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June 29, 2017

VIA ELECTRONIC FILING
Daniel P. Wolf
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 2017 Remaining Life Depreciation Petition
Docket No. E015/D-17-118

Dear Mr. Wolf:

Minnesota Power (the "Company") hereby requests that the life of its Hibbard Renewable Energy Center ("HREC") be extended to 2029 in its 2017 Remaining Life Depreciation Petition in the above-referenced Docket. This Petition was initially filed on April 18, 2017 and the Initial Comment period was extended until November 27, 2017 to allow time for parties to develop the record on depreciation issues in the Company's current rate proceeding (Docket No. E015/GR-16-664).

In Rebuttal Testimony filed today in its rate proceeding, the Company states that it intends to request this life extension, consistent with the Company's most recently approved Integrated Resource Plan. The discussion about the HREC life extension is included in the Rebuttal Testimony of Herbert G. Minke, III at page 7, lines 1-13. A copy of Mr. Minke's testimony is attached to this letter as Attachment 1.

While other depreciation issues are still being discussed in the rate proceeding, the Company agrees with the Minnesota Department of Commerce, Division of Energy Resources ("Department") on the HREC life extension issue. The Direct Testimony of Nancy A. Campbell, filed on May 31, 2017 on behalf of the Department, recommends that HREC be extended to 2029 (see pages 28-34).

The Company has made a red-line version of the Initial Filing of its 2017 Remaining Life Depreciation Petition to show the changes resulting from the HREC life extension request. Further, the Company has updated its Appendix A from the Initial Filing to incorporate the HREC life extension

(with updates highlighted in yellow). These documents are attached to this letter as Attachment 2 and Attachment 3, respectively.

Please contact me at 218-355-3586 with any questions related to this issue.

Yours truly,

Susan Ludwig

SL:sr
Cc: Official Service List

Rebuttal Testimony and Schedule
Herbert G. Minke, III

Before the Minnesota Public Utilities Commission

State of Minnesota

In the Matter of the Application of Minnesota Power
For Authority to Increase Rates for Electric Utility
Service in Minnesota

Docket No. E015/GR-16-664

Exhibit _____

REGULATORY ACCOUNTING

June 29, 2017

Table of Contents

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Herbert G. Minke, III and my business address is 30 West Superior Street, Duluth, Minnesota 55802.

Q. Have you previously provided testimony in this proceeding?

A. Yes. I presented Direct Testimony in this case on behalf of ALLETE, Inc., doing business as Minnesota Power ("Minnesota Power" or "the Company") regarding Regulatory Accounting matters.

Q. What is the purpose of your Rebuttal Testimony?

A. My Rebuttal Testimony responds to certain regulatory accounting and depreciation issues in the Direct Testimony provided by Minnesota Department of Commerce, Division of Energy Resources ("Department") witness Ms. Nancy Campbell, Minnesota Office of the Attorney General – Residential Utilities and Antitrust Division ("OAG") witness Ms. Shoua Lee, and Clean Energy Organizations ("CEO") witness Mr. Uday Varadarajan. Specifically, I address several parties' proposals with respect to the depreciable life of generation Units 1 through 4 at the Boswell Energy Center ("BEC"), and the Department's proposal to adjust the depreciation life for our Hibbard Renewable Energy Center ("Hibbard"). Additionally, my Rebuttal Testimony responds to Ms. Campbell's questions regarding the regulatory accounting and corresponding cash collection for rider projects that are being rolled into base rates during this rate proceeding.

Q. Are you sponsoring any exhibits in connection with your Rebuttal Testimony in this proceeding?

A. Yes. I am sponsoring the following exhibit:

- Exhibit ___ (HGM), Rebuttal Schedule 1 – 2017 Rider Cash Collection.

II. ACCOUNTING FOR RIDER CASH COLLECTIONS

Q. What is the Department's concern regarding proper accounting for the cash collected through riders during this rate proceeding?

