Basin's Revenue Requirements: Boswell 4 Environmental Retrofit Exhibit B-2 Page 9 of 11

BEC 4 Environmental Retrofit: Basin Project ID # 103698 In Service 12/31/2015

Section	Line	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Α	Book Basis of Property 0 CWIP 1/	158,138,334	164,051,625	169,822,486	178,446,714	184,539,021	190,427,455	198,190,291	206,540,188	213,309,063	218,022,407	221,371,896	
	1 Plant in Service												239,589,963
	2 Accumulated Depreciation 12/2015 Plant	-	-	-	-	-	-	-	-	-	-	-	499,146
	Net Plant Total Depreciation	-	-	-	-	-	-	-	-	-	-	-	239,090,818 499,146
	4 Total Depreciation	-	-	-	-	-	-	-	-	-	-	-	455,140
	5 Book Depreciation Rate (24 yrs remaining life 2012)												0.42%
В	Tax Basis of Property												
	1 Plant in Service	-	-	-	-	-	-	-	-	-	-	-	239,589,963
	2 Accumulated Depreciation	-	-	-	-	-	-	-	-	-	-	-	2,610,298
	3 Net Plant	-	-	-	-	-	-	-	-	-	-	-	236,979,665
	4 Bonus Depreciation												
	5 Net Depreciable 12/2015 Plant												239,589,963
	6 Tax Depreciation Rate 12/2015 Plant 2/												1.089%
	7 Tax Depreciation 12/2015 Plant	-	-	-	-	-	-	-	-	-	-	-	2,610,298
	8 Tax Book Difference	-	-	-	-	-	-	-	-	-	-	-	2,111,153
	9 Income Tax Rate 3/	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
	10 Accumulated Deferred Income Tax Liability	-	-	-	-	-	-	-	-	-	-	-	873,384
	11 Deferred Tax Expense debit / (Credit)	-	-	-	-	-	-	-	-	-	-	-	873,384
С	Revenue Requirements - Basin 4/												
	1 Net Plant	-	-	-	-	-	-	-	-	-	-	-	239,090,818
	2 Less: ADITL - Def Taxes	-	-	-	-	-	-	-	-	-	-	-	(873,384)
	3 Rate Base	-	-	-	-	-	-	-	-	-	-	-	238,217,434
	4 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	119,108,717
	5 Current Return on CWIP	-	-	-	-	356,171	367,926	381,321	397,132	411,967	423,233	431,145	217,216
	6 Return on Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	233,745
	7 Operation & Maintenance Expense	-	-	-	-	-	-	-	-	-	-	143,913	143,913
	8 Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	93,290
	9 Property Tax 5/					<u>-</u>	<u>-</u>						
	10 Revenue Requirements - Basin	-	-	-	-	356,171	367,926	381,321	397,132	411,967	423,233	575,058	688,164
	11 Revenue Credit for Basin's Share	-	-	-	-	(356,171)	(367,926)	(381,321)	(397,132)	(411,967)	(423,233)	(575,058)	(688,164)

^{1/} Refer to Exhibit B-3, page 29-31.

[TRADE SECRET DATA HAS BEEN EXCISED]

5/ Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

^{2/} Refer to Exhibit B-6.

^{3/} Minnesota Composite Income Tax Rate.

Minnesota Power BEC4 Rider Basin Revenue Requirements: Boswell Ash Pond Phase 1

Exhibit B-2 Page 10 of 11

Boswell Ash Pond Phase 1: Basin Project ID # 106072 In Service 12/31/2016

Section	Line	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Α	Book Basis of Property 0 CWIP 1/	144,077	217,584	326,524	542,583	956,403	1,316,662	2,018,882	2,117,109	2,211,217	2,284,724	2,349,992	2,388,072
	1 Plant in Service	144,077	217,504	320,324	342,303	330,403	1,510,002	2,010,002	2,117,103	2,211,217	2,204,724	2,040,002	2,300,072
	2 Accumulated Depreciation 12/2016 Plant	-	-	-	-	-	-		-		-	-	-
	3 Net Plant	-	-	-	-	-	-	-	-	-	-	-	-
	4 Total Depreciation	-	-	-	-	-	-	-	-	-	-	-	-
	5 Book Depreciation Rate (24 yrs remaining life 2012)												
В	Tax Basis of Property												
	1 Plant in Service	-	-	-	-	-	-	-	-	-	-	-	-
	2 Accumulated Depreciation 3 Net Plant	-	-	-	-	-	-	-	-	-	-	-	-
	4 Bonus Depreciation												
	5 Net Depreciable 12/2016 Plant												
	6 Tax Depreciation Rate 12/2016 Plant 2/												
	7 Total Tax Depreciation (including bonus)	-	-	-	-	-	-	-	-	-	-	-	-
	8 Tax Book Difference	-	-	-	-	-	-	-	-	-	-	-	-
	9 Income Tax Rate 3/	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%	41.37%
	10 Accumulated Deferred Income Tax Liability 11 Deferred Tax Expense debit / (Credit)	-	-	-	-	-	-	-	-	-	-	-	-
	12 ADITA for NOL Carryforward	-	-	-	-	-	-	-	-	-	-	-	
	13 Carryforeward utilized												
	14 ADITA - NOL	-	-	-	-	-	-	-	-	-	-	-	-
С	Revenue Requirements - Basin 4/												
Ü	1 Net Plant	_	_	_	_	_	_	_	_	_	_	_	_
	2 Less: ADITL - Def Taxes	_	_	_	_	_	_	_	_	_	_	_	_
	3 Rate Base	-	-	-	-		-	-	-		-	-	-
	4 Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	5 Current Return on CWIP	-	-	-	-	1,471	2,230	3,273	4,058	4,247	4,412	4,548	4,649
	6 Return on Average Rate Base	-	-	-	-	-	-	-	-	-	-	-	-
	7 Operation & Maintenance Expense	-	-	-	-	-	-	-	-	-	-	7,476	7,476
	8 Depreciation Expense	-	-	-	-	-	-	-	-	-	-	-	-
	9 Property Tax 5/						<u>-</u>						
	10 Revenue Requirements - Basin	-	-	-	-	1,471	2,230	3,273	4,058	4,247	4,412	12,024	12,125
	11 Revenue Credit for Basin's Share	-	-	-	-	(1,471)	(2,230)	(3,273)	(4,058)	(4,247)	(4,412)	(12,024)	(12,125)

^{1/} Refer to Exhibit B-3, pages 29-31.

[TRADE SECRET DATA HAS BEEN EXCISED]

5/ Project assumed to qualify for 100% property tax pollution control exemption per Tax Department.

^{2/} Refer to Exhibit B-6.

^{3/} Minnesota Composite Income Tax Rate.

Minnesota Power BEC 4 Rider Exhibit B-2 Page 11 of 11

Revenue Requirement Credit for Revenue Requirements in Base Rates Associated with Plant to be Retired

BEC 4 Environmental Retrofit: Base Rate Revenue Credit

Expected Property Retirement: October 2015

_Aposto.	Topoly rollional october 2010		Base Rates
Section	Line	2009	2010
Α	Book Basis of Property to be Retired		
	1 Plant in Service	38,547,474	38,446,916
	2 Total Accumulated Depreciation	21,988,517	22,424,632
	3 Net Plant	16,558,958	16,022,285
	4 Depreciation Expense		436,115
В	Tax Basis of Property of to be Retired		
	1 Plant in Service	38,547,474	38,446,916
	2 Accumulated Depreciation	37,285,386	37,326,552
	3 Net Plant	1,262,088	1,120,364
	4 Total Tax Depreciation		41,166
	5 Tax Book Difference	15,296,869	14,901,920
	6 Income Tax Rate 1/	41.37%	41.37%
	7 Accumulated Deferred Income Tax Liability	6,328,315	6,164,924
	8 Deferred Tax Expense debit / (Credit)		(163,390)
С	Revenue Requirements in Base Rates		
	1 Net Plant	16,558,958	16,022,285
	2 Less: ADITL - Def Taxes	(6,328,315)	(6,164,924)
	3 Rate Base	10,230,643	9,857,360
	4 Average Rate Base		10,044,001
	5 Return on Average Rate Base 2/		505.040
	6 After Tax Return on Equity 7 Income Tax Component		565,913
	7 Income Tax Component 8 Interest Expense Component		399,315
	·	-	255,118
	9 Total Return on Average Rate Base		1,220,346
	10 Operation & Maintenance Expense Associated with Plant to be Retired		640,000
	11 Depreciation Expense		436,115
	12 Property Tax 3/	_	
	13 Revenue Requirements in Base Rates Associated with Property to be Retired		2,296,461
	14 Monthly Credit for Revenue Requirements in Base Rates 15 MN Jurisdictional Allocator 4/		(191,372)
	15 Min Jurisdictional Allocator 4/ 16 Monthly MN jurisdictional Credit for Revenue Requirements in Base Rates 5/		0.82017 (156,957)
	To Montany Mina jurisdictional Credition Revenue Requirements in base Rates 5/		(130,937)

^{1/} Minnesota Composite Income Tax Rate.

^{2/} Pre-tax rate of return is 12.15% from 2009 MPUC rate case, Docket No. E-015/GR-09-1151. Refer to Exhibit B-4 rate of return components.

^{3/} Property qualified for property tax pollution control exemption per Tax Department.

^{4/} Refer to Exhibit B-5, line 11.

^{5/} This monthly revenue requirement credit is needed beginning with when the property is retired (expected 10/2015) until the retirement and BEC 4 Project are incorporated into base rates in a subsequent rate case.

Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP

Exhibit B-3 Page 1 of 31

BEC 4 Environmental Retrofit In Service 12/31/2015	Total <u>Project</u> 234,166,221	to date Jan-13	<u>Feb-13</u>	<u>Mar-13</u>	<u>Apr-13</u>	<u>May-13</u>	<u>Jun-13</u>	<u>Jul-13</u>	<u>Aug-13</u>	<u>Sep-13</u>	Oct-13 Start Return on CWIP	<u>Nov-13</u>	<u>Dec-13</u>	<u>Jan-14</u>	<u>Feb-14</u>	<u>Mar-14</u>	<u>Apr-14</u>
ВОМ		0	21,039,943	23,516,218	26,180,685	30,213,278	33,332,023	34,494,470	36,721,832	40,697,760	44,259,813	48,732,179	53,338,904	58,899,724	60,638,366	67,294,300	74,377,448
CapEx	235,985,298	20,189,572	2,439,150	2,594,454	3,961,992	3,061,934	1,052,045	2,124,604	3,867,255	3,425,444	4,561,805	4,719,711	5,753,924	1,807,357	6,752,543	7,196,027	9,743,271
Less Internal Cost	-5,020,297	-923,580	-86,728	-67,342	-84,473	-117,140	-79,756	-95,645	-105,757	-97,437	-89,439	-112,986	-193,104	-68,716	-96,609	-112,878	-117,852
AFUDC	3,604,666	1,890,832	130,908	144,919	163,136	182,679	199,828	208,650	225,340	245,626	14,567	15,400	16,892	17,454	18,124	18,972	19,907
Less AFUDC on Internal Cost	-403,445	-116,881	-7,056	-7,563	-8,063	-8,727	-9,669	-10,247	-10,910	-11,580	-14,567	-15,400	-16,892	-17,454	-18,124	-18,972	-19,907
EOM		21,039,943	23,516,218	26,180,685	30,213,278	33,332,023	34,494,470	36,721,832	40,697,760	44,259,813	48,732,179	53,338,904	58,899,724	60,638,366	67,294,300	74,377,448	84,002,868
Return on CWIP																	
After Tax Return on Equity											218,312	239,626	263,496	280,633	300,340	332,594	371,820
Income Tax Component											154,044	169,083	185,926	198,018	211,924	234,683	262,361
Interest Expense Component											98,417	108,025	118,786	126,511	135,395	149,936	167,619
Total Return on CWIP											470,772	516,735	568,208	605,162	647,659	717,213	801,800
rotal rectal from OVVII											470,772	010,700	000,200	000,102	047,000	717,210	001,000
DEC 40: W.	5 a=a 4a4																
BEC 4 Storm Water	5,372,401																
In Service 9/30/2016		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
вом		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	5,372,401																
Less Internal Cost	0																
AFUDC	0																
Less AFUDC on Internal Cost	0																
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP																	
After Tax Return on Equity											0	0	0	0	0	0	0
Income Tax Component											0	0	0	0	0	0	0
Interest Expense Component											<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Return on CWIP											0	0	0	0	0	0	0
BEC 4 Ash Phase 1	5,031,629																
In Service 12/31/2016																	
BOM		0	0	423	425	427	430	3,701	3,722	4,079	4,101	4,661	8,095	15,085	15,085	15,085	16,312
CapEx	5,073,016	0	422	0	0	0	3,266	0	336	0	560	3,436	6,994	0	0	1,228	312
Less Internal Cost	-41,470	0	0	0	0	0	-6	0	0	0	0	-2	-4	0	0	-1	-306
AFUDC	84	0	1	2	2	2	11	20	21	22	0	0	0	0	0	0	0
Less AFUDC on Internal Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		0	423	425	427	430	3,701	3,722	4,079	4,101	4,661	8,095	15,085	15,085	15,085	16,312	16,318
Return on CWIP		ŭ	120	120		.00	0,707	0,7.22	1,070	.,	1,001	0,000	10,000	10,000	10,000	.0,0.2	10,010
After Tax Return on Equity											21	30	54	71	71	74	77
Income Tax Component											15	21	38	50	50	52	54
Interest Expense Component											9	14	<u>25</u>	<u>32</u>	<u>32</u>	33	<u>35</u>
Total Return on CWIP											44	65	117	153	153	159	165
Total Return on CWIF											***	05	117	155	100	139	105
BEC 4 Ash Phase 2	823,997																
In Service 12/31/2019																	
ВОМ		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	854,859																
Less Internal Cost	-30,862																
AFUDC	0																
Less AFUDC on Internal Cost	0																
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP																	
After Tax Return on Equity																	
Income Tax Component																	
Interest Expense Component																	
Total Poture on CMIP																	