A. As discussed in the Company's Direct Testimony, Minnesota Power proposes to roll projects for which costs are currently being recovered in riders into base rates wherever those projects were in service by December 31, 2016. However, Ms. Campbell expresses concern that the Company is still collecting actual cash through the riders to cover the costs of these projects, whereas the amounts included in base rates for rider cash collections are based on estimates. Therefore, it is necessary to ultimately "true up" the actual cash collected from riders in 2017 and as recognized in base rates, in order to make sure customers do not pay for more or less than they should once actual cash collections are known.

Based on annualizing actual Base Rider Cash Collections from January through April of 2017, Ms. Campbell assumes actual Base Rider Cash Collections for 2017 will be approximately $88 million, or roughly $5.558 million lower than the Company's Base Rider Cash Collections assumed for the purposes of establishing the 2017 test year base rates. Therefore, Ms. Campbell suggests that the 2017 test year operating revenues should be reduced by $5.558 million subject to true-up when final rates are implemented in 2018 (at which time actual 2017 cash collections will be known).

Q. Do you agree with the Department's concerns?

A. Yes and no. I agree there needs to be some form of true-up for rider project collections. This is typical for all current cost recovery projects regardless of whether they remain in the rider or move to base rates. However, I do not agree that this rate proceeding is the appropriate forum to adjust these differences. Consistent with normal rider true-ups, the reconciliation should occur in the tracker dockets.

Q. Why is it typical for all current cost recovery projects to need some form of true-up for rider project collections?

A. This is because the revenue requirement calculation used to determine cash collections is based on *projected* costs and energy consumption by customers, as defined by the applicable rider statute or prior Minnesota Public Utilities Commission ("Commission") precedent. *Actual* collections will almost always differ from these revenue requirements, since customer energy usage (the billing unit applied to the billing factor) is almost always different from the projected data. Therefore, a true-up is calculated once actual data is known, based on the difference between the actual revenue requirement and the actual cash collections. This true-up, which may be positive or negative, is then incorporated into the calculation for determining future cash collections. The true-up is a normal part of rider management, and a true-up should occur here for rider projects moving into base rates.

Q. What is the normal process of trueing up rider cash collections as compared to the revenue requirements for these projects?

A. The most common true-up occurs for rider projects that remain in riders, where actual cash collections are reconciled annually. For each rider, the cash is collected and recorded in a Federal Energy Regulatory Commission ("FERC") regulatory asset account, more generically referred to as a tracker balance. Consistent with the ongoing need to true-up rider collections with actual amounts owed, the use of tracker balances has been the standard practice for recording and tracking these differences for many years in Minnesota. The differences between actual cash collections and revenue requirements – that is, the over- or under-collection of amounts collected – are refunded to or collected from customers in a subsequent period (typically annually).

Q. How do you propose to ensure rider collections are reconciled in this rate proceeding, so that customers are not permanently over- or under-charged for rider projects?

A. Essentially the same process should occur here, when the rider projects move to base rates. Collections on all cost recovery riders are currently being recorded in the FERC

regulatory asset accounts referred to as tracker balances. Therefore, traditional cost recovery trackers are already in place and functioning for the purpose of reconciling estimated and actual amounts collected from customers. For differences in rider collections resulting from projects moved to general rates from riders, I propose continuing to use these same trackers to track any differences between the collections related to these projects and the revenue requirements for these projects, and then trueing up the difference(s) through the rider line on bills just as we currently do.

Q. Could you provide a high level example of how your proposal would be implemented?

A. Yes. For discussion purposes, let's assume Minnesota Power collected $100 in revenue requirements (cash collections) for projects associated with riders, bifurcated so that $90 was for projects that will be in general rates in the future and $10 for projects remaining in the riders. And assume that once actual data was available, it was determined that there was only $80 of actual revenue requirements for these rider projects. In that instance, the $20 difference between the cash collections of $100 and the actual revenue requirement of $80 would need to be returned to customers. This is the over-collection regardless of whether the projects are in base rates or in riders. This amount would then be recorded as a regulatory asset, as has been the procedure historically in cost recovery riders, and returned to customers as part of the annual reconciliation of riders.