Total Return on CWIP

Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP Exhibit B-3 Page 2 of 31

BEC 4 Environmental Retrofit In Service 12/31/2015 BOM	Total <u>Project</u> 234,166,221	May-14 84,002,868	<u>Jun-14</u> 91,674,596	<u>Jul-14</u> 99,156,809	Aug-14 104,738,266	Sep-14 110,556,751	Oct-14 119,314,309	Nov-14 130,614,877	Dec-14 138,716,380	<u>Jan-15</u> 146,854,579	Feb-15 154,212,688	<u>Mar-15</u>	<u>Apr-15</u> 165,703,952	<u>May-15</u>	<u>Jun-15</u> 180,221,170	<u>Jul-15</u> 186,006,730
CapEx	235,985,298	7,845,283	7,601,922	5,701,139	5,931,783	8,854,002	11,397,012	8,262,243	8,234,642	7,454,554	5,913,291	5,770,861	8,624,229	6,092,306	5,888,434	7,762,836
Less Internal Cost	-5,020,297	-173,555	-119,708	-119,683	-113,297	-96,444	-96,444	-160,740	-96,444	-96,444	-96,444	-96,444	-96,444	-102,874	-102,874	-102,874
AFUDC	3,604,666	21,082	22,939	23,234	24,178	0	0	0	0	0	0	0	0	0	0	0
Less AFUDC on Internal Cost	-403,445	-21,082	-22,939	-23,234	-24,178	0	0	0	0	0	0	0	0	0	0	0
EOM		91,674,596	99,156,809	104,738,266	110,556,751	119,314,309	130,614,877	138,716,380	146,854,579	154,212,688	160,029,535	165,703,952	174,231,737	180,221,170	186,006,730	193,666,693
Return on CWIP																
After Tax Return on Equity		412,428	448,004	478,673	505,436	539,655	586,744	632,293	670,418	706,798	737,728	764,706	798,047	832,128	859,772	891,337
Income Tax Component		291,014	316,117	337,757	356,642	380,787	414,014	446,154	473,055	498,725	520,550	539,586	563,112	587,160	606,666	628,939
Interest Expense Component		185,925	201,963	215,789	227,854	243,280	264,508	285,042	302,229	318,630	332,573	344,735	359,765	375,129	387,591	401,821
Total Return on CWIP		889,367	966,084	1,032,219	1,089,931	1,163,722	1,265,267	1,363,489	1,445,703	1,524,153	1,590,851	1,649,026	1,720,924	1,794,418	1,854,029	1,922,097
		,		,	,,.	,,	,, -	,,	, ., .,	,- ,	,,	,,-	, -,-	, - , -	, ,-	,- ,
BEC 4 Storm Water In Service 9/30/2016 BOM	5,372,401	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	5,372,401	Ū	J	Ü	Ū	· ·	Ü	Ū	Ū	Ů	Ū	Ů	- U	Ů	Ü	•
Less Internal Cost	0,372,401															
AFUDC	0															
Less AFUDC on Internal Cost	0															
EOM	U	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		U	U	U	U	0	U	U	0	U	U	U	U	U	U	U
Return on CWIP		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
After Tax Return on Equity		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Income Tax Component		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Expense Component		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BEC 4 Ash Phase 1 In Service 12/31/2016	5,031,629															
		40.040	40.040		44.000		07.004	70 740	00.400	05.000	400 400	201.101	040.057	500.004	200 005	4 000 000
вом	5.070.040	16,318	16,318	29,004	41,689	54,375	67,061	79,746	92,432	95,632	132,182	204,404	312,057	526,831	939,365	1,298,338
CapEx	5,073,016	1,286	13,972	13,972	13,972	13,972	13,972	13,972	4,486	37,836	73,508	108,940	216,060	413,820	360,260	702,220
Less Internal Cost	-41,470	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286
AFUDC	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less AFUDC on Internal Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		16,318	29,004	41,689	54,375	67,061	79,746	92,432	95,632	132,182	204,404	312,057	526,831	939,365	1,298,338	1,999,272
Return on CWIP																
After Tax Return on Equity		77	106	166	226	285	345	404	442	535	790	1,212	1,969	3,442	5,253	7,742
Income Tax Component		54	75	117	159	201	243	285	312	377	558	856	1,390	2,429	3,707	5,463
Interest Expense Component		<u>35</u>	<u>48</u>	<u>75</u>	<u>102</u>	<u>129</u>	<u>155</u>	<u>182</u>	<u>199</u>	241	<u>356</u>	547	888	1,552	2,368	3,490
Total Return on CWIP		165	229	358	486	615	743	872	952	1,153	1,704	2,615	4,247	7,423	11,328	16,694
BEC 4 Ash Phase 2	823,997															
In Service 12/31/2019	,															
BOM		0	0	0	n	0	0	0	0	0	0	0	0	0	0	n
CapEx	854.859	0	Ů	Ū	Ū	0		Ū	0	Ů	Ů	0	Ů	•	•	- C
Less Internal Cost	-30,862															
AFUDC	-50,002															
Less AFUDC on Internal Cost	0															
EOM	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP		0	U	U	0	0	0	0	0	U	0	U	U	U	U	U
Return on CWIP																

After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP

Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP Exhibit B-3 Page 3 of 31

BEC 4 Environmental Retrofit In Service 12/31/2015 BOM	Total <u>Project</u> 234,166,221	Aug-15 193,666,693	<u>Sep-15</u> 201,913,716	Oct-15 208,451,126	Nov-15 212,933,005	<u>Dec-15</u> <u>In-Service</u> 12/31/2015 216,115,324	<u>Jan-16</u>	<u>Feb-16</u>	<u>Mar-16</u>	<u>Apr-16</u>	<u>May-16</u>	<u>Jun-16</u>	<u>Jul-16</u>	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>
CapEx	235,985,298	8,349,897	6,768,875	4,713,344	3,349,489	18,218,067										
Less Internal Cost	-5,020,297	-102,874	-231,466	-231,466	-167,170	-167,170										
AFUDC	3,604,666	0	0	0	0	0										
Less AFUDC on Internal Cost	-403,445	0	0	0	0	0										
EOM		201,913,716	208,451,126	212,933,005	216,115,324	234,166,221										
Return on CWIP																
After Tax Return on Equity		928,681	963,390	989,259	1,007,252	507,361										
Income Tax Component		655,289	679,780	698,033	710,729	358,000										
Interest Expense Component		418,656	434,303	445,965	454,076	228,722										
Total Return on CWIP		2,002,626	2,077,472	2,133,257	2,172,057	1,094,084										
BEC 4 Storm Water In Service 9/30/2016 BOM	5,372,401	0	0	0	0	0	0	0	0	0	0	767,486	1,534,972	2,302,458	In-Service 9/30/2016 3,069,943	
CapEx	5,372,401										767,486	767,486	767,486	767,486	2,302,458	
Less Internal Cost	0										0	0	0	0	0	
AFUDC	0										0	0	0	0	0	
Less AFUDC on Internal Cost	0	0	0	0	0	•	0		0		707.400	4.504.070	0	0	0	
EOM Datum on OWID		0	0	0	0	0	0	0	0	0	767,486	1,534,972	2,302,458	3,069,943	5,372,401	
Return on CWIP		0	0	0	0	0	0	0	0	0	4 000	E 40E	0.000	10.610	7 207	
After Tax Return on Equity Income Tax Component		0	0	0	0	0	0	0	0	0	1,802 1,271	5,405 3,814	9,009 6,357	12,612 8,900	7,207 5,085	
Interest Expense Component		<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	0	<u>0</u>	<u>0</u>	812	2,437	4,061	5,686	3,249	
Total Return on CWIP		0	<u>U</u>	0	<u>u</u> 0	0	<u>u</u> 0	0	0	0	3,885	11,656	19,427	27,198	3, <u>249</u> 15,542	
Total Retuil on CVVIF		U	U	U	U	U	U	U	U	U	3,000	11,050	19,427	27,190	13,342	
BEC 4 Ash Phase 1 In Service 12/31/2016	5,031,629															
BOM	E 070 040	1,999,272	2,096,213	2,189,035	2,261,257	2,325,238	2,362,033	2,584,499	2,806,965	3,029,432	3,251,898	3,474,365	3,696,831	3,919,297	4,141,764	4,364,230
CapEx Less Internal Cost	5,073,016 -41,470	98,228 -1,286	94,108 -1,286	73,508 -1,286	65,268 -1,286	38,080 -1,286	223,752 -1,286	223,752 -1,286								
AFUDC	-41,470 84	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286
Less AFUDC on Internal Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM	0_	2,096,213	2,189,035	2,261,257	2,325,238	2,362,033	2,584,499	2,806,965	3,029,432	3,251,898	3,474,365	3,696,831	3,919,297	4,141,764	4,364,230	4,586,697
Return on CWIP		_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_,,	_,,	_,,	_,,,	_,,,	_,,,	-,,	-,,	-,,	-,,	-,,	.,,	.,,	.,,
After Tax Return on Equity		9,615	10,060	10,448	10,767	11,004	11,613	12,657	13,702	14,746	15,791	16,835	17,880	18,924	19,969	21,014
Income Tax Component		6,784	7,099	7,372	7,598	7,765	8,194	8,931	9,668	10,405	11,142	11,879	12,616	13,353	14,090	14,827
Interest Expense Component		4,334	4,535	4,710	4,854	4,961	5,235	5,706	6,177	6,648	7,119	7,590	8,060	8,531	9,002	9,473
Total Return on CWIP		20,733	21,694	22,530	23,219	23,729	25,042	27,294	29,547	31,799	34,052	36,304	38,557	40,809	43,062	45,314
BEC 4 Ash Phase 2	823,997															
In Service 12/31/2019																
BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	854,859															
Less Internal Cost	-30,862															
AFUDC	0															
Less AFUDC on Internal Cost	0															
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP																
After Tax Return on Equity																
Income Tax Component																
Interest Expense Component Total Return on CWIP																

Total Return on CWIP

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272

Minnesota Power
BEC 4 Rider
Plant Additions, AFUDC and Return on CWIP

Total Project Nov-16 Dec-16 Jan-17 Feb-17 Mar-17 Apr-17 May-17 Jun-17 <u>Jul-17</u> Aug-17 Sep-17 Oct-17 Nov-17 Dec-17 Jan-18 BEC 4 Environmental Retrofit 234,166,221 In Service 12/31/2015 235,985,298 CapEx Less Internal Cost -5,020,297 AFUDC 3,604,666 Less AFUDC on Internal Cost -403,445 EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Storm Water 5,372,401 In Service 9/30/2016 BOM CapEx 5,372,401 Less Internal Cost 0 AFUDC 0 Less AFUDC on Internal Cost Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 1 5,031,629 In-Service In Service 12/31/2016 12/31/2016 BOM 4,586,697 4,809,163 CapEx 5,073,016 223,752 223,752 Less Internal Cost -41,470 -1,286 -1,286 AFUDC 84 0 Less AFUDC on Internal Cost EOM 4,809,163 5,031,629 Return on CWIP After Tax Return on Equity 11.290 22.058 Income Tax Component 15,564 7,966 Interest Expense Component 9,944 5,090 Total Return on CWIP 47,567 24,346 BEC 4 Ash Phase 2 823,997 In Service 12/31/2019 BOM 854.859 54.952 CapEx Less Internal Cost -30,862 -1,286 AFUDC 0 0 Less AFUDC on Internal Cost EOM 0 53,666 Return on CWIP After Tax Return on Equity 126 Income Tax Component 89

Interest Expense Component

Total Return on CWIP

Minnesota Power
BEC 4 Rider
Plant Additions, AFUDC and Return on CWIP

Total Project Feb-18 Mar-18 Apr-18 May-18 <u>Jun-18</u> <u>Jul-18</u> Aug-18 Sep-18 Oct-18 Nov-18 Dec-18 Jan-19 Feb-19 Mar-19 Apr-19 BEC 4 Environmental Retrofit 234,166,221 In Service 12/31/2015 CapEx 235,985,298 Less Internal Cost -5,020,297 AFUDC 3,604,666 Less AFUDC on Internal Cost -403,445 EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Storm Water 5,372,401 In Service 9/30/2016 ROM CapEx 5,372,401 Less Internal Cost AFUDC Less AFUDC on Internal Cost Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 1 5,031,629 In Service 12/31/2016 BOM CapEx 5,073,016 Less Internal Cost -41,470 AFUDC 84 Less AFUDC on Internal Cost 0 FOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 2 823,997 In Service 12/31/2019 BOM 53,666 107,333 160,999 214,666 268,332 321,998 375,665 429,331 482,998 536,664 590,330 643,997 658,997 673,997 688,997 854.859 54,952 54.952 54,952 54,952 16,286 CapEx 54.952 54,952 54,952 54,952 54,952 54,952 54.952 16,286 16,286 16,286 Less Internal Cost -30,862 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 AFUDC 0 0 0 0 0 0 0 0 0 0 0 Less AFUDC on Internal Cost 0 EOM 107,333 160,999 214,666 268,332 321,998 375,665 429,331 482,998 536,664 590,330 643,997 658,997 673,997 688,997 703,997 Return on CWIP After Tax Return on Equity 378 630 882 1,134 1,386 1,638 1,890 2,142 2,394 2,646 2,898 3,059 3,129 3,200 3,270 Income Tax Component 267 444 622 800 978 1,156 1,333 1,511 1,689 1,867 2,045 2,158 2,208 2,258 2,308 Interest Expense Component 170 284 398 511 625 738 852 966 1,079 1,193 1,306 1,379 1,411 1,443 1,474

Total Return on CWIP

815

1,358

1,902

2,445

2,989

3,532

4,075

4,619

5,162

5,705

6,249

6,596

6,748

6,900

7,052

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Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP Exhibit B-3 Page 6 of 31

BEC 4 Environmental Retrofit In Service 12/31/2015 BOM	Total <u>Project</u> 234,166,221	<u>May-19</u>	<u>Jun-19</u>	<u>Jul-19</u>	<u>Aug-19</u>	<u>Sep-19</u>	<u>Oct-19</u>	<u>Nov-19</u>	<u>Dec-19</u>	<u>Jan-20</u>	<u>Feb-20</u>	<u>Mar-20</u>	<u>Apr-20</u>	<u>May-20</u>	<u>Jun-20</u>	<u>Jul-20</u>	<u>Aug-20</u>
CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost	235,985,298 -5,020,297 3,604,666 -403,445																
EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP																	
BEC 4 Storm Water In Service 9/30/2016 BOM	5,372,401																
CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM	5,372,401 0 0 0																
Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP																	
BEC 4 Ash Phase 1 In Service 12/31/2016 BOM	5,031,629																
CapEx Less Internal Cost	5,073,016 -41,470																
AFUDC Less AFUDC on Internal Cost	84 0																
EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP																	
BEC 4 Ash Phase 2 In Service 12/31/2019 BOM	823,997	703,997	718,997	733,997	748,997	763,997	778,997	793,997	In-Service 12/31/2019 808,997								
CapEx Less Internal Cost	854,859 -30,862	16,286 -1,286	16,286 -1,286	16,286 -1,286	16,286 -1,286	16,286 -1,286	16,286 -1,286	16,286 -1,286	16,286 -1,286								
AFUDC Less AFUDC on Internal Cost	0	-1,280 0 0	0	0	0	0	0	0	0								
EOM Return on CWIP		718,997	733,997	748,997	763,997	778,997	793,997	808,997	823,997								
After Tax Return on Equity Income Tax Component Interest Expense Component		3,341 2,357 <u>1,506</u>	3,411 2,407 <u>1,538</u>	3,482 2,457 <u>1,570</u>	3,552 2,506 <u>1,601</u>	3,622 2,556 <u>1,633</u>	3,693 2,606 <u>1,665</u>	3,763 2,655 1,697	1,899 1,340 <u>856</u>								
Total Return on CWIP		7,204	7,356	7,508	7,660	7,811	7,963	8,115	4,096								

Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP Exhibit B-3 Page 7 of 31

BEC 4 Ash Phase 3	Total <u>Project</u> 1,378,067	to date Jan-13	<u>Feb-13</u>	<u>Mar-13</u>	<u>Apr-13</u>	<u>May-13</u>	<u>Jun-13</u>	<u>Jul-13</u>	<u>Aug-13</u>	<u>Sep-13</u>	Oct-13	<u>Nov-13</u>	<u>Dec-13</u>	<u>Jan-14</u>	<u>Feb-14</u>	<u>Mar-14</u>	<u>Apr-14</u>
In Service 12/31/2023	1,370,007																
вом		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	1,380,554																
Less Internal Cost	-2,487																
AFUDC	0																
Less AFUDC on Internal Cost	0																
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP																	
BEC 4 Ash Phase 4	3,228,882																
In Service 12/31/2029	0,220,002																
BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,234,710	, i	, in the second	, in the second	Ŭ	, i	Ü	Ŭ		, and the second	Ü	, i	, in the second	Ü	Ü	Ü	Ü
Less Internal Cost	-5,828																
AFUDC	0																
Less AFUDC on Internal Cost	0																
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP																	
After Tax Return on Equity																	
Income Tax Component																	
Interest Expense Component																	
Total Return on CWIP																	
BEC 4 Ash Phase 5 In Service 12/31/2035 BOM	3,941,852	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,948,967	U	U	U	0	U	0	U	U	U	U	U	U	U	0	U	0
Less Internal Cost	-7,115																
AFUDC	-7,119																
Less AFUDC on Internal Cost	0																
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP																	
After Tax Return on Equity																	
Income Tax Component																	
Interest Expense Component																	
Total Return on CWIP																	
Total	253,943,048																
BOM		0	21,039,943	23,516,640	26,181,110	30,213,705	33,332,452	34,498,171	36,725,554	40,701,839	44,263,914	48,736,841	53,347,000	58,914,810	60,653,451	67,309,385	74,393,761
CapEx	255,849,805	20,189,572	2,439,572	2,594,454	3,961,992	3,061,934	1,055,311	2,124,604	3,867,591	3,425,444	4,562,365	4,723,148	5,760,918	1,807,357	6,752,543	7,197,255	9,743,583
Less Internal Cost	-5,108,060	-923,580	-86,728	-67,342	-84,473	-117,140	-79,762	-95,645	-105,757	-97,437	-89,439	-112,989	-193,108	-68,716	-96,609	-112,879	-118,158
AFUDC	3,604,750	1,890,832	130,909	144,921	163,139	182,681	199,839	208,671	225,361	245,648	14,567	15,400	16,892	17,454	18,124	18,972	19,907
Less AFUDC on Internal Cost	-403,445	-116,881	-7,056	-7,563	-8,063	-8,727	-9,669	-10,247	-10,910	-11,580	-14,567	-15,400	-16,892	-17,454	-18,124	-18,972	-19,907
EOM		21,039,943	23,516,640	26,181,110	30,213,705	33,332,452	34,498,171	36,725,554	40,701,839		48,736,841	53,347,000	58,914,810	60,653,451	67,309,385	74,393,761	84,019,187
Return on CWIP																	
After Tax Return on Equity	17,557,522	0	0	0	0	0	0	0	0	0	218,332	239,656	263,551	280,703	300,411	332,668	371,897
Income Tax Component	12,388,804	0	0	0	0	0	0	0	0	0	154,058	169,104	185,964	198,068	211,974	234,735	262,415
Interest Expense Component	7,915,054	0	0	0	0	0	0	0	0		98,426	108,039	118,810	126,543	135,427	149,969	167,654
Total Return on CWIP	37,861,380	0	0	0	0	0	0	0	0	0	470,816	516,799	568,325	605,314	647,812	717,372	801,966

Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP Exhibit B-3 Page 8 of 31

BEC 4 Ash Phase 3	Total <u>Project</u> 1,378,067	<u>May-14</u>	<u>Jun-14</u>	<u>Jul-14</u>	<u>Aug-14</u>	<u>Sep-14</u>	<u>Oct-14</u>	<u>Nov-14</u>	<u>Dec-14</u>	<u>Jan-15</u>	<u>Feb-15</u>	<u>Mar-15</u>	<u>Apr-15</u>	<u>May-15</u>	<u>Jun-15</u>	<u>Jul-15</u>
In Service 12/31/2023																
BOM	4 000 554	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost	1,380,554 -2,487															
AFUDC	-2,467															
Less AFUDC on Internal Cost	0															
EOM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP		Ü	· ·	· ·	ŭ	Ü	· ·	Ü	Ü	ŭ	ŭ	Ü	ŭ	ŭ	Ü	ŭ
After Tax Return on Equity																
Income Tax Component																
Interest Expense Component																
Total Return on CWIP																
BEC 4 Ash Phase 4	3,228,882															
In Service 12/31/2029																
вом		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost	3,234,710															
AFUDC	-5,828 0															
Less AFUDC on Internal Cost	0															
EOM	· ·	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP																
After Tax Return on Equity																
Income Tax Component																
Interest Expense Component																
Total Return on CWIP																
BEC 4 Ash Phase 5	3,941,852															
In Service 12/31/2035	3,341,032															
BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,948,967															
Less Internal Cost	-7,115															
AFUDC	0															
Less AFUDC on Internal Cost EOM	0		0	0	0	^	0	0	^	0	0	^	0	0	^	0
Return on CWIP		0	U	0	0	0	0	0	0	0	0	0	0	0	0	U
After Tax Return on Equity																
Income Tax Component																
Interest Expense Component																
Total Return on CWIP																
Total	253,943,048															
вом		84,019,187	91,690,914	99,185,813	104,779,955	110,611,126	119,381,370	130,694,623	138,808,812	146,950,210	154,344,870	160,233,939	166,016,010	174,758,568	181,160,534	187,305,068
CapEx	255,849,805	7,846,569	7,615,893	5,715,110	5,945,755	8,867,973	11,410,984	8,276,215	8,239,128	7,492,390	5,986,799	5,879,800	8,840,288	6,506,126	6,248,693	8,465,056
Less Internal Cost	-5,108,060	-174,841	-120,994	-120,969	-114,583	-97,730	-97,730	-162,026	-97,730	-97,730	-97,730	-97,730	-97,730	-104,160	-104,160	-104,160
AFUDC	3,604,750	21,082	22,939	23,234	24,178	0	0	0	0	0	0	0	0	0	0	0
Less AFUDC on Internal Cost EOM	-403,445	-21,082	-22,939	-23,234	-24,178	110 201 270	120 604 622	120 000 012	146 050 210	154 244 970	160 222 020	166 016 010	174 750 560	191 160 534	197 205 069	105 665 065
EOM Return on CWIP		91,690,914	99,185,813	104,779,955	110,611,126	119,381,370	130,694,623	138,808,812	146,950,210	154,344,870	160,233,939	166,016,010	174,758,568	181,160,534	187,305,068	195,665,965
After Tax Return on Equity	17,557,522	412,504	448,110	478,839	505,661	539,940	587,089	632,697	670,860	707,333	738,518	765,918	800,017	835,571	865,025	899,079
Income Tax Component	12,388,804	291,068	316,192	337,874	356,801	380,988	414,257	446,439	473,367	499,103	521,108	540,441	564,502	589,589	610,372	634,401
Interest Expense Component	7,915,054	185,960	202,011	215,864	227,956	243,409	264,664	285,224	302,428	318,871	332,929	345,281	360,653	376,681	389,959	405,311
Total Return on CWIP	37,861,380	889,532	966,313	1,032,577	1,090,417	1,164,337	1,266,010	1,364,361	1,446,655	1,525,306	1,592,555	1,651,640	1,725,171	1,801,840	1,865,357	1,938,791

Minnesota Power
BEC 4 Rider
Plant Additions, AFUDC and Return on CWIP

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BEC 4 Ash Phase 3 In Service 12/31/2023	Total <u>Project</u> 1,378,067	<u>Aug-15</u>	<u>Sep-15</u>	Oct-15	<u>Nov-15</u>	<u>Dec-15</u>	<u>Jan-16</u>	<u>Feb-16</u>	<u>Mar-16</u>	<u>Apr-16</u>	<u>May-16</u>	<u>Jun-16</u>	<u>Jul-16</u>	<u>Aug-16</u>	<u>Sep-16</u>	Oct-16
BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost	1,380,554 -2,487 0 0	J	J	J	·	J		0	Ū				Ū		J	Ů
EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BEC 4 Ash Phase 4 In Service 12/31/2029 BOM	3,228,882	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost AFUDC	3,234,710 -5,828 0															
Less AFUDC on Internal Cost	0															
EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BEC 4 Ash Phase 5 In Service 12/31/2035 BOM	3,941,852	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost	3,948,967 -7,115 0 0															
EOM RETURN ON CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	253,943,048															
BOM		195,665,965	204,009,930	210,640,161	215,194,261	218,440,562	236,528,254	236,750,720	236,973,187	237,195,653	237,418,120	238,408,072	239,398,024	240,387,976	241,377,929	243,902,852
CapEx	255,849,805	8,448,125	6,862,983	4,786,852	3,414,756	18,256,148	223,752	223,752	223,752	223,752	991,238	991,238	991,238	991,238	2,526,210	223,752
Less Internal Cost AFUDC	-5,108,060 3,604,750	-104,160 0	-232,752 0	-232,752 0	-168,456 0	-168,456 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0	-1,286 0
Less AFUDC on Internal Cost EOM	-403,445	0	0	0	0	0	0	0	0 237,195,653	0 237,418,120	0	0	0	0	0	0
Return on CWIP		204,009,930	210,640,161	215,194,261	218,440,562	236,528,254	236,750,720	236,973,187	237,195,653	237,418,120	238,408,072	239,398,024	240,387,976	241,377,929	243,902,852	244,125,319
After Tax Return on Equity	17,557,522	938,296	973,450	999,707	1,018,019	518,365	11,613	12,657	13,702	14,746	17,593	22,241	26,889	31,537	27,176	21,014
Income Tax Component	12,388,804	662,073	686,878	705,405	718,327	365,765	8,194	8,931	9,668	10,405	12,414	15,693	18,973	22,253	19,176	14,827
Interest Expense Component Total Return on CWIP	7,915,054 37,861,380	422,990 2,023,359	438,838 2,099,166	450,675 2,155,787	458,930 2,195,276	233,683 1,117,813	5,235 25,042	5,706 27,294	6,177 29,547	6,648 31,799	7,931 37,937	10,026 47,960	12,122 57,984	14,217 68,007	12,251 58,603	9,473 45,314

Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP Exhibit B-3 Page 10 of 31

BEC 4 Ash Phase 3	Total <u>Project</u> 1,378,067	<u>Nov-16</u>	<u>Dec-16</u>	<u>Jan-17</u>	<u>Feb-17</u>	<u>Mar-17</u>	<u>Apr-17</u>	<u>May-17</u>	<u>Jun-17</u>	<u>Jul-17</u>	<u>Aug-17</u>	<u>Sep-17</u>	Oct-17	<u>Nov-17</u>	<u>Dec-17</u>	<u>Jan-18</u>
In Service 12/31/2023																
BOM	4 000 554	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost	1,380,554 -2,487															
AFUDC	-2,467															
Less AFUDC on Internal Cost	0															
EOM	· ·	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP		v	v	v	v	o o	v	o o	v	Ü	C	· ·	· ·	v	v	Ü
BEC 4 Ash Phase 4	3,228,882															
In Service 12/31/2029																
BOM	0.004.740	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost	3,234,710 -5,828															
AFUDC	-5,628															
Less AFUDC on Internal Cost	0															
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP																
BEC 4 Ash Phase 5 In Service 12/31/2035 BOM	3,941,852	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,948,967															
Less Internal Cost AFUDC	-7,115 0															
Less AFUDC on Internal Cost	0															
EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	253,943,048															
BOM		244,125,319	244,347,785	244,570,252	244,570,252	244 570 252	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244 570 252	244,570,252	244,570,252	244,570,252	244 570 252
CapEx	255,849,805	223,752	223,752	0	0	0	0	0	0	0	0	0		0	0	54,952
Less Internal Cost	-5,108,060	-1,286	-1,286	0	0	0	0	0	0	0	0	0	0	0	0	-1,286
AFUDC	3,604,750	0	0	0	0	0	0	0	0	0	0	0		0	0	0
Less AFUDC on Internal Cost	-403,445	0	0	0	0	0	0	0	0	0	0	0		0	0	0
EOM		244,347,785	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244,570,252	244,623,918
Return on CWIP After Tax Return on Equity	47 FE7 F00	00.0=0	44.000	_	_	•	•	-	•	_	_	_	_	_	_	400
Income Tax Component	17,557,522 12,388,804	22,058 15,564	11,290 7,966	0	0	0	0	0	0	0	0	0		0	0	126 89
Interest Expense Component	7,915,054	9,944	7,966 5,090	0	0	0	0	0	0	0	0	0		0	0	89 57
Total Return on CWIP	37,861,380	47,567	24,346	0	0	0	0	0	0	0	0	0		0	0	272

Minnesota Power
BEC 4 Rider
Plant Additions, AFUDC and Return on CWIP

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	Total <u>Project</u>	<u>Feb-18</u>	<u>Mar-18</u>	<u> Apr-18</u>	<u>May-18</u>	<u>Jun-18</u>	<u>Jul-18</u>	<u>Aug-18</u>	<u>Sep-18</u>	Oct-18	<u>Nov-18</u>	<u>Dec-18</u>	<u>Jan-19</u>	<u>Feb-19</u>	<u>Mar-19</u>	<u>Apr-19</u>
BEC 4 Ash Phase 3 In Service 12/31/2023	1,378,067															
вом		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	1,380,554															
Less Internal Cost	-2,487															
AFUDC Less AFUDC on Internal Cost	0 0															
EOM	U	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP		Ü	U	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü
BEC 4 Ash Phase 4	3,228,882															
In Service 12/31/2029																
BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,234,710															
Less Internal Cost	-5,828															
AFUDC	0															
Less AFUDC on Internal Cost EOM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP		Ü	0	Ü	Ü	U	U	Ü	U	U	Ü	Ü	Ü	Ü	Ü	U
BEC 4 Ash Phase 5 In Service 12/31/2035	3,941,852															
BOM	3,948,967	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost	-7,115 0 0															
EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	253,943,048															
BOM		244,623,918	244,677,584	244,731,251	244,784,917	244,838,584	244,892,250	244,945,916		245,053,249	245,106,916	245,160,582		245,229,248	245,244,248	245,259,248
CapEx	255,849,805	54,952	54,952	54,952	54,952	54,952	54,952	54,952	54,952	54,952	54,952	54,952	16,286	16,286	16,286	16,286
Less Internal Cost	-5,108,060	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286	-1,286
AFUDC	3,604,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less AFUDC on Internal Cost EOM	-403,445	0 244,677,584	0 244,731,251	0 244,784,917	0 244,838,584	0 244,892,250	0 244,945,916	0 244,999,583	0 245,053,249	0 245,106,916	0 245,160,582	0 245,214,248	0 245.229.248	0 245,244,248	0 245,259,248	245,274,248
Return on CWIP		244,011,084	244,731,251	244,704,917	244,030,084	244,092,250	244,940,916	244,999,083	245,055,249	240,100,916	240,100,082	240,214,248	240,229,248	240,244,248	240,209,248	240,214,248
After Tax Return on Equity	17,557,522	378	630	882	1,134	1,386	1,638	1,890	2,142	2,394	2,646	2,898	3,059	3,129	3,200	3,270
Income Tax Component	12,388,804	267	444	622	800	978	1,156	1,333	1,511	1,689	1,867	2,045	2,158	2,208	2,258	2,308
Interest Expense Component	7,915,054	170	284	398	511	625	738	852	966	1,079	1,193	1,306	1,379	1,411	1,443	1,474
Total Return on CWIP	37,861,380	815	1,358	1,902	2,445	2,989	3,532	4,075	4,619	5,162	5,705	6,249	6,596	6,748	6,900	7,052

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Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP

Total Project May-19 <u>Jun-19</u> <u>Jul-19</u> Aug-19 Sep-19 Oct-19 Nov-19 Dec-19 Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 <u>Jul-20</u> Aug-20 BEC 4 Ash Phase 3 1,378,067 In Service 12/31/2023 BOM CapEx 1,380,554 Less Internal Cost -2,487 AFUDC 0 Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 4 3.228.882 In Service 12/31/2029 BOM CapEx 3,234,710 Less Internal Cost -5,828 AFUDC 0 Less AFUDC on Internal Cost EOM 0 0 0 0 0 Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 5 3,941,852 In Service 12/31/2035 BOM CapEx 3,948,967 Less Internal Cost -7,115 AFUDC 0 Less AFUDC on Internal Cost 0 FOM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP 253,943,048 Total 245,379,248 245,394,248 245,394,248 245,394,248 245,394,248 BOM 245,319,248 245,334,248 245,349,248 245,364,248 245,274,248 245,289,248 245,304,248 245,394,248 245,394,248 245,394,248 245,394,248 CapEx 255,849,805 16,286 16,286 16,286 16,286 16,286 16,286 16,286 16,286 0 -1,286 -1,286 Less Internal Cost -5,108,060 -1,286 -1,286 -1,286 -1,286 -1,286 -1,286 0 Ω 0 Ω 0 Ω AFUDC 3,604,750 0 0 0 0 0 0 0 0 0 0 Less AFUDC on Internal Cost -403,445 Ω EOM 245,289,248 245,304,248 245,319,248 245,334,248 245,349,248 245,364,248 245,379,248 245,394,248 245,394,248 245,394,248 245,394,248 245,394,248 245,394,248 245,394,248 245,394,248 245,394,248

Return on CWIP After Tax Return on Equity

Total Return on CWIP

Income Tax Component

Interest Expense Component

17,557,522

12,388,804

7.915.054

37,861,380

3.341

2,357

1.506

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3.411

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Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP Exhibit B-3 Page 13 of 31