Q. Why do you disagree with Ms. Campbell's proposal to include this true-up in the rate proceeding?

A. If a true-up were included in the rate proceeding, any over- or under-collection would recur annually, rather than as a one-time adjustment. Using the example above, if the $20 of over-collection was instead accounted for in base rates, that $20 would remain in base rates year after year – until the Company's next rate case filing – rather than being refunded to customers one time. This would result in multiple repeated years of returning $20 to customers, even though that amount represents only one year of over-collection.

By using the Company's proposed method, any over- or under-collection would be accounted for once, as is appropriate. Additionally, any further allocation to rate classes would be managed using methods already prescribed by statute or Commission precedent and previously established in the Company's current cost recovery riders. In this way, the normal process for returning rider funds to customers would continue.

Q. Did Ms. Campbell have other concerns about the base rider cash collections?

A. Yes. Ms. Campbell notes that the Company's rate case income statement adjustments to account for estimated rider cash collections included Dual Fuel, whereas subsequent discovery responses (specifically Minnesota Power's response to Department IR No. 2134, attached to Ms. Campbell's Direct Testimony as DOC Ex. ___ NAC-25) did not include Dual Fuel in updated actual rider collections. Ms. Campbell therefore asked the Company to clarify the extent to which Dual Fuel amounts are included in the actual Base Rider Cash Collections to date.

Q. What did you conclude about Dual Fuel amounts in the base rider cash collections?

A. Minnesota Power's response in DOC IR 2134.01 Attach provided the actual rider cash collection credited to base rates as of April 2017. The numbers in this schedule did include Dual Fuel cash in the residential and general service classes, but did not separately break it out. To verify this, Exhibit ___ (HGM), Rebuttal Schedule 1, page 1 provides information consistent with the Company's response in DOC IR 2134.01 Attach, but provides a different view that shows the break-out of Dual Fuel cash in the collection of cash credited to base rates for January through April 2017. It shows there is no inconsistency regarding the inclusion of Dual Fuel in the Company's cash collections; the schedules merely show a different itemization.

Q. Did the Company review the Department's base rate rider cash adjustment?

A. Yes. The Company reviewed the Department's base rider cash adjustment and found that it overstated the Dual Fuel cash because the amount provided by the Company in DOC IR 2134.01 Attach already included Dual Fuel revenue, as previously mentioned. The cash adjustment was also overstated because it is not appropriate to annualize the four-

month impact of Dual Fuel across twelve months, as the Department has done, since Dual Fuel usage varies significantly by season. In addition, the lower-than-estimated cash collections in the first four months are mainly a result of the billing cycle in January for the base rate rider billing that was effective January 1, 2017. Exhibit ___ (HGM), Rebuttal Schedule 1, page 2 shows the proper annualization of Dual Fuel revenue credited to base rates. The Company's annualized Dual Fuel projection is developed by calculating the ratio of budgeted amounts for January to April compared to the total annual budgeted amount for the year and applying these ratios to the actual amounts for January to April. This method accounts for seasonality and is more accurate than annualizing the actuals over a 12-month period.

Q. Did the Company calculate a base rate rider adjustment incorporating the proper annualization of Dual Fuel revenues?

A. Yes. Exhibit ___ (HGM), Rebuttal Schedule 1, page 1, column [f] shows the annualized amounts of rider cash collections incorporating the proper annualization of Dual Fuel Revenue. As a result, if the Department's base rate rider cash adjustment were to be made, the adjustment should be revised from ($5,557,673.19) to ($7,653,063.77), as shown in column [g]. However, the Company disagrees that a rider cash adjustment is necessary in order to true-up the rider project collections.

Q. Why does the Company disagree that a rider cash adjustment is necessary in order to true-up the rider project collections?

A. If an adjustment were made to reduce base rider cash, the result would be that the revenue deficiency would increase by the same amount. Likewise, an increase to base rider cash would result in a decrease to the revenue deficiency by the same amount. So there would be no net impact in the rate calculation. Further, this adjustment would unnecessarily complicate the base rate rider cash calculations in the E-Schedule bill comparisons, as a completely new estimate would eventually need to be incorporated on a monthly basis for all riders. If rider true-up reconciliation occurs in the tracker dockets, as Minnesota Power proposes, there is no reason to make a base rate rider cash adjustment in the rate proceeding.