Before 1281/1289 18	BEC 4 Ash Phase 3	Total <u>Project</u> 1,378,067	<u>Sep-20</u>	Oct-20	Nov-20	<u>Dec-20</u>	<u>Jan-21</u>	<u>Feb-21</u>	<u>Mar-21</u>	<u>Apr-21</u>	<u>May-21</u>	<u>Jun-21</u>	<u>Jul-21</u>	<u>Aug-21</u>	<u>Sep-21</u>	Oct-21	<u>Nov-21</u>
Cape	In Service 12/31/2023	1,212,221	_	_	_		_	_	_						_	_	
Less Friend Cott 14-14 15-14			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFFINITION OF TOTAL STATE OF THE STATE OF TH																	
Content Cont																	
ECM 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																	
Return an CWIP After Tais Return on CWIP After Tais Return on CWIP Total Return on CWIP BEC A Ash Phase 4		0															
Alter Tas Raturu on Egypt Concer Tax Components Control Reference Control Control Reference Control Control			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Record Recomponent Contingent Recomponent Contingent Recomponent Contingent Recomponent Contingent Recomponent Contingent Recomponent Recomponent Recomponent Contingent Recomponent Rec																	
Part																	
BEC A Ahi Phuse 8 3,941,968																	
BEC 4 Ash Phase 4 1,232,2369 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																	
BOM	Total Return on CWIP																
BOM																	
BOM 9,24,710 0, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BEC 4 Ash Phase 4	3,228,882															
Cape	In Service 12/31/2029																
Cape	BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less Partunce Content Cott		3,234,710															
AFUIC CLEAS AFUIC CONTENSION CLEAS AFUIC	Less Internal Cost	-5,828															
EOM O O O O O O O O O O O O O O O O O O	AFUDC																
Return on CWIP After Tax Return on CRIPIN HIGHER SET PRINTED EGE 4 Ash Phase 5	Less AFUDC on Internal Cost	0															
Atter Tax Return on Equity Increase Expense Component Interest Expense Comp			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Room Fax Component Reference Component Reference Component Total Return on CVIP Reference Planta	Return on CWIP																
Total	After Tax Return on Equity																
REC 4 4sh Phase 5 1,94 1,95 1	Income Tax Component																
BEC 4 Ash Phase 5 In Service 122412035 BOM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Interest Expense Component																
Navice 1221/2025	Total Return on CWIP																
Navice 1221/2025																	
BOM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BEC 4 Ash Phase 5	3,941,852															
CapEx 3,348,967	In Service 12/31/2035																
Less Internal Cost	BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFUDC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																	
Less AFUDC on Intermal Cost CSA																	
EOM Return or CWIP After Tax Return on Equity Income Tax Component Total 253,943,048 Total 253,943,048 245,394,248 24																	
Return on CWIP After Tax Return on Equity Interest Expense Component Interest Expense Component Total 253,943,048 Total 253,843,048 245,394,248		0															
After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP Total 253,943,048 EDM 245,394,248 245,39			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Income Tax Component Interest Expense Component Total Return on CWIP																	
Total Return on CWIP Total 253,943,048 245,394,248																	
Total 253,943,048 Form 1 253,943,048 Return on CWIP After Tax Return on Equity 17,557,522 17,527,522 18,000 18,																	
Total 253,943,048 BOM 245,394,248 245,394																	
BOM 245,394,248 24	Total Return on CWIP																
BOM 245,394,248 24																	
BOM 245,394,248 24																	
CapEx 255,849,805 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total	253,943,048															
CapEx 255,849,805 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ВОМ		245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248
AFUDC 3,604,750 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CapEx	255,849,805	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFUDC 3,604,750 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Less Internal Cost	-5,108,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM 245,394,248 24			0														0
Return on CWIP After Tax Return on Equity 17,557,522 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-403,445													-	-	0
After Tax Return on Equity 17,557,522 0			245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248	245,394,248
Income Tax Component 12,388,804 0																	
Interest Expense Component 7,915,054 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-	-													
Total Return on CWIP 37,861,380 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																	
	Total Return on CWIP	37,861,380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP Exhibit B-3 Page 14 of 31

BEC 4 Ash Phase 3 In Service 12/31/2023 BOM	Total <u>Project</u> 1,378,067	<u>Dec-21</u>	Jan-22	<u>Feb-22</u> 4,261	<u>Mar-22</u> 8,521	<u>Apr-22</u> 12,782	<u>May-22</u> 17,042	<u>Jun-22</u> 21,303	<u>Jul-22</u> 25,563	<u>Aug-22</u> 29,824	<u>Sep-22</u> 34,084	Oct-22 38,345	Nov-22 42,605	<u>Dec-22</u> 46,866	Jan-23	Feb-23
	1,380,554	U	0 4,268	4,261	4,268	4,268	4,268	4,268	4,268	4,268	34,084 4,268	4,268	42,605	46,866	51,126 110,778	161,705 110,778
CapEx Less Internal Cost	-2,487		4,200 -8	4,200 -8	4,200 -8	4,266 -8	4,266 -8	4,200 -8	4,266 -8	4,266 -8	4,266 -8	4,200 -8	4,266 -8	4,200 -8	-200	-200
AFUDC	-2,407		0	0	0	0	0	0	0	0	0	0	0	0	0	-200
Less AFUDC on Internal Cost	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		0	4,261	8,521	12,782	17,042	21,303	25,563	29,824	34,084	38,345	42,605	46,866	51,126	161,705	272,283
Return on CWIP																
After Tax Return on Equity			10	30	50	70	90	110	130	150	170	190	210	230	500	1,019
Income Tax Component			7	21	35	49	64	78	92	106	120	134	148	162	353	719
Interest Expense Component			<u>5</u>	<u>14</u>	<u>23</u>	<u>32</u>	<u>41</u>	<u>50</u>	<u>59</u>	<u>68</u>	77	<u>86</u>	<u>95</u>	104	225	<u>459</u>
Total Return on CWIP			22	65	108	151	194	237	280	324	367	410	453	496	1,077	2,197
BEC 4 Ash Phase 4 In Service 12/31/2029	3,228,882															
BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,234,710															
Less Internal Cost	-5,828															
AFUDC Less AFUDC on Internal Cost	0															
EOM	U	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP		0	U	0	U	U	U	U	U	U	U	U	U	U	U	U
After Tax Return on Equity																
Income Tax Component																
Interest Expense Component																
Total Return on CWIP																
BEC 4 Ash Phase 5	3,941,852															
In Service 12/31/2035																
BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,948,967															
Less Internal Cost AFUDC	-7,115 0															
Less AFUDC on Internal Cost	0															
EOM	0_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP		· ·	· ·	· ·	Ü	Ü	· ·	· ·	Ü	· ·	· ·	· ·	Ü	· ·	· ·	Ü
After Tax Return on Equity																
Income Tax Component																
Interest Expense Component																
Total Return on CWIP																
Total	253,943,048															
ВОМ		245,394,248	245,394,248	245,398,509	245,402,770	245,407,030	245,411,291	245,415,551	245,419,812	245,424,072	245,428,333	245,432,593	245,436,854	245,441,114	245,445,375	245,555,953
CapEx	255,849,805	0	4,268	4,268	4,268	4,268	4,268	4,268	4,268	4,268	4,268	4,268	4,268	4,268	110,778	110,778
Less Internal Cost	-5,108,060	0	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-200	-200
AFUDC	3,604,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less AFUDC on Internal Cost EOM	-403,445	0 245,394,248	0 245,398,509	0 245,402,770	0 245,407,030	0 245,411,291	0 245,415,551	0 245,419,812	0 245,424,072	0 245,428,333	0 245,432,593	0 245,436,854	0 245,441,114	0 245,445,375	0 245,555,953	0 245,666,531
Return on CWIP		240,394,248	240,390,009	240,402,770	240,407,030	240,411,291	240,410,051	240,419,612	240,424,072	240,420,333	240,432,093	240,430,654	245,441,114	240,440,375	240,000,953	240,000,031
After Tax Return on Equity	17,557,522	0	10	30	50	70	90	110	130	150	170	190	210	230	500	1,019
Income Tax Component	12,388,804	0	7	21	35	49	64	78	92	106	120	134	148	162	353	719
Interest Expense Component	7,915,054	0	5	14	23	32	41	50	59	68	77	86	95	104	225	459
Total Return on CWIP	37,861,380	0	22	65	108	151	194	237	280	324	367	410	453	496	1,077	2,197
	2.,22.,500	ŭ		00	. 30	.01		20.	200	J	50.		.00	.00	.,	=,

Minnesota Power
BEC 4 Rider
Plant Additions, AFUDC and Return on CWIP

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BEC 4 Ash Phase 3 In Service 12/31/2023 BOM	Total <u>Project</u> 1,378,067	<u>Mar-23</u> 272,283	<u>Apr-23</u> 382,861	<u>May-23</u> 493,440	<u>Jun-23</u> 604,018	<u>Jul-23</u> 714,596	<u>Aug-23</u> 825,175	<u>Sep-23</u> 935,753	Oct-23 1,046,331	Nov-23 1,156,910	Dec-23 In-Service 12/31/2023 1,267,488	<u>Jan-24</u>	<u>Feb-24</u>	<u>Mar-24</u>	<u>Apr-24</u>	<u>May-24</u>
CapEx	1,380,554	110,778	110,778	110,778	110,778	110,778	110,778	110,778	110,778	110,778	110,778					
Less Internal Cost	-2,487	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200					
AFUDC	-2,467	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200					
Less AFUDC on Internal Cost	0	0	0	0	0	0	0	0	0	0	0					
EOM	· ·	382,861	493,440	604,018	714,596	825,175	935,753	1,046,331	1,156,910	1,267,488	1,378,067					
Return on CWIP		002,001	100, 110	001,010	7.1.,000	020,170	000,700	1,010,001	1,100,010	1,201,100	1,010,001					
After Tax Return on Equity		1,538	2,057	2,576	3,096	3,615	4,134	4,653	5,172	5,692	2,976					
Income Tax Component		1.085	1,452	1,818	2,184	2,551	2,917	3,283	3,650	4.016	2,100					
Interest Expense Component		693	927	1,161	1,396	1,630	1,864	2,098	2,332	2,566	1,341					
Total Return on CWIP		3,317	4,436	5,556	6,675	7,795	8,915	10,034	11,154	12,274	6,417					
BEC 4 Ash Phase 4 In Service 12/31/2029	3,228,882															
BOM		0	0	0	0	0	0	0	0	0	0	0	4,655	9,310	13,965	18,620
CapEx	3,234,710											4,663	4,663	4,663	4,663	4,663
Less Internal Cost	-5,828											-8	-8	-8	-8	-8
AFUDC	0											0	0	0	0	0
Less AFUDC on Internal Cost	0											0	0	0	0	0
EOM		0	0	0	0	0	0	0	0	0	0	4,655	9,310	13,965	18,620	23,275
Return on CWIP												44	00		70	00
After Tax Return on Equity												11 8	33	55	76	98
Income Tax Component													23	39	54	69
Interest Expense Component Total Return on CWIP												<u>5</u> 24	<u>15</u> 71	<u>25</u> 118	<u>34</u> 165	<u>44</u> 212
Total Return on CWIP												24	71	110	165	212
BEC 4 Ash Phase 5 In Service 12/31/2035 BOM	3,941,852	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,948,967	U	U	U	0	U	U	U	U	U	U	U	U	U	U	0
Less Internal Cost	-7,115															
AFUDC	0															
Less AFUDC on Internal Cost	0															
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP																
Total	253,943,048															
вом		245,666,531	245,777,110	245,887,688	245,998,267	246,108,845	246,219,423	246,330,002	246,440,580	246,551,158	246,661,737	246,772,315	246,776,970	246,781,625	246,786,280	246,790,935
CapEx	255,849,805	110,778	110,778	110,778	110,778	110,778	110,778	110,778	110,778	110,778	110,778	4,663	4,663	4,663	4,663	4,663
Less Internal Cost	-5,108,060	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-8	-8	-8	-8	-8
AFUDC	3,604,750	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less AFUDC on Internal Cost	-403,445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		245,777,110	245,887,688	245,998,267	246,108,845	246,219,423	246,330,002	246,440,580	246,551,158	246,661,737	246,772,315	246,776,970	246,781,625	246,786,280	246,790,935	246,795,590
Return on CWIP	17 557 500	. =0-	0.05-		0.005	2 24-					0.07-					
After Tax Return on Equity	17,557,522	1,538	2,057	2,576	3,096	3,615	4,134	4,653	5,172	5,692	2,976	11	33	55	76	98
Income Tax Component	12,388,804	1,085	1,452	1,818	2,184	2,551	2,917	3,283	3,650	4,016	2,100	8	23	39	54	69
Interest Expense Component	7,915,054	693	927	1,161	1,396	1,630	1,864	2,098	2,332	2,566	1,341	5 24	15 71	25 118	34 165	44
Total Return on CWIP	37,861,380	3,317	4,436	5,556	6,675	7,795	8,915	10,034	11,154	12,274	6,417	24	/1	118	165	212

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BEC 4 Ash Phase 3 In Service 12/31/2023 BOM	Total <u>Project</u> 1,378,067	<u>Jun-24</u>	<u>Jul-24</u>	<u>Aug-24</u>	<u>Sep-24</u>	<u>Oct-24</u>	<u>Nov-24</u>	<u>Dec-24</u>	<u>Jan-25</u>	<u>Feb-25</u>	<u>Mar-25</u>	<u>Apr-25</u>	<u>May-25</u>	<u>Jun-25</u>	<u>Jul-25</u>	<u>Aug-25</u>	<u>Sep-25</u>
CapEx Less Internal Cost AFUDC	1,380,554 -2,487																
Less AFUDC on Internal Cost	0																
EOM Return on CWIP																	
After Tax Return on Equity																	
Income Tax Component Interest Expense Component																	
Total Return on CWIP																	
BEC 4 Ash Phase 4	3,228,882																
In Service 12/31/2029 BOM		23,275	27,930	32,585	37,240	41,895	46,550	51,205	55,860	94,687	133,514	172,342	211,169	249,996	288,823	327,651	366,478
CapEx	3,234,710	4,663	4,663	4,663	4,663	4,663	4,663	4,663	38,897	38,897	38,897	38,897	38,897	38,897	38,897	38,897	38,897
Less Internal Cost	-5,828	-8	-8	-8	-8	-8	-8	-8	-70	-70	-70	-70	-70	-70	-70	-70	-70
AFUDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less AFUDC on Internal Cost EOM	U	0 27,930	32,585	0 37,240	0 41,895	46,550	0 51,205	0 55,860	0 94,687	133,514	0 172,342	0 211,169	249,996	288,823	327,651	0 366,478	405,305
Return on CWIP		27,000	02,000	01,240	41,000	40,000	01,200	00,000	54,007	100,014	172,042	211,100	240,000	200,020	027,001	000,470	400,000
After Tax Return on Equity		120	142	164	186	208	229	251	353	536	718	900	1,083	1,265	1,447	1,630	1,812
Income Tax Component		85	100	116	131	147	162	177	249	378	507	635	764	893	1,021	1,150	1,278
Interest Expense Component Total Return on CWIP		<u>54</u> 259	64 306	<u>74</u> 353	<u>84</u> 401	<u>94</u> 448	<u>103</u> 495	<u>113</u> 542	159 762	242 1,155	324 1,548	<u>406</u> 1,942	488 2,335	<u>570</u> 2,728	<u>652</u> 3,121	<u>735</u> 3,514	<u>817</u> 3,907
Total Return on CWIF		239	300	333	401	440	495	542	702	1,133	1,546	1,942	2,333	2,720	3,121	3,314	3,907
BEC 4 Ash Phase 5 In Service 12/31/2035	3,941,852																
вом		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,948,967																
Less Internal Cost AFUDC	-7,115 0																
Less AFUDC on Internal Cost	0																
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Return on CWIP																	
After Tax Return on Equity Income Tax Component																	
Interest Expense Component																	
Total Return on CWIP																	
Total	253,943,048																
вом		246,795,590	246,800,245	246,804,900	246,809,555	246,814,210	246,818,865	246,823,520	246,828,175	246,867,002	246,905,829	246,944,657	246,983,484	247,022,311	247,061,138	247,099,966	247,138,793
CapEx	255,849,805	4,663	4,663	4,663	4,663	4,663	4,663	4,663	38,897	38,897	38,897	38,897	38,897	38,897	38,897	38,897	38,897
Less Internal Cost AFUDC	-5,108,060 3,604,750	-8 0	-8 0	-8 0	-8 0	-8 0	-8 0	-8 0	-70 0	-70 0	-70 0	-70 0	-70 0	-70 0	-70 0	-70 0	-70 0
Less AFUDC on Internal Cost	-403,445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		246,800,245	246,804,900	246,809,555	246,814,210	246,818,865	246,823,520	246,828,175	246,867,002	246,905,829	246,944,657	246,983,484	247,022,311	247,061,138	247,099,966	247,138,793	247,177,620
Return on CWIP	47.557.5																
After Tax Return on Equity Income Tax Component	17,557,522 12.388.804	120 85	142 100	164 116	186 131	208 147	229 162	251 177	353 249	536 378	718 507	900 635	1,083 764	1,265 893	1,447 1,021	1,630 1.150	1,812 1,278
Income Tax Component Interest Expense Component	7,915,054	85 54	64	74	84	94	103	117	159	378 242	324	406	764 488	570	652	735	1,278
Total Return on CWIP	37,861,380	259	306	353	401	448	495	542	762	1,155	1,548	1,942	2,335	2,728	3,121	3,514	3,907