III. HIBBARD RENEWABLE ENERGY CENTER

Q. What does the Department propose with respect to the depreciable life of Hibbard?

A. Department witness Ms. Nancy Campbell recommends that the depreciation life of Hibbard be extended to 2029, consistent with the Company's most recently approved Integrated Resource Plan ("IRP").

Q. Do you agree with Ms. Campbell on the life extension of Hibbard?

A. Yes. Minnesota Power agrees the life of the Hibbard station should be extended to 2029 consistent with the IRP, and intends to add a request to extend Hibbard's life to the Company's open 2017 annual depreciation filing in Docket No. E015/D-17-118. Company witness Ms. Marcia Podratz incorporates this proposal into the Company's updated revenue requirement in her Rebuttal Testimony.

IV. BOSWELL ENERGY CENTER DEPRECIATION LIFE

Q. Please summarize the various parties' positions on the Company's proposal to set the depreciable life of BEC at 2050 for accounting purposes.

A. The parties take widely varying positions on this proposal. The Minnesota Chamber of Commerce supports the proposal, and expresses appreciation for the Company's attention to customer cost.[1] Department witness Ms. Campbell supports extending the depreciation life to 2050 for BEC Units 3 ("BEC3") and 4 ("BEC4"), but recommends setting the BEC Units 1 and 2 ("BEC1&2") life to 2022 to be consistent with the Commission's closure order in the Company's last IRP.[2] OAG witness Ms. Shoua Lee argues that intergenerational inequities, FERC accounting, operational questions, and potential stranded costs warrant no change to the BEC depreciable life.[3] CEO witness Mr. Uday Varadarajan recommends that the Commission should reject the proposal,

[1] Blazar Direct at 7.
[2] Campbell Direct at 34-45.
[3] Lee Direct at 6-37.

largely out of concern that this might support BEC3 and BEC4 operating longer than they otherwise would, and suggests ratepayer-backed bond securitization.[4]

Q. What is the Company's position on the BEC depreciation life in Rebuttal?

A. The Company continues to support extending the depreciation life of BEC to 2050 consistent with BEC's *capability* to operate to 2050. However, the Company is not suggesting that BEC will necessarily operate until 2050, and does not propose that a 2050 depreciation life would create any presumptions or plans with respect to the actual operations of any of BEC. I discuss each of the parties' positions below.

Q. Do you agree with Ms. Campbell's proposed handling of BEC depreciation?

A. Yes and no. While Minnesota Power appreciates the Department's agreement that the BEC3 and BEC4 life should be extended to 2050, Minnesota Power believes the entire station should be treated as one unit of property and depreciated over the life of the station, which should be to 2050.

Q. Is there regulatory precedent and FERC accounting support for treating BEC as one unit for depreciation purposes?

A. Yes. Both generally accepted accounting principles ("GAAP") and FERC accounting recognize both group accounting for depreciation and composite accounting for depreciation. These methods are commonly applied in regulated and non-regulated accounting situations. Currently, Minnesota Power depreciates transmission and distribution assets using group accounting with one useful life and one group depreciation expense reserve for accumulated depreciation. For generation assets, all the assets for a generating unit – for example BEC4 – are combined and depreciated over the useful life of the unit in one composite life. Both of these methods have been approved by the Commission and used for many years by Minnesota Power and other utilities across the industry. The application of either the group or composite method for depreciation is not a departure from GAAP or FERC accounting. Minnesota Power is requesting an

[4] Varadarajan at 3-14.

extension of the composite method currently used and approved by the Commission to apply to the entire BEC facility, and not just at the individual generating units at the facility, as is currently the practice.

Additionally, as all BEC generating units and the Boswell Common Facilities reach the end of their remaining lives, most of the decisions pertaining to the station will not be unit specific. For example, although BEC1&2 will close in 2018, a large portion of the decommissioning of BEC1&2 is unlikely to occur until the entire BEC station is closed and decommissioned given both the efficiency of handling decommissioning in that manner and that all BEC units share some common assets. Due to the longer timeframe needed to retire these types of assets and the ultimate decommissioning of the units coinciding with BEC3 and BEC4, it makes sense to establish regulatory accounting along the same timelines for the entire BEC station. Ultimately, decisions on decommissioning and salvage will be made for the entire station, not each unit.

Q. Could the same result also be achieved by setting the depreciation life of each BEC Unit and its combined common facilities independently, but to the same 2050 timeline?

A. Yes. This would be another way to get to the same outcome.

Q. Should BEC1&2 be depreciated over their current useful life until 2022, as Ms. Campbell recommends?

A. No. While 2022 is the life used for planning purposes in evaluating these units in the last IRP, it is no longer the life over which Minnesota Power plans to operate the units at BEC. Since Minnesota Power has already announced the closure of these two units by 2018, 2022 no longer is relevant to either the capability or planned operation of BEC1&2.

Further, a useful life of 2022 is not consistent with FERC accounting or GAAP, nor is it consistent with FERC retirement accounting. If the Commission allowed Minnesota Power to use normal FERC retirement accounting now in 2017 to account for the retirement of BEC1&2, the remaining unrecovered balance would be recovered over the

remaining life of the remaining asset pool. In this case, Minnesota Power believes "the asset pool" would be BEC, and the remaining plant balance would be recovered over the remaining life of BEC, which Minnesota Power proposes is 2050.

The alternative would be for regulatory accounting to follow GAAP and accelerate depreciation of the remaining unrecovered balances over the remaining life of two years in 2017 and 2018. It is Minnesota Power's position this method would be too costly for customers and should not be considered.

Finally, setting a 2022 depreciation schedule for BEC1&2 would significantly increase customers' current rates as compared to establishing a 2050 depreciation period, which is an important reason why Minnesota Power supports a longer depreciation period.

Q. Why is it important to resolve this issue at this time?

A. BEC1&2 will close at the end of 2018, and the closure of a coal unit takes several years of planning and approvals even before a decision can be made to discontinue operations. In the case of BEC1&2, that involved several IRPs, including the Company's most recent 2015 IRP, as well as discussions with the Environmental Protection Agency ("EPA"). Closure in 2018 was based upon a power supply analysis that establishes this course of action to be in the best interest of customers. Announcing it now and establishing accounting accordingly allows for workforce transition planning, as well as the engineering and permit planning time required. Establishing regulatory accounting methodology at the same time closure planning for BEC1&2 is underway would result in certainty on the treatment of the remaining unrecovered plant balances and would smooth the cost of this transition to customers. At the same time (and as previously noted), a large portion of the decommissioning of BEC1&2 will likely not happen until the entire BEC station is closed and decommissioned at some point farther in the future. Establishing the 2050 deprecation life of BEC accounts for each of these considerations.

Q. OAG witness Ms. Lee asserts the Engineering Consultants report supporting the useful life of 2050 for BEC should be disregarded due to its length. Do you agree?

A. No. Ms. Lee's assertion is without merit. The report by Burns and McDonnell is the standard report used to establish the engineering basis by which to determine the useful lives of assets set in a regulatory utility setting. The length of the report has no bearing on the viability and validity of a professional engineer's opinion. Burns and McDonnell is an international firm with extensive utility experience, and has worked with Minnesota Power on several generations of resource planning dockets approved by the Commission. Ms. Lee also has not provided credentials or valid engineering analysis to support her assertion. As such, this opinion should have little bearing on the broader discussion.

Q Ms. Lee asserts that Minnesota Power's request for a possible consideration of a separate recovery period from a useful life for BEC violates FERC accounting and GAAP, and therefore would require a variance from Commission rules. Do you agree?

A. No. The Company's proposal is no different than the typical accounting for differences between regulatory accounting and GAAP. As in other situations, the difference between GAAP and regulatory accounting treatment would result in a regulatory asset or liability as contemplated by FAS 71 or ASC 980. Accounting for the difference between regulatory accounting and GAAP accounting is a fundamental concept in utility GAAP and ratemaking accounting. The FERC Uniform System of Accounts recognizes the need to account for these differences, and has multiple areas where these differences are common place. Some examples are allowance for funds used during construction ("AFUDC") equity, investment tax credit normalization, asset retirement obligations, and FASB 158 for pensions. As this request is clearly within the statutory and rule making authority of the Commission and is consistent with FERC accounting and GAAP, no request for a variance from the Commission rules is needed.