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BEC 4 Ash Phase 3 In Service 12/31/2023 BOM	Total <u>Project</u> 1,378,067	Oct-25	<u>Nov-25</u>	<u>Dec-25</u>	<u>Jan-26</u>	<u>Feb-26</u>	<u>Mar-26</u>	<u>Apr-26</u>	<u>May-26</u>	<u>Jun-26</u>	<u>Jul-26</u>	<u>Aug-26</u>	<u>Sep-26</u>	Oct-26	<u>Nov-26</u>	<u>Dec-26</u>	<u>Jan-27</u>
CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost	1,380,554 -2,487 0 0																
Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP	U																
BEC 4 Ash Phase 4 In Service 12/31/2029 BOM	3,228,882	405,305	444,133	482,960	521,787	526,792	531,797	536,802	541,806	546,811	551,816	556,821	561,825	566,830	571,835	576,840	581,844
CapEx	3,234,710	38,897	38,897	38,897	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	127,609
Less Internal Cost	-5,828	-70	-70	-70	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-230
AFUDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less AFUDC on Internal Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		444,133	482,960	521,787	526,792	531,797	536,802	541,806	546,811	551,816	556,821	561,825	566,830	571,835	576,840	581,844	709,224
Return on CWIP After Tax Return on Equity		1,994	2,176	2,359	2,462	2,485	2,509	2,532	2,556	2,579	2,603	2,626	2,650	2,673	2,697	2,720	3,031
Income Tax Component		1,407	1,536	1,664	1,737	1,754	1,770	1,787	1,803	1,820	1,836	1,853	1,870	1,886	1,903	1,919	2,139
Interest Expense Component		899	981	1,063	1,110	1,120	1,131	1,142	1,152	1,163	1,173	1,184	1,194	1,205	1,216	1,226	1,366
Total Return on CWIP		4,300	4,693	5,087	5,308	5,359	5,410	5,460	5,511	5,562	5,612	5,663	5,714	5,764	5,815	5,866	6,536
BEC 4 Ash Phase 5 In Service 12/31/2035 BOM	3,941,852	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	3,948,967	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0	U
Less Internal Cost AFUDC Less AFUDC on Internal Cost	-7,115 0																
EOM Return on CWIP	<u> </u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP																	
Total	253,943,048																
вом		247,177,620	247,216,448	247,255,275	247,294,102	247,299,107	247,304,112	247,309,117	247,314,121	247,319,126	247,324,131	247,329,136	247,334,140	247,339,145	247,344,150	247,349,155	247,354,160
СарЕх	255,849,805	38,897	38,897	38,897	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	5,014	127,609
Less Internal Cost	-5,108,060	-70	-70	-70	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-230
AFUDC Less AFUDC on Internal Cost	3,604,750 -403,445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM	-403,445	247,216,448	247,255,275		Ū	247,304,112	Ü	247,314,121	247,319,126	247,324,131	247,329,136	247,334,140	247,339,145	247,344,150	247,349,155	247,354,160	247,481,539
Return on CWIP		,0,0	,230,270	,_0-, 102	,200,107	,007,112	,000,117	,0 17, 121	,010,120	,527,101	,020,100	,004, 140	,000,170	,044,100	,040,100	,007,100	, 1,000
After Tax Return on Equity	17,557,522	1,994	2,176	2,359	2,462	2,485	2,509	2,532	2,556	2,579	2,603	2,626	2,650	2,673	2,697	2,720	3,031
Income Tax Component	12,388,804	1,407	1,536	1,664	1,737	1,754	1,770	1,787	1,803	1,820	1,836	1,853	1,870	1,886	1,903	1,919	2,139
Interest Expense Component	7,915,054	899	981	1,063	1,110	1,120	1,131	1,142	1,152	1,163	1,173	1,184	1,194	1,205	1,216	1,226	1,366
Total Return on CWIP	37,861,380	4,300	4,693	5,087	5,308	5,359	5,410	5,460	5,511	5,562	5,612	5,663	5,714	5,764	5,815	5,866	6,536

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BEC 4 Ash Phase 3 In Service 12/31/2023 BOM	Total <u>Project</u> 1,378,067	<u>Feb-27</u>	<u>Mar-27</u>	<u>Apr-27</u>	<u>May-27</u>	<u>Jun-27</u>	<u>Jul-27</u>	<u>Aug-27</u>	<u>Sep-27</u>	<u>Oct-27</u>	<u>Nov-27</u>	<u>Dec-27</u>	<u>Jan-28</u>	<u>Feb-28</u>	<u>Mar-28</u>	<u>Apr-28</u>
CapEx	1,380,554															
Less Internal Cost AFUDC	-2,487 0															
Less AFUDC on Internal Cost	0															
EOM Return on CWIP After Tax Return on Equity																
Income Tax Component																
Interest Expense Component Total Return on CWIP																
BEC 4 Ash Phase 4 In Service 12/31/2029	3,228,882															
ВОМ		709,224	836,603	963,983	1,091,362	1,218,741	1,346,121	1,473,500	1,600,880	1,728,259	1,855,638	1,983,018	2,110,397	2,183,451	2,256,504	2,329,557
CapEx Less Internal Cost	3,234,710 -5,828	127,609	127,609	127,609	127,609	127,609	127,609	127,609	127,609	127,609	127,609	127,609	73,185	73,185	73,185	73,185
AFUDC	-5,626 0	-230 0	-230 0	-230 0	-230 0	-230 0	-230 0	-230 0	-230 0	-230 0	-230 0	-230 0	-132 0	-132 0	-132 0	-132 0
Less AFUDC on Internal Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		836,603	963,983	1,091,362	1,218,741	1,346,121	1,473,500	1,600,880	1,728,259	1,855,638	1,983,018	2,110,397	2,183,451	2,256,504	2,329,557	2,402,611
Return on CWIP After Tax Return on Equity		3,629	4,227	4,825	5,423	6,021	6,619	7,218	7,816	8,414	9,012	9,610	10,080	10,423	10,766	11,109
Income Tax Component		2,561	2,983	3,405	3,827	4,249	4,671	5,093	5,515	5,937	6,359	6,781	7,113	7,355	7,597	7,839
Interest Expense Component		1,636	1,906	2,175	2,445	2,714	2,984	3,254	3,523	3,793	4,063	4,332	4,544	4,699	4,854	5,008
Total Return on CWIP		7,826	9,115	10,405	11,695	12,985	14,274	15,564	16,854	18,143	19,433	20,723	21,738	22,477	23,217	23,957
BEC 4 Ash Phase 5 In Service 12/31/2035	3,941,852															
BOM CapEx	3,948,967	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less Internal Cost AFUDC	-7,115 0															
Less AFUDC on Internal Cost	0	_	_			_						_		_	_	
EOM Return on CWIP After Tax Return on Equity		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Income Tax Component Interest Expense Component Total Return on CWIP																
Total	253,943,048															
ВОМ		247,481,539	247,608,918	247,736,298	247,863,677	247,991,056	248,118,436	248,245,815	248,373,195	248,500,574	248,627,953	248,755,333	248,882,712	248,955,766	249,028,819	249,101,872
CapEx	255,849,805	127,609	127,609	127,609	127,609	127,609	127,609	127,609	127,609	127,609	127,609	127,609	73,185	73,185	73,185	73,185
Less Internal Cost	-5,108,060	-230	-230	-230	-230	-230	-230	-230	-230	-230	-230	-230	-132	-132	-132	-132
AFUDC Less AFUDC on Internal Cost	3,604,750 -403,445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM	-403,443	247,608,918	247,736,298	247,863,677	247,991,056	248,118,436	248,245,815	248,373,195	248,500,574	248,627,953	248,755,333	248,882,712	248,955,766	249,028,819	249,101,872	249,174,926
Return on CWIP																
After Tax Return on Equity	17,557,522	3,629	4,227	4,825	5,423	6,021	6,619	7,218	7,816	8,414	9,012	9,610	10,080	10,423	10,766	11,109
Income Tax Component	12,388,804	2,561	2,983	3,405	3,827	4,249	4,671	5,093	5,515	5,937	6,359	6,781	7,113	7,355	7,597	7,839
Interest Expense Component Total Return on CWIP	7,915,054 37,861,380	1,636 7,826	1,906 9,115	2,175 10,405	2,445 11,695	2,714 12,985	2,984 14,274	3,254 15,564	3,523 16,854	3,793 18,143	4,063 19,433	4,332 20,723	4,544 21,738	4,699 22,477	4,854 23,217	5,008 23,957
Total Total II OII OII I	5.,501,500	7,020	5,115	10,400	71,000	12,000	17,217	10,004	10,004	10,140	10,400	20,723	21,700	,-,,	20,217	20,007

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BEC 4 Rider
Plant Additions, AFUDC and Return on CWIP

Total **Project** May-28 Jun-28 <u>Jul-28</u> Aug-28 Sep-28 Oct-28 Nov-28 Dec-28 Jan-29 Feb-29 Mar-29 Apr-29 May-29 Jun-29 Jul-29 BEC 4 Ash Phase 3 1,378,067 In Service 12/31/2023 BOM CapEx 1,380,554 Less Internal Cost -2,487 AFUDC 0 Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 4 3.228.882 In Service 12/31/2029 3,007,192 2.402.611 2.548,718 2.621.771 2 840 932 2 913 985 2 987 039 3.067.653 3.107.960 ROM 2.475.664 2 694 825 2.767.878 3.027.346 3.047.499 3 087 807 20,190 CapEx 3,234,710 73,185 73,185 73,185 73,185 73,185 73,185 73,185 73,185 20,190 20,190 20,190 20,190 20,190 20,190 Less Internal Cost -132 -5.828 -132 -132 -132 -132 -132 -132 -132 -36 -36 -36 -36 -36 -36 -36 AFUDC 0 0 0 0 0 0 0 Less AFUDC on Internal Cost Λ Λ Ω EOM 2,475,664 2,548,718 2,621,771 2,694,825 2,767,878 2,840,932 2,913,985 2,987,039 3,007,192 3,027,346 3,047,499 3,067,653 3,087,807 3,107,960 3,128,114 Return on CWIP After Tax Return on Equity 11,452 11,795 12,138 12,481 12,824 13,167 13,510 13,853 14,072 14,167 14,262 14,356 14,451 14,545 14,640 Income Tax Component 8,081 8,323 8,565 8,807 9,049 9,291 9,533 9,775 9,930 9,996 10,063 10,130 10,197 10,263 10,330 5,163 5,317 5,472 5,627 5,781 5,936 6,091 6.344 6,387 6,429 6,557 6,600 Interest Expense Component 6,245 6,472 6,515 Total Return on CWIP 24,696 25,436 26,176 26,915 27,655 28,395 29,134 29,874 30,346 30,550 30,754 30,958 31,162 31,366 31,570 BEC 4 Ash Phase 5 3,941,852 In Service 12/31/2035 BOM CapEx 3,948,967 Less Internal Cost -7,115 AFUDC 0 Less AFUDC on Internal Cost 0 FOM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP Total 253,943,048 249,174,926 BOM 249,247,979 249,321,033 249,394,086 249,467,140 249,540,193 249,613,247 249,686,300 249,759,354 249.779.507 249,799,661 249,819,814 249,839,968 249,860,122 249,880,275 CapEx 255,849,805 73,185 73,185 73,185 73,185 73,185 73,185 73,185 73,185 20,190 20,190 20,190 20,190 20,190 20,190 20,190 Less Internal Cost -5,108,060 -132 -132 -132 -132 -132 -132 -132 -132 -36 -36 -36 -36 -36 -36 -36 3,604,750 0 0 0 0 0 0 0 0 AFUDC 0 0 0 0 0 0 Less AFUDC on Internal Cost -403,445 Ω 0 Ω Ω Ω 249,394,086 249,613,247 249,686,300 249,759,354 249,799,661 249,839,968 249,860,122 EOM 249,247,979 249,321,033 249,467,140 249,540,193 249,779,507 249,819,814 249,880,275 249,900,429 Return on CWIP After Tax Return on Equity 17,557,522 11.452 11.795 12.138 12.481 12.824 13,167 13.853 14.072 14.167 14.262 14.451 14.640 13.510 14.356 14.545 Income Tax Component 12,388,804 8,081 8,323 8,565 8,807 9,049 9,291 9,533 9,775 9,930 9,996 10,063 10,130 10,197 10,263 10,330 Interest Expense Component 7.915.054 5.163 5.317 5.472 5.627 5.781 5.936 6.091 6.245 6.344 6.387 6.429 6.472 6.515 6.557 6.600 Total Return on CWIP 37,861,380 24,696 25,436 26,176 26,915 27,655 28,395 29,134 29,874 30,346 30,550 30,754 30,958 31,162 31,366 31,570

Exhibit B-3

0

255

180

115

550

250,058,354

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Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP

Total Project Aug-29 Sep-29 Oct-29 Nov-29 Dec-29 Jan-30 Feb-30 Mar-30 Apr-30 May-30 Jun-30 Jul-30 Aug-30 Sep-30 Oct-30 BEC 4 Ash Phase 3 1,378,067 In Service 12/31/2023 BOM CapEx 1,380,554 -2,487 Less Internal Cost AFUDC 0 Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 4 3.228.882 In-Service In Service 12/31/2029 12/31/2029 3,168,421 3,188,575 3.128.114 3.148.267 3.208.728 ROM CapEx 3,234,710 20,190 20,190 20,190 20,190 Less Internal Cost -5,828 -36 -36 -36 -36 -36 AFUDC 0 0 0 Less AFUDC on Internal Cost EOM 3,148,267 3,168,421 3,188,575 3,208,728 3,228,882 Return on CWIP After Tax Return on Equity 14,735 14,829 14,924 15,019 111 Income Tax Component 10,397 10,464 10,531 10,597 79 Interest Expense Component 6,643 6,685 6,728 6,770 50 Total Return on CWIP 31,774 31,978 32,182 32,386 240 BEC 4 Ash Phase 5 3,941,852 In Service 12/31/2035 BOM 0 5,716 11,431 17,147 22,863 28,578 34,294 40,010 45,725 51,441 3,948,967 5,726 CapEx 5,726 5.726 5,726 5,726 5,726 5,726 5,726 5,726 5,726 Less Internal Cost -7,115 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10 AFUDC 0 0 0 0 0 0 0 0 0 0 Less AFUDC on Internal Cost 0 0 0 0 51,441 0 40.010 FOM 0 0 0 0 5,716 11,431 17,147 22.863 28.578 34.294 45,725 57.157 Return on CWIP After Tax Return on Equity 13 40 67 94 121 148 174 201 228 255 Income Tax Component 9 28 47 66 85 104 123 142 161 180 42 67 Interest Expense Component 6 18 30 54 79 91 103 115 Total Return on CWIP 29 87 145 203 260 318 376 434 492 550 253,943,048 Total 249,900,429 BOM 249,920,582 249,940,736 249,960,890 249,981,043 250,001,197 250,006,912 250,012,628 250,018,344 250,024,060 250,029,775 250,035,491 250,041,207 250,046,922 250,052,638 CapEx 255,849,805 20,190 20,190 20,190 20,190 20,190 5,726 5,726 5,726 5,726 5,726 5,726 5,726 5,726 5,726 5,726 -5,108,060 -36 -36 -36 -36 -36 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10 Less Internal Cost 3,604,750 0 0 0 0 0 0 0 0 0 **AFUDC** 0 0