Even if a variance were required, the Company has asked for this treatment and discussed why it is needed and in the public interest in detail in both this docket and in the Company's depreciation filings. As such, the proposal can be addressed on its merit.

Q Ms. Lee has concluded Minnesota Power does not have adequate operations and maintenance ("O&M") expense detail in years 2034 to 2050 to support the Company's depreciation proposal. Do you agree?

A. No. Company witness Mr. Joshua Skelton explains that the Company's planning detail for BEC is consistent with available information for similar assets when looking far into the future, and the Company currently anticipates that the capital and O&M necessary to operate BEC3 and BEC4 until 2050 will generally be routine investments.

From my regulatory accounting perspective, the farther out in time the utility plans, the less precise the projected financial estimates will be. The projections of these revenues and expenses or estimated costs are virtually always difficult to predict with a high degree of certainty. This is true in the State of Minnesota IRP process as well as in Certificate of Need processes, where costs and facility needs are projected decades into the future. These projections represent the best information available at the time, and are an acceptable method for making utility planning decisions. Consequently, not having perfectly precise details is not unusual, and does not invalidate the conclusion that the depreciation life of BEC should be extended into that period of time based on a similar quality and quantity of data available here. Should those needs change based on newer information in the future, it would of course be evaluated at that time.

Q Ms. Lee contends Minnesota Power's proposal would create "stranded costs." Do you agree?

A. No. Ms. Lee is defining stranded costs as the undepreciated plant balance that exists after the plant is no longer non-used and useful.[5] This is a distortion of the general industry definition, which defines stranded costs as *potentially unrecovered* costs that exist after a plant is never in use or is no longer used and useful.[6] This lack of recovery occurs when

[5] Lee Direct at 13.
[6] The Edison Electric Institute defines stranded costs as "Costs incurred by utilities to serve their customers that potentially may be unrecoverable in a newly-created competitive market." Edison Electric Institute Glossary of Electric Industry Terms, (April 2005).

plant costs are not included in general rates or when they cannot be recovered in the marketplace due to industry restructuring or changes in regulation of markets. This is not the situation here.

Ms. Lee is also making the assumption that BEC will be closed prior to the end of its approved useful life, which is an invalid planning assumption at this time. Just as the Company is not asking the Commission to "extend" the operating life of BEC, it also is not asking the Commission to determine that the useful life of BEC will expire before 2050. If Minnesota Power's proposal is adopted by the Commission, there will be a plan for cost recovery; therefore, there would not be, nor would this proposal create, a stranded cost.

Q Are any of Ms. Lee's observations on unrecovered costs valid as they apply to Minnesota Power's proposal for BEC?

A. Yes and no. Ms. Lee expresses concern about "intergenerational inequities." While Minnesota Power acknowledges that its proposal could create intergenerational cost differences over time, the actual operations of these plants could be different than their operational lives. Further, Minnesota Power believes the equities balance in favor of the Company's proposal. That said, Minnesota Power feels these differences are worthwhile, as they help reduce costs to current customers while Minnesota Power transitions its generation supply to more renewable and renewable-supporting energy while implementing the Company's Energy*Forward* strategy.

Minnesota Power does not agree this proposal goes against "decades of traditional ratemaking principles" as Ms. Lee asserts. As noted above, regulatory assets and liabilities have existed for years in Minnesota. Further, the depreciable life of an asset set before it is decommissioned rarely precisely matches its actual operating life. The radical transformation of the Minnesota energy supply has happened on a relatively short time frame when compared to the decades-long planning tradition in Minnesota. That, in itself, is a change in the industry, as well as a change for Minnesota Power. The Company, in partnership with its regulators, is looking for ways to continue transitioning

Minnesota's energy supply to cleaner, less carbon-intense generation while still maintaining reliability and reasonable cost levels for all of Minnesota's energy consumers. While the Company disagrees with Ms. Lee's characterization, these broad changes and challenges in the industry necessitate new thinking and new solutions.