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13

9

6

29

250,012,628

40

28

18

87

250,018,344

67

47

30

145

250,024,060

94

66

42

203

250,029,775

121

85

54

260

250,035,491

148

104

67

318

250,041,207

174

123

79

376

250,046,922

201

142

91

434

250,052,638

228

161

103

492

250,006,912

Less AFUDC on Internal Cost

EOM

Return on CWIP After Tax Return on Equity

Total Return on CWIP

Income Tax Component

Interest Expense Component

-403,445

17,557,522

12,388,804

7.915.054

37,861,380

249,920,582

14.735

10,397

6.643

31,774

0

14.829

10,464

6.685

31,978

249,940,736

Ω

249,981,043

15.019

10,597

32,386

6.770

250,001,197

111

79

50

240

249,960,890

14.924

10,531

6.728

32,182

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Minnesota Power
BEC 4 Rider
Plant Additions, AFUDC and Return on CWIP

Total Project Nov-30 Dec-30 Jan-31 Feb-31 Mar-31 Apr-31 May-31 <u>Jun-31</u> <u>Jul-31</u> Aug-31 Sep-31 Oct-31 Nov-31 Dec-31 Jan-32 BEC 4 Ash Phase 3 1,378,067 In Service 12/31/2023 BOM CapEx 1,380,554 -2,487 Less Internal Cost AFUDC 0 Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 4 3.228.882 In Service 12/31/2029 ROM CapEx 3,234,710 Less Internal Cost -5.828 AFUDC 0 Less AFUDC on Internal Cost Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 5 3,941,852 In Service 12/31/2035 BOM 57,157 62,873 68,588 191,837 315,085 438,334 561,582 684,831 808,080 931,328 1,054,577 1,177,825 1,301,074 1,424,322 1,547,571 3,948,967 123,471 123,471 123,471 123,471 123,471 123,471 123,471 123,471 CapEx 5,726 5,726 123,471 123,471 123,471 123,471 Less Internal Cost -7,115 -10 -10 -222 -222 -222 -222 -222 -222 -222 -222 -222 -222 -222 -222 0 AFUDC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Less AFUDC on Internal Cost 0 684.831 FOM 62.873 68,588 191,837 315,085 438.334 561,582 808.080 931,328 1,054,577 1,177,825 1,301,074 1,424,322 1,547,571 1.547.571 Return on CWIP After Tax Return on Equity 611 282 309 1.190 1.769 2.347 2 926 3 505 4 084 4 662 5.241 5.820 6.398 6.977 7.266 Income Tax Component 199 218 431 840 1,248 1,656 2,065 2,473 2,881 3,290 3,698 4,106 4,515 4,923 5,127 127 276 1,058 2,884 Interest Expense Component 139 536 797 1,319 1,580 1,841 2,102 2,363 2,624 3,145 3,276 Total Return on CWIP 608 666 1,318 2,566 3,814 5,062 6,310 7,558 8,806 10,054 11,302 12,549 13,797 15,045 15,669 253,943,048 Total 250,058,354 250,439,531 BOM 250,064,069 250,069,785 250,193,034 250,316,282 250,562,779 250,686,028 250,809,276 250,932,525 251,055,774 251,179,022 251,302,271 251,425,519 251,548,768 CapEx 255,849,805 5,726 5,726 123,471 123,471 123,471 123,471 123,471 123,471 123,471 123,471 123,471 123,471 123,471 123,471 Less Internal Cost -5 108 060 -10 -10 -222 -222 -222 -222 -222 -222 -222 -222 -222 -222 -222 -222 ٥ AFUDC 3,604,750 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Less AFLIDC on Internal Cost -403 445 0 0 Ω Ω 0 Ω 250,439,531 250,562,779 250,686,028 250,809,276 250,932,525 251,055,774 EOM 250,064,069 250,069,785 250,193,034 250,316,282 251,179,022 251,302,271 251,425,519 251,548,768 251,548,768

Return on CWIP After Tax Return on Equity

Total Return on CWIP

Income Tax Component

Interest Expense Component

17,557,522

12,388,804

7.915.054

37,861,380

282

199

127

608

309

218

139

666

611

431

276

1,318

1.190

840

536

2,566

1.769

1,248

3,814

797

2.347

1,656

1.058

5,062

2.926

2,065

1.319

6,310

3.505

2,473

1.580

7,558

4.084

2,881

1.841

8,806

4.662

3,290

2.102

10,054

5.241

3,698

2.363

11,302

5.820

4,106

2.624

12,549

6.398

4,515

2.884

13,797

6.977

4,923

3.145

15,045

7.266

5,127

3.276

15,669

Minnesota Power
BEC 4 Rider
Plant Additions, AFUDC and Return on CWIP

Total **Project** Feb-32 Mar-32 Apr-32 May-32 Jun-32 Jul-32 Aug-32 Sep-32 Oct-32 Nov-32 Dec-32 Jan-33 Feb-33 Mar-33 Apr-33 BEC 4 Ash Phase 3 1,378,067 In Service 12/31/2023 BOM CapEx 1,380,554 Less Internal Cost -2,487 AFUDC 0 Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 4 3.228.882 In Service 12/31/2029 ROM CapEx 3,234,710 Less Internal Cost -5.828 AFUDC Less AFUDC on Internal Cost Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 5 3,941,852 In Service 12/31/2035 BOM 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 CapEx 3,948,967 0 0 0 0 Less Internal Cost -7,115 0 0 0 0 0 0 0 0 0 0 0 0 AFUDC 0 0 0 0 0 0 0 0 0 0 Less AFUDC on Internal Cost 1.547.571 FOM 1,547,571 1.547.571 1,547,571 1.547.571 1,547,571 1.547.571 1,547,571 1.547.571 1,547,571 1.547.571 1.547.571 1,547,571 1.547.571 1.547.571 Return on CWIP 7,266 After Tax Return on Equity 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 Income Tax Component 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 3,276 Interest Expense Component 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 Total Return on CWIP 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 253,943,048 Total 251,548,768 251,548,768 251,548,768 251,548,768 BOM 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 CapEx 255,849,805 0 Less Internal Cost -5,108,060 Ω ٥ 0 ٥ 0 ٥ ٥ 0 Ω ٥ 0 0 0 Ω 0 3,604,750 0 0 0 0 0 0 0 AFUDC 0 0 Less AFUDC on Internal Cost -403,445 0 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 EOM 251,548,768 251,548,768 251,548,768 251,548,768 251,548,768 Return on CWIP After Tax Return on Equity 17,557,522 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 7.266 Income Tax Component 12,388,804 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 Interest Expense Component 7.915.054 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.276 Total Return on CWIP 37,861,380 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669

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Minnesota Power
BEC 4 Rider
Plant Additions, AFUDC and Return on CWIP

Total Project May-33 Jun-33 Jul-33 Aug-33 Sep-33 Oct-33 Nov-33 Dec-33 Jan-34 Feb-34 Mar-34 Apr-34 May-34 Jun-34 <u>Jul-34</u> BEC 4 Ash Phase 3 1,378,067 In Service 12/31/2023 BOM CapEx 1,380,554 Less Internal Cost -2,487 AFUDC 0 Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 4 3.228.882 In Service 12/31/2029 ROM CapEx 3,234,710 Less Internal Cost -5,828 AFUDC 0 Less AFUDC on Internal Cost Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 5 3,941,852 In Service 12/31/2035 BOM 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,547,571 1,553,221 1,558,871 1,564,521 1,570,171 1,575,821 1,581,471 CapEx 3,948,967 5,660 0 5.660 5,660 5.660 5.660 5.660 5.660 Less Internal Cost -7,115 0 0 0 0 0 0 0 -10 -10 -10 -10 -10 -10 -10 AFUDC 0 0 0 0 0 0 0 0 0 Less AFUDC on Internal Cost 0 1,547,571 1,570,171 1.581.471 FOM 1.547.571 1.547.571 1,547,571 1.547.571 1,547,571 1,547,571 1.547.571 1,553,221 1,558,871 1.564.521 1,575,821 1.587.121 Return on CWIP 7.266 7 439 After Tax Return on Equity 7.266 7.266 7.266 7.266 7,266 7.266 7.266 7.280 7.306 7.333 7.359 7.386 7.412 Income Tax Component 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,137 5,155 5,174 5,193 5,211 5,230 5,249 Interest Expense Component 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,276 3,282 3,294 3,306 3,318 3,330 3,341 3,353 Total Return on CWIP 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,669 15,698 15,755 15,812 15,869 15,927 15,984 16,041 253,943,048 Total BOM 251,548,768 251,582,668 251,548,768 251,548,768 251,548,768 251,548,768 251.548.768 251,548,768 251,548,768 251,548,768 251,554,418 251,560,068 251,565,718 251,571,368 251,577,018 CapEx 255,849,805 5,660 5,660 5,660 5,660 5,660 5,660 -5,108,060 Ω 0 ٥ Ω 0 -10 -10 -10 -10 -10 -10 -10 Less Internal Cost Ω 0 AFUDC 3,604,750 0 0 0 0 0 0 0 0 0 0 0 Less AFLIDC on Internal Cost -403,445 251,548,768 251,548,768 251,548,768 251,548,768 251,560,068 251,565,718 251,571,368 251,577,018 251,582,668 251,588,318 EOM 251,548,768 251,548,768 251,548,768 251,548,768 251,554,418 Return on CWIP After Tax Return on Equity 17,557,522 7.266 7.266 7.266 7.266 7.280 7.333 7.359 7.386 7.412 7.439 7.266 7.266 7.266 7.266 7.306 Income Tax Component 12,388,804 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,127 5,137 5,155 5,174 5,193 5,211 5,230 5,249 Interest Expense Component 7.915.054 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.276 3.282 3.294 3.306 3.318 3.330 3.341 3.353

Total Return on CWIP

37,861,380

15,669

15,669

15,669

15,669

15,669

15,669

15,669

15,669

15,698

15,755

15,812

15,869

15,927

15,984

16,041

Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP

Total Project Aug-34 Sep-34 Oct-34 Nov-34 Dec-34 Jan-35 Feb-35 Mar-35 Apr-35 May-35 Jun-35 Jul-35 Aug-35 Sep-35 Oct-35 BEC 4 Ash Phase 3 1,378,067 In Service 12/31/2023 BOM CapEx 1,380,554 Less Internal Cost -2,487 AFUDC 0 Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 4 3.228.882 In Service 12/31/2029 ROM CapEx 3,234,710 Less Internal Cost -5.828 AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP BEC 4 Ash Phase 5 3,941,852 In Service 12/31/2035 BOM 1,587,121 1,592,771 1,598,421 1,604,071 1,609,721 1,615,371 1,809,244 2,003,118 2,196,991 2,390,864 2,584,738 2,778,611 2,972,485 3,166,358 3,360,231 CapEx 3,948,967 194,223 194,223 194,223 5,660 5.660 5,660 5.660 5,660 194,223 194,223 194,223 194,223 194,223 194,223 194,223 Less Internal Cost -7,115 -10 -10 -10 -10 -10 -350 -350 -350 -350 -350 -350 -350 -350 -350 -350 AFUDC 0 0 0 0 0 0 0 0 0 0 0 0 0 Less AFUDC on Internal Cost 0 0 1,592,771 2,390,864 FOM 1,598,421 1.604.071 1,609,721 1,615,371 1.809.244 2,003,118 2.196.991 2.584.738 2.778.611 2.972.485 3,166,358 3.360.231 3.554.105 Return on CWIP 7.545 16 232 After Tax Return on Equity 7.465 7.492 7.518 7.571 8 040 8 950 9.860 10.771 11.681 12 591 13 502 14 412 15.322 Income Tax Component 5,268 5,286 5,305 5,324 5,342 5,673 6,315 6,958 7,600 8,242 8,885 9,527 10,169 10,811 11,454 3,401 4,445 Interest Expense Component 3,365 3,377 3,389 3,413 3,624 4,035 4,855 5,266 5,676 6,087 6,497 6,907 7,318 Total Return on CWIP 16,098 16,155 16,213 16,270 16,327 17,337 19,300 21,263 23,226 25,189 27,152 29,115 31,078 33,041 35,004 Total 253,943,048 BOM 251,588,318 251,593,968 251,599,618 251,605,268 251,610,918 251,616,568 251,810,441 252,004,314 252,198,188 252,392,061 252,585,935 252,779,808 252,973,681 253,167,555 253,361,428 CapEx 255,849,805 5,660 5,660 5,660 5,660 5,660 194,223 194,223 194,223 194,223 194,223 194,223 194,223 194,223 194,223 194,223 -5 108 060 -10 -10 -10 -10 -10 -350 -350 -350 -350 -350 -350 -350 -350 -350 -350 Less Internal Cost 3,604,750 0 0 0 0 0 0 0 0 AFUDC 0 0 0 0 0 Less AFUDC on Internal Cost -403,445 Ω 0 Ω 251,593,968 251,599,618 251,610,918 252,392,061 252,585,935 EOM 251,605,268 251,616,568 251,810,441 252,004,314 252,198,188 252,779,808 252,973,681 253,167,555 253,361,428 253,555,302 Return on CWIP After Tax Return on Equity 17,557,522 7.465 7.492 7.518 7.571 8.040 10.771 11.681 12.591 13.502 14.412 15.322 16.232 7.545 8.950 9.860 Income Tax Component 12,388,804 5,268 5,286 5,305 5,324 5,342 5,673 6,315 6,958 7,600 8,242 8,885 9,527 10,169 10,811 11,454 Interest Expense Component 7.915.054 3.365 3.377 3.389 3,401 3.413 3.624 4.035 4.445 4.855 5.266 5.676 6.087 6.497 6.907 7.318

Total Return on CWIP

37,861,380

16,098

16,155

16,213

16,270

16,327

17,337

19,300

21,263

23,226

25,189

27,152

29,115

31,078

33,041

35,004

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Minnesota Power BEC 4 Rider Plant Additions, AFUDC and Return on CWIP