Q Does Minnesota Power share Ms. Lee's concerns about the adequacy of accumulating sufficient decommissioning and removal obligation funding if the Commission accepts Minnesota Power's proposal and the BEC station as a whole is closed prior to the end of its useful life?

A. Yes and no. Currently, Minnesota Power recovers in rates a portion of the expected net decommissioning costs of its assets annually along with the depreciation expense for a related asset. This charge to earnings is a method to reflect the future estimated obligation to decommission the asset sometime in the future. If the depreciable life of BEC is extended to 2050, the estimated costs to decommission the facility will be fully reflected in the estimated obligation to decommission the station. If for some reason the plant is closed prior to the end of its expected useful life, there could be an unfunded obligation for decommissioning that would need to be met by Minnesota Power. In this case, the Company would recover the remaining decommissioning costs for the unfunded obligation from closure until 2050. This is the same obligation the Company has today and Minnesota Power's proposal does not change that obligation. It would need to be addressed in a resource planning proceeding, where a shorter operating life of BEC could be considered.

Q Ms. Lee also submits that if BEC is depreciated over an extended period of time as proposed by Minnesota Power, such that the rate base asset is earning a return over a longer period, Company shareholders will receive an additional return on their investment. Do you agree?

A. No, not to the extent Ms. Lee is suggesting this proposal will result in a benefit to shareholders and a detriment to customers. It is correct that the amount paid by customers will increase as the net plant balance in rate base is reduced over a longer period of time, but this relates to the time value of money – not a greater profit to

shareholders. The additional amount paid to shareholders is compensation for the delay in the amount of time until they see a full return on their capital investment. Meanwhile, the customers experience lower rates during the same delay period because they do not have to return the investment to shareholders so quickly. Further, the actual return rate – in this case the return on equity – will be determined in this and future general rate proceedings and will not increase as a result of Minnesota Power's proposal.

Q Finally, Ms. Lee raises the concern that if the Commission adopts Minnesota Power's proposal, it will in some way influence the outcome of potential future regulation or potential legislation that might cause Minnesota Power to close down BEC before the end of its useful life. Do you agree?

A. No. Minnesota Power has consistently met its environmental and renewable energy obligations, and in many cases, long before it was required to do so by regulation or legislation. When BEC3 and BEC4 were retrofitted to meet compliance with the Minnesota Mercury Emissions Reduction Act ("MERA") and the EPA Mercury and Air Toxics Rule ("MATS"), replacement and closure was considered and determined not to be in the best interests of customers. Conversely, while BEC1&2 were not within the scope of MERA, it was determined it was too costly and not in the customers' best interest to retrofit those units to meet requirements for MATs and additional SO_2 reductions. Extending the life will not materially change the analysis to either close or retain the operation of a plant if some future regulation requires its closure. Nor does this decision in itself determine whether to keep any unit open longer.

Q CEO witness Mr. Varadarajan suggests that instead of a life extension, some form of securitization could create a "win-win" outcome for customers and the Company. Do you agree?

A. I do not agree with this particular suggestion. While Minnesota Power is very open to working with the CEO on developing an acceptable method to reduce the transition costs to a cleaner, more renewable-based energy supply, it is unclear how securitization would apply to an existing operating asset or group of assets. In the other states mentioned in Mr. Varadarajan's testimony, securitization was utilized to recover stranded or

unrecovered costs at facility closure. Minnesota Power's proposal is for a currently-operating facility, reducing costs to customers during an active transition of the energy supply. Additionally, I am not a lawyer but Minnesota Power believes statutory changes to Minnesota Statutes chapter 216B would be needed to allow the ongoing funding commitment of the irrevocable trusts necessary to facilitate these financing structures. Minnesota Power is very willing to work with the CEO on this concept in other, more appropriate situations. The Company also understands the CEO's concern that this depreciation should not determine the actual operating life of BEC assets, and does not seek to make that determination in this ratemaking docket.