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BEC 4 Ash Phase 3 In Service 12/31/2023 BOM	Total <u>Project</u> 1,378,067	<u>Nov-35</u>	<u>Dec-35</u>
CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost	1,380,554 -2,487 0 0		
EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP			
BEC 4 Ash Phase 4 In Service 12/31/2029 BOM	3,228,882		
CapEx	3,234,710		
Less Internal Cost AFUDC	-5,828 0		
Less AFUDC on Internal Cost	0		
EOM			
Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP			
BFC 4 Ash Phase 5	3 941 852		In-Service
BEC 4 Ash Phase 5 In Service 12/31/2035	3,941,852		In-Service 12/31/2035
BEC 4 Ash Phase 5 In Service 12/31/2035 BOM	3,941,852	3,554,105	
In Service 12/31/2035 BOM CapEx	3,948,967	194,223	12/31/2035 3,747,978 194,223
In Service 12/31/2035 BOM CapEx Less Internal Cost	3,948,967 -7,115	194,223 -350	12/31/2035 3,747,978 194,223 -350
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC	3,948,967 -7,115 0	194,223 -350 0	12/31/2035 3,747,978 194,223 -350 0
In Service 12/31/2035 BOM CapEx Less Internal Cost	3,948,967 -7,115	194,223 -350	12/31/2035 3,747,978 194,223 -350
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP	3,948,967 -7,115 0	194,223 -350 0 0	12/31/2035 3,747,978 194,223 -350 0
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity	3,948,967 -7,115 0	194,223 -350 0 0 3,747,978	12/31/2035 3,747,978 194,223 -350 0 0 3,941,852
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component	3,948,967 -7,115 0	194,223 -350 0 0 3,747,978 17,143 12,096	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component	3,948,967 -7,115 0	194,223 -350 0 0 3,747,978 17,143 12,096 7,728	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209 3,967
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component	3,948,967 -7,115 0	194,223 -350 0 0 3,747,978 17,143 12,096	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component	3,948,967 -7,115 0	194,223 -350 0 0 3,747,978 17,143 12,096 7,728	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209 3,967
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Total Return on CWIP	3,948,967 -7,115 0 0	194,223 -350 0 0 3,747,978 17,143 12,096 7,728 36,967	12/31/2035 3,747,978 194,223 -350 0 0 3,941,852 8,799 6,209 3,967 18,974
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP Total BOM CapEx	3,948,967 -7,115 0 0 253,943,048	194,223 -350 0 0 3,747,978 17,143 12,096 7,728 36,967	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209 3,967 18,974
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC On Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP Total BOM CapEx Less Internal Cost	3,948,967 -7,115 0 0 253,943,048 255,849,805 -5,108,060	194,223 -350 0 0 3,747,978 17,143 12,096 7,728 36,967 253,555,302 194,223 -350	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209 3,967 18,974 253,749,175
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC Dess AFUDC After Tax Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP Total BOM CapEx Less Internal Cost AFUDC	3,948,967 -7,115 0 0 0 253,943,048 255,849,805 -5,108,060 3,604,750	194,223 -350 0 0 3,747,978 17,143 12,096 7,728 36,967 253,555,302 194,223 -350 0	12/31/2035 3,747,978 194,223 -350 0 0 3,941,852 8,799 6,209 3,967 18,974 253,749,175 194,223 -350 0
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC On Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP Total BOM CapEx Less Internal Cost	3,948,967 -7,115 0 0 253,943,048 255,849,805 -5,108,060	194,223 -350 0 0 3,747,978 17,143 12,096 7,728 36,967 253,555,302 194,223 -350	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209 3,967 18,974 253,749,175
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP Total BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP	3,948,967 -7,115 0 0 253,943,048 255,849,805 -5,108,060 3,604,750 -403,445	194,223 -350 0 0 3,747,978 17,143 12,096 7,728 36,967 253,555,302 194,223 -350 0 0	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209 3,967 18,974 253,749,175 194,223 -350 0 0
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity AFUDC After Tax Return on Equity	3,948,967 -7,115 0 0 0 253,943,048 255,849,805 -5,108,060 3,604,750 -403,445	194,223 -350 0 0 3,747,978 17,143 12,096 7,728 36,967 253,555,302 194,223 -350 0 0 253,749,175	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209 3,967 18,974 253,749,175 194,223 -350 0 0 253,943,048
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total Return on CWIP Total BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Return on Equity Income Tax Component	3,948,967 -7,115 0 0 0 253,943,048 255,849,805 -5,108,060 3,604,750 -403,445 17,557,522 12,388,804	194,223 -350 0 0 3,747,978 17,143 12,096 7,728 36,967 253,555,302 194,223 -350 0 0 253,749,175 17,143 12,096	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209 3,967 18,974 253,749,175 194,223 -350 0 0 253,943,048 8,799 6,209
In Service 12/31/2035 BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity Income Tax Component Interest Expense Component Total BOM CapEx Less Internal Cost AFUDC Less AFUDC on Internal Cost EOM Return on CWIP After Tax Return on Equity AFUDC After Tax Return on Equity	3,948,967 -7,115 0 0 0 253,943,048 255,849,805 -5,108,060 3,604,750 -403,445	194,223 -350 0 0 3,747,978 17,143 12,096 7,728 36,967 253,555,302 194,223 -350 0 0 253,749,175	12/31/2035 3,747,978 194,223 -350 0 3,941,852 8,799 6,209 3,967 18,974 253,749,175 194,223 -350 0 0 253,943,048

Minnesota Power BEC4 Rider Plant Additions, AFUDC and Return on CWIP for Basin's Share

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BEC 4 Environmental Retrofit In Service 12/31/2015 BOM	Total <u>Project</u> 239,589,963	to date Jan-13	Feb-13 22,080,404	Mar-13 24,650,462	<u>Apr-13</u> 27,389,835	May-13 31,514,963	<u>Jun-13</u> 34,759,576	<u>Jul-13</u> 36,011,448	Aug-13 38,344,703	Sep-13 42,437,297	Oct-13 46,108,367	Nov-13 50,684,738	Dec-13 55,419,850	<u>Jan-14</u> 61,190,666	Feb-14 63,015,477	<u>Mar-14</u> 69,786,144	<u>Apr-14</u> 77,001,143
CapEx	235,985,298	20.189.572	2,439,150	2,594,454	3,961,992	3.061.934	1.052.045	2.124.604	3.867.255	3,425,444	4.561.805	4.719.711	5.753.924	1,807,357	6,752,543	7,196,027	9,743,271
Less Internal Cost 1/	233,963,296	20, 169,572	2,439,130	2,594,454	3,901,992	0,001,934	1,032,043	2,124,004	0,007,200	0,425,444	4,301,803	4,719,711	0,755,924	0	0,752,543	0	9,743,271
AFUDC	3,604,666	1,890,832	130,908	144,919	163,136	182,679	199.828	208,650	225,340	245,626	14,567	15,400	16,892	17,454	18,124	18,972	19,907
EOM	0,001,000	22,080,404	24,650,462	27,389,835	31,514,963	34,759,576	36,011,448	38,344,703	42,437,297	46,108,367	50,684,738	55,419,850	61,190,666	63,015,477	69,786,144	77,001,143	86,764,321
Basin's Return on CWIP																	
BEC 4 Storm Water In Service 9/30/2016	5,372,401																
BOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	5.372.401	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less Internal Cost 1/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFUDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Basin's Return on CWIP																	
BEC 4 Ash Phase 1 In Service 12/31/2016	5,073,100																
вом		0	0	423	426	428	430	3,708	3,728	4,086	4,108	4,669	8,105	15,099	15,099	15,099	16,327
CapEx	5,073,016	0	422	0	0	0	3,266	0	336	0	560	3,436	6,994	0	0	1,228	312
Less Internal Cost 1/ AFUDC	0 84	0	0	0 2	0	0 2	0	0	0	0 22	0	0	0	0	0	0	0
EOM	84	0	423	426	428	430	11 3,708	20 3,728	21 4,086	4,108	4,669	0 8,105	15,099	0 15,099	15,099	0 16,327	16,639
Basin's Return on CWIP																	
BEC 4 Ash Phase 2 In Service 12/31/2019	854,859																
вом		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost 1/	854,859 0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0
AFUDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Basin's Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

^{1/} Internal costs and AFUC on internal costs are not excluded for Basin calculations.

Minnesota Power BEC4 Rider Plant Additions, AFUDC and Return on CWIP for Basin's Share

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BEC 4 Environmental Retrofit In Service 12/31/2015	Total <u>Project</u> 239,589,963	<u>May-14</u>	<u>Jun-14</u>	<u>Jul-14</u>	<u>Aug-14</u>	<u>Sep-14</u>	Oct-14	<u>Nov-14</u>	<u>Dec-14</u>	<u>Jan-15</u>	<u>Feb-15</u>	<u>Mar-15</u>	<u>Apr-15</u>	<u>May-15</u>	<u>Jun-15</u>	<u>Jul-15</u>
BOM		86,764,321	94,630,686	102,255,547	107,979,920	113,935,881	122,789,882	134,186,894	142,449,138	150,683,780	158,138,334	164,051,625	169,822,486	178,446,714	184,539,021	190,427,455
CapEx	235,985,298	7,845,283	7,601,922	5,701,139	5,931,783	8,854,002	11,397,012	8,262,243	8,234,642	7,454,554	5,913,291	5,770,861	8,624,229	6,092,306	5,888,434	7,762,836
Less Internal Cost 1/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFUDC	3,604,666	21,082	22,939	23,234	24,178	0	0	0	0	0	0	0	0	0	0	0
EOM		94,630,686	102,255,547	107,979,920	113,935,881	122,789,882	134,186,894	142,449,138	150,683,780	158,138,334	164,051,625	169,822,486	178,446,714	184,539,021	190,427,455	198,190,291
Basin's Return on CWIP														356,171	367,926	381,321
BEC 4 Storm Water	5,372,401															
In Service 9/30/2016																
ВОМ		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	5,372,401	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less Internal Cost 1/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFUDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Basin's Return on CWIP														0	0	0
BEC 4 Ash Phase 1 In Service 12/31/2016 BOM	5,073,100	40.000	17,925	31,897	45,868	50.040	70.044	87,783	404 754	400.040	444.077	047.504	200 524	542,583	050.400	1,316,662
CapEx	5,073,016	16,639 1,286	17,925	13,972	13,972	59,840 13,972	73,811 13,972	13,972	101,754 4,486	106,240 37,836	144,077 73,508	217,584 108,940	326,524 216,060	413,820	956,403 360,260	702,220
Less Internal Cost 1/	5,073,016	1,200	13,972	13,972	13,972	13,972	13,972	13,972	4,466	0 37,036	73,506	100,940	216,060	413,620	360,260	702,220
AFUDC	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM	04	17,925	31,897	45,868	59,840	73,811	87,783	101,754	106,240	144,077	217,584	326,524	542,583	956,403	1,316,662	2,018,882
Basin's Return on CWIP														1,471	2,230	3,273
BEC 4 Ash Phase 2 In Service 12/31/2019	854,859	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BOM	054.050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx Less Internal Cost 1/	854,859	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Less Internal Cost 1/ AFUDC	0	0		0						0	0	0	0			0
EOM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EUM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Basin's Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Minnesota Power BEC4 Rider Plant Additions, AFUDC and Return on CWIP for Basin's Share

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BEC 4 Environmental Retrofit In Service 12/31/2015 BOM	Total Project 239,589,963	Aug-15 198,190,291	Sep-15 206,540,188	Oct-15 213,309,063	Nov-15 218,022,407	Dec-15 In-Service 12/31/2015 221,371,896	<u>Jan-16</u>	<u>Feb-16</u>	<u>Mar-16</u>	<u>Apr-16</u>	<u>May-16</u>	<u>Jun-16</u>	<u>Jul-16</u>	<u>Aug-16</u>	<u>Sep-16</u>	<u>Oct-16</u>
CapEx	235,985,298	8,349,897	6,768,875	4,713,344	3,349,489	18,218,067										
Less Internal Cost 1/	0	0	0	0	0	0										
AFUDC	3,604,666	0	0	0	0	0										
EOM		206,540,188	213,309,063	218,022,407	221,371,896	239,589,963										
Basin's Return on CWIP		397,132	411,967	423,233	431,145	217,216										
BEC 4 Storm Water	5,372,401														In-Service	
In Service 9/30/2016	-,,														9/30/2016	
BOM		0	0	0	0	0	0	0	0	0	0	767.486	1,534,972	2.302.458	3,069,943	
CapEx	5,372,401	0	0	0	0	0	0	0	0	0	767,486	767,486	767,486	767,486	2,302,458	
Less Internal Cost 1/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AFUDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EOM		0	0	0	0	0	0	0	0	0	767,486	1,534,972	2,302,458	3,069,943	5,372,401	
Basin's Return on CWIP		0	0	0	0	0	0	0	0	0	753	2,259	3,765	5,272	3,012	
BEC 4 Ash Phase 1 In Service 12/31/2016	5,073,100															
BOM		2,018,882	2,117,109	2,211,217	2,284,724	2,349,992	2,388,072	2,611,824	2,835,577	3,059,329	3,283,081	3,506,834	3,730,586	3,954,338	4,178,091	4,401,843
CapEx	5,073,016	98,228	94,108	73,508	65,268	38,080	223,752	223,752	223,752	223,752	223,752	223,752	223,752	223,752	223,752	223,752
Less Internal Cost 1/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFUDC	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM		2,117,109	2,211,217	2,284,724	2,349,992	2,388,072	2,611,824	2,835,577	3,059,329	3,283,081	3,506,834	3,730,586	3,954,338	4,178,091	4,401,843	4,625,595
Basin's Return on CWIP		4,058	4,247	4,412	4,548	4,649	4,906	5,345	5,784	6,223	6,662	7,102	7,541	7,980	8,419	8,858
BEC 4 Ash Phase 2 In Service 12/31/2019 BOM	854,859	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CapEx	854.859	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less Internal Cost 1/	034,039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFUDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EOM	· ·	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Basin's Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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BEC 4 Environmental Retrofit In Service 12/31/2015 BOM	Total <u>Project</u> 239,589,963	<u>Nov-16</u>	<u>Dec-16</u>	<u>Jan-17</u>	<u>Feb-17</u>	<u>Mar-17</u>	<u>Apr-17</u>	<u>May-17</u>	<u>Jun-17</u>	<u>Jul-17</u>	<u>Aug-17</u>	<u>Sep-17</u>	<u>Oct-17</u>	<u>Nov-17</u>	<u>Dec-17</u>	<u>Jan-18</u>
CapEx	235,985,298															
Less Internal Cost 1/	0															
AFUDC	3,604,666															
EOM																
Basin's Return on CWIP																
BEC 4 Storm Water	5,372,401															
In Service 9/30/2016	-,,															
BOM																
CapEx	5,372,401															
Less Internal Cost 1/	0															
AFUDC	0															
EOM																
Basin's Return on CWIP																
BEC 4 Ash Phase 1	5,073,100		In-Service													
In Service 12/31/2016	2,212,122		12/31/2016													
BOM		4,625,595	4,849,348													
CapEx	5,073,016	223,752	223,752													
Less Internal Cost 1/	0	0	0													
AFUDC	84	0	0													
EOM		4,849,348	5,073,100													
Basin's Return on CWIP		9,297	4,758													
BEC 4 Ash Phase 2 In Service 12/31/2019	854,859															
BOM		0	0	0												0
CapEx	854,859	0	0	0												
Less Internal Cost 1/	0	0	0	0												0
AFUDC EOM	0	0	0	0												0 54,952
EOM		U	U	U	U	0	U	0	U	0	Ü	U	U	U	U	54,952
Basin's Return on CWIP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	54

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	Total <u>Project</u>	Feb-18	<u>Mar-18</u>	<u>Apr-18</u>	May-18	<u>Jun-18</u>	<u>Jul-18</u>	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	<u>Jan-19</u>	Feb-19	<u>Mar-19</u>	<u>Apr-19</u>
BEC 4 Environmental Retrofit In Service 12/31/2015 BOM	239,589,963															
CapEx	235,985,298															
Less Internal Cost 1/	0															
AFUDC EOM	3,604,666															
EOW																
Basin's Return on CWIP																
BEC 4 Storm Water	5,372,401															
In Service 9/30/2016	-,,															
BOM																
CapEx	5,372,401															
Less Internal Cost 1/	0															
AFUDC	0															
EOM																
Basin's Return on CWIP																
BEC 4 Ash Phase 1	5,073,100															
In Service 12/31/2016																
BOM	F 070 040															
CapEx Less Internal Cost 1/	5,073,016 0															
AFUDC	84															
EOM	04															
Basin's Return on CWIP																
BEC 4 Ash Phase 2	854,859															
In Service 12/31/2019																
ВОМ		54,952	109,905	164,857	219,809	274,762	329,714	384,666	439,619	494,571	549,523	604,476	659,428	675,714	692,000	708,286
CapEx	854,859	54,952	54,952	54,952	54,952	54,952	54,952	54,952	54,952	54,952	54,952	54,952	16,286	16,286	16,286	16,286
Less Internal Cost 1/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFUDC EOM	0	100.005	0 164,857	0 219,809	0 274,762	0 329,714	0 384,666	0 439,619	0 494,571	0 549,523	0	0 659,428	0 675,714	0 692,000	0 708,286	0 724,572
EOW		109,905	164,857	219,809	214,162	329,714	384,666	439,619	494,571	549,523	604,476	659,428	6/5,/14	692,000	708,286	124,572
Basin's Return on CWIP		162	270	377	485	593	701	809	917	1,024	1,132	1,240	1,310	1,342	1,374	1,406

Minnesota Power BEC4 Rider Plant Additions, AFUDC and Return on CWIP for Basin's Share

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BEC 4 Environmental Retrofit In Service 12/31/2015 BOM	Total <u>Project</u> 239,589,963	<u>May-19</u>	<u>Jun-19</u>	<u>Jul-19</u>	<u>Aug-19</u>	<u>Sep-19</u>	Oct-19	<u>Nov-19</u>	<u>Dec-19</u>	Jan-20
CapEx	235,985,298									
Less Internal Cost 1/	0									
AFUDC	3,604,666									
EOM										
Basin's Return on CWIP										
BEC 4 Storm Water	5,372,401									
In Service 9/30/2016	0,072,401									
BOM										
CapEx	5,372,401									
Less Internal Cost 1/	0									
AFUDC	0									
EOM										
Basin's Return on CWIP BEC 4 Ash Phase 1	5,073,100									
In Service 12/31/2016										
вом										
CapEx	5,073,016									
Less Internal Cost 1/	0									
AFUDC	84									
EOM										
Basin's Return on CWIP										
BEC 4 Ash Phase 2	854,859								In-Service	
In Service 12/31/2019	00 1,000								12/31/2019	
ВОМ		724,572	740,857	757,143	773,429	789,715	806,001	822,287	838,573	
					16,286	16,286	16,286	16,286	16,286	
CapEx	854,859	16,286	16,286	16,286	10,200	10,200		10,200	10,200	
	854,859 0	16,286 0	16,286 0	16,286 0	0	0	0	0	0	
CapEx Less Internal Cost 1/ AFUDC		0	0	0	0	0	0	0	0	
CapEx Less Internal Cost 1/	0	0	0	0	0	0	0	0	0	
CapEx Less Internal Cost 1/ AFUDC	0	0	0	0	0	0	0	0	0	

Minnesota Power BEC4 Rider Exhibit B-4 Page 1 of 1

MPUC Docket E015/GR-09-1151
Rate of Return / Cost of Capital Summary
(thousands of dollars)
Commission Decision (9/29/2010)

Average for 13 months Ended 12/31/10

Long Term Debt
Common Equity
. ,

		Component	Weighted	Pre-tax	After-Tax			
Amount	% of Total	Cost	Cost	Rate	Rate			
696,677	45.71%	5.56%	2.540%	2.540%	1.490%			
827,534	54.29%	10.38%	5.640%	9.610%	5.640%			
1,524,211	100.00%		8.180%	12.150%	7.130%			
Federal & State Income Tax Rate 41.37%								
Pretax "Gross-up" Factor 1.70560								
		After Tax F	Return on Equ	uity	5.6343% 1/			
Income Tax Component 3.9757% 2								
		Interest Ex	pense Comp	onent	2.5400%			
		Pre-tax Re	eturn	·	12.1500%			
	Amount 696,677 827,534	Amount % of Total 696,677 45.71% 827,534 54.29%	Amount % of Total Component Cost 696,677 45.71% 5.56% 827,534 54.29% 10.38% 1,524,211 100.00% Federal & SPretax "Grown and Free Component Costs of Cos	Amount % of Total Component Cost Weighted Cost 696,677 45.71% 5.56% 2.540% 827,534 54.29% 10.38% 5.640% 1,524,211 100.00% 8.180% Federal & State Income Pretax "Gross-up" Factor After Tax Return on Equations Income Tax Component	Amount % of Total 696,677 Cost 45.71% 45.71% 5.56% 2.540% 2.540% 2.540% 2.540% 40.00% 2.540% 9.610% 2.150% 1,524,211 100.00% 8.180% 12.150% Federal & State Income Tax Rate Pretax "Gross-up" Factor After Tax Return on Equity Income Tax Component Interest Expense Component			

^{1/} Rounding forced to equity.

²/ Shown here as a component of the pretax rate of return. Can also be computed as 70.56% gross up on After Tax Return on Equity.

Minnesota Power BEC 4 Rider 2010 Rate Case Allocators

Exhibit B-5 Page 1 of 2

Demand Responsibility of Power Supply Cost Based on Peak & Average Methodology: D-01 & D-02
Test Year 2010 Rebuttal Customer Budget
Revised from original work paper AF-3, page 14
MP Exhibit (SJS) Rebuttal Schedule 2, page 9 of 15
Docket No. E-015/GR-09-1151

		Total Retail	Residential	General Service	Large Light & Power	Large Power	Municipal Pumping	Lighting
1 2 3	Annual Energy (E-01 with losses) Average Demand Percent	8,973,590 1,024,382 100.000	1,164,063 132,884 12.972	645,945 73,738 7.198	1,311,171 149,677 14.611	5,768,410 658,494 64.282	61,116 6,977 0.681	22,885 2,612 0.255
4 5	Annual CP Demand (loss adjusted) Percent	1,267,035 100.000	214,342 16.917	116,138 9.166	224,399 17.711	697,256 55.031	9,334 0.737	5,567 0.439
6	Annual Load Factor (Line 2 / Line 4)	0.80849						
7	1.0 - Load Factor	0.19151						
8	Average Factor (Line 3 x Line 6 total)	80.849	10.488	5.820	11.813	51.971	0.551	0.206
9	Peak Factor (Line 5 x Line 7 total)	19.151	3.240	1.755	3.392	10.539	0.141	0.084
10	Composite Factor - D-01 (Line 8 + Line 9)	100.000	13.728	7.575	15.205	62.510	0.692	0.290
11	Power Supply Production - D-01 Adjusted for Jurisditional Split (Line 10 x .82017)	82.017	11.259	6.213	12.471	51.269	0.568	0.237
12	Power Supply Transmission - D-02 Adjusted for Jurisditional Split (Line 10 x .77570)	77.570	10.649	5.876	11.795	48.489	0.537	0.224

Notes:

Residential, General Service, Large Light and Power and Municipal Pumping CP demands per customer from load research multiplied by budgeted number of customers and adjusted for losses. Large Power CP demand based on 2008 CP adjusted for losses and ratio of 2008 to Test Year average demand. Large Light and Power and Large Power loads normalized to reflect three cusomters that moved from Large Power to Large Light and Power. Lighting CP is average load based on Test Year budgeted total energy and 4,200 burning hours and adjusted for losses.

Exhibit B-5 Page 2 of 2

Minnesota Power BEC 4 Environmental Rider: 2015 Factor Filing Allocation Factors

	D-01	
	Rate Case	Normalized
MN Jurisdiction	0.82017	1.0000
Residential	0.11259	0.1373
General Service	0.06213	0.0758
Large Light & Power	0.12471	0.1521
Large Power	0.51269	0.6251
Municipal Pumping	0.00568	0.0069
Lighting	0.00237	0.0029

The D-01 allocators from MP's 2009 MPUC rate case Docket No. E-015/GR-09-1151. Because the revenue tracker amounts are 100% MN Jurisdictional, the factor are normalized to obtain class allocations.

Boswell Ash Pond Projects

Minnesota Power BEC4 Rider Tax Depreciation Table Exhibit B-6 Page 1 of 1

BEC4 Environmental Retrofit Project

			Pollution					Pollution	
	20 yr PUP		Control				20 yr PUP	Control	
	40%		60%		Weighted		40%	60%	Weighted
	Weighting	1/	Weighting	2/	Average		Weighting 3	/ Weighting 4/	Average
Year 1	0.938%		1.1905%		1.0895%	Year 1	3.750%	1.1905%	2.2143%
Year 2	7.430%		14.2857%		11.5434%	Year 2	7.219%	14.2857%	11.4590%
Year 3	6.872%		14.2857%		11.3202%	Year 3	6.677%	14.2857%	11.2422%
Year 4	6.357%		14.2857%		11.1142%	Year 4	6.177%	14.2857%	11.0422%
Year 5	5.880%		14.2857%		10.9234%	Year 5	5.713%	14.2857%	10.8566%
Year 6	5.439%		14.2857%		10.7470%	Year 6	5.285%	14.2857%	10.6854%
Year 7	5.031%		14.2857%		10.5838%	Year 7	4.888%	14.2857%	10.5266%
Year 8	4.654%		13.095%		9.7187%	Year 8	4.522%	13.095%	9.6659%
Year 9	4.458%		0.000%		1.7832%	Year 9	4.462%	0.000%	1.7848%
Year 10	4.458%		0.000%		1.7832%	Year 10	4.461%	0.000%	1.7844%
Year 11	4.458%		0.000%		1.7832%	Year 11	4.462%	0.000%	1.7848%
Year 12	4.458%		0.000%		1.7832%	Year 12	4.461%	0.000%	1.7844%
Year 13	4.458%		0.000%		1.7832%	Year 13	4.462%	0.000%	1.7848%
Year 14	4.458%		0.000%		1.7832%	Year 14	4.461%	0.000%	1.7844%
Year 15	4.458%		0.000%		1.7832%	Year 15	4.462%	0.000%	1.7848%
Year 16	4.458%		0.000%		1.7832%	Year 16	4.461%	0.000%	1.7844%
Year 17	4.458%		0.000%		1.7832%	Year 17	4.462%	0.000%	1.7848%
Year 18	4.459%		0.000%		1.7836%	Year 18	4.461%	0.000%	1.7844%
Year 19	4.458%		0.000%		1.7832%	Year 19	4.462%	0.000%	1.7848%
Year 20	4.459%		0.000%		1.7836%	Year 20	4.461%	0.000%	1.7844%
Year 21	3.901%		0.000%	_	1.5604%	Year 21	2.231%	0.000%	0.8924%
	100.000%		100.000%		100.000%		100.000%	100.000%	100.000%

Weighting allocation per Internal Revenue Code Regulation 1.169-4.

Boswell Storm Water Project

		-	Pollution		
	20 yr PUP		Control		
	40%		60%		Weighted
	Weighting	5/	Weighting	6/	Average
Year 1	3.750%	_	4.7619%	_'	4.3571%
Year 2	7.219%		14.2857%		11.4590%
Year 3	6.677%		14.2857%		11.2422%
Year 4	6.177%		14.2857%		11.0422%
Year 5	5.713%		14.2857%		10.8566%
Year 6	5.285%		14.2857%		10.6854%
Year 7	4.888%		14.2857%		10.5266%
Year 8	4.522%		9.524%		7.5231%
Year 9	4.462%		0.000%		1.7848%
Year 10	4.461%		0.000%		1.7844%
Year 11	4.462%		0.000%		1.7848%
Year 12	4.461%		0.000%		1.7844%
Year 13	4.462%		0.000%		1.7848%
Year 14	4.461%		0.000%		1.7844%
Year 15	4.462%		0.000%		1.7848%
Year 16	4.461%		0.000%		1.7844%
Year 17	4.462%		0.000%		1.7848%
Year 18	4.461%		0.000%		1.7844%
Year 19	4.462%		0.000%		1.7848%
Year 20	4.461%		0.000%		1.7844%
Year 21	2.231%	_	0.000%	_,	0.8924%
	100.000%		100.000%		100.000%

Weighting allocation per Internal Revenue Code Regulation 1.169-4.

^{1/ 40%} weighting is 20 year PUP tax table, mid 4th quarter

^{2/ 60%} weighting of pollution control portion is 84 month straight line. Plant in-service in December, so one month depreciation taken in first year and eleven months taken in final year.

Weighting allocation per Internal Revenue Code Regulation 1.169-4. 3/ 40% weighting is 20 year PUP tax table, half-year

^{4/ 60%} weighting of pollution control portion is 84 month straight line. Plant in-service in December, so one month depreciation taken in first year and eleven months taken in final year.

^{5/ 40%} weighting is 20 year PUP tax table, half-year

^{6/ 60%} weighting of pollution control portion is 84 month straight line. Plant in-service in September, so four month depreciation taken in first year and eight months taken in final year.

EXHIBIT C



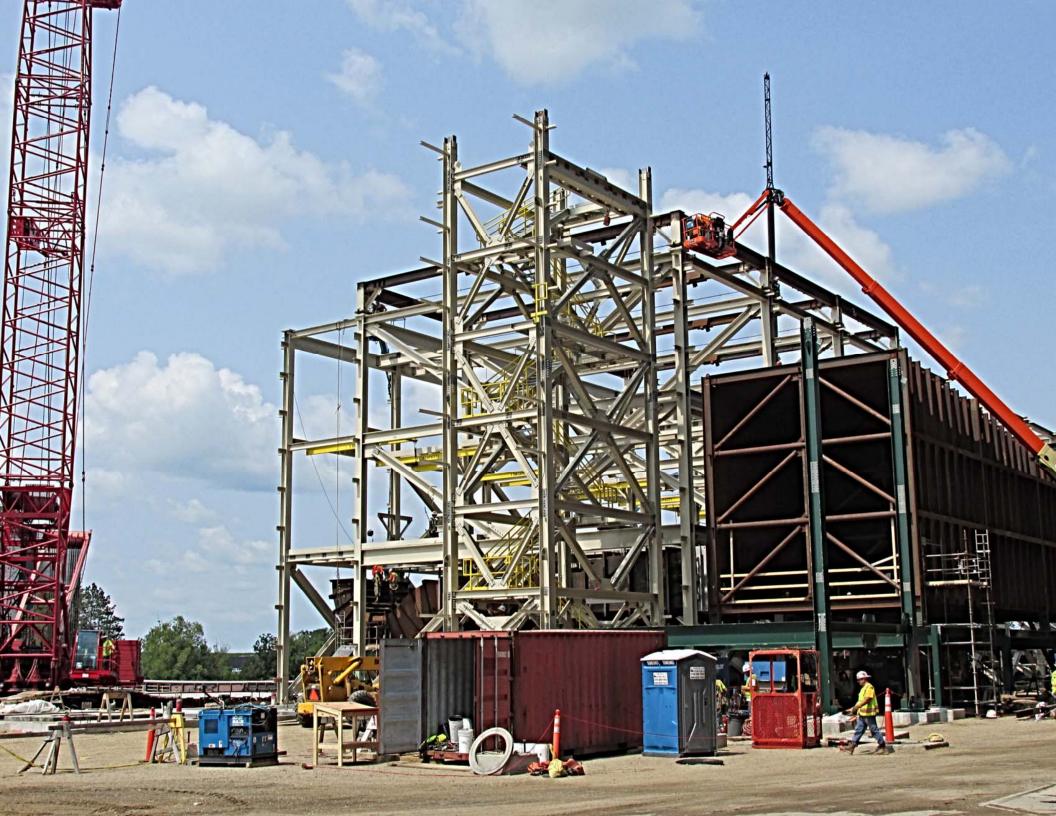
















STATE OF MINNESOTA)	AFFIDAVIT OF SERVICE VIA
) ss	ELECTRONIC FILING
COUNTY OF ST. LOUIS)	

Susan Romans of the City of Duluth, County of St. Louis, State of Minnesota, says that on the 26th day of November, 2014, she served Minnesota Power's Petition to 2015 Boswell Unit 4 Emission Reduction Factor to the Minnesota Public Utilities Commission via electronic filing. The persons on the attached General Service List were served as requested.

Dwan Romans

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.m n.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	GEN_SL_Minnesota Power_Minnesota Power General Service List
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	Yes	GEN_SL_Minnesota Power_Minnesota Power General Service List
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	Yes	GEN_SL_Minnesota Power_Minnesota Power General Service List
Elizabeth	Goodpaster	bgoodpaster@mncenter.or g	MN Center for Environmental Advocacy	Suite 206 26 East Exchange St St. Paul, MN 551011667	Electronic Service treet	No	GEN_SL_Minnesota Power_Minnesota Power General Service List
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	No	GEN_SL_Minnesota Power_Minnesota Power General Service List
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Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	GEN_SL_Minnesota Power_Minnesota Power General Service List
Michael	Krikava	mkrikava@briggs.com	Briggs And Morgan, P.A.	2200 IDS Center 80 S 8th St Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Minnesota Power_Minnesota Power General Service List
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Douglas	Larson	dlarson@dakotaelectric.co m	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	GEN_SL_Minnesota Power_Minnesota Power General Service List
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	GEN_SL_Minnesota Power_Minnesota Power General Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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