Q Please summarize your Rebuttal Testimony position on the treatment of the BEC depreciable life.

A. As discussed in this section of my Rebuttal Testimony, the Company continues to believe that it is in the best interest of customers to extend the life of all BEC units and common property to 2050.

V. CONCLUSION

Q. Please summarize your testimony.

A. Minnesota Power agrees with Ms. Campbell that there should be a true-up for rider project collections, but believes that the true-up should occur in the tracker dockets, consistent with normal rider true-ups, rather than in this rate proceeding. The Company has provided evidence that Dual Fuel revenues have been included both in projected and actual cash collections.

Additionally, the Company agrees with Ms. Campbell that the depreciation life of Hibbard should be extended to 2029.

Finally, the Company continues to assert that it is in the best interest of customers to extend the life of all units at BEC until 2050, consistent with BEC's capability to operate to that time. This proposal is supported by both GAAP and FERC accounting and will not result in stranded costs.

Q. Does this complete your testimony?

A. Yes.

Minnesota Power
Actual Rider Cash Collection Credited to Base Rates

		[a] Jan-17	[b] Feb-17	[c] Mar-17	[d] Apr-17	[e] Total Jan - Apr	[f] Annualized 1/	[g]
	Boswell 4 - Base Rates							
1	Residential	$ (69,156.23)	$ (206,527.37)	$ (176,800.10)	$ (179,832.63)	$ (632,316.33)	$ (1,896,948.99)	
2	General Service	$ (39,901.36)	$ (130,083.13)	$ (120,391.37)	$ (120,949.21)	$ (411,325.07)	$ (1,233,975.21)	
3	Large Light & Power	$ (160,563.39)	$ (254,354.78)	$ (266,909.64)	$ (255,661.55)	$ (937,489.36)	$ (2,812,468.08)	
4	Large Power	$ (887,735.68)	$ (907,537.98)	$ (973,184.68)	$ (940,643.64)	$ (3,709,101.98)	$ (11,127,305.94)	
5	Municipal Pumping	$ (672.74)	$ (2,515.85)	$ (2,471.03)	$ (2,432.31)	$ (8,091.93)	$ (24,275.79)	
6	Lighting	$ (2,088.19)	$ (4,801.75)	$ (4,029.00)	$ (4,012.27)	$ (14,931.21)	$ (44,793.63)	
7	Dual Fuel - Residential	$ (9,999.72)	$ (35,199.80)	$ (28,153.33)	$ (24,417.41)	$ (97,770.26)	$ (153,007.32)	
8	Dual Fuel - General Service	$ (2,132.88)	$ (6,438.76)	$ (5,955.19)	$ (5,231.77)	$ (19,758.60)	$ (43,874.21)	
9	Total BEC4	$ (1,172,250.19)	$ (1,547,459.42)	$ (1,577,894.34)	$ (1,533,180.79)	$ (5,830,784.74)	$ (17,336,649.17)	
	Renewable - Base Rates							
10	Residential	$ (206,855.81)	$ (617,775.54)	$ (528,847.38)	$ (537,921.10)	$ (1,891,399.83)	$ (5,674,199.49)	
11	General Service	$ (119,360.32)	$ (389,120.40)	$ (360,125.11)	$ (361,795.86)	$ (1,230,401.69)	$ (3,691,205.07)	
12	Large Light & Power	$ (480,293.76)	$ (760,852.56)	$ (798,407.99)	$ (764,761.61)	$ (2,804,315.92)	$ (8,412,947.76)	
13	Large Power	$ (3,210,064.94)	$ (3,279,653.25)	$ (3,519,569.28)	$ (3,401,435.04)	$ (13,410,722.51)	$ (40,232,167.53)	
14	Municipal Pumping	$ (2,012.41)	$ (7,525.59)	$ (7,391.66)	$ (7,275.89)	$ (24,205.55)	$ (72,616.65)	
15	Lighting	$ (6,208.01)	$ (14,302.57)	$ (12,105.73)	$ (11,974.02)	$ (44,590.33)	$ (133,770.99)	
16	Dual Fuel - Residential	$ (29,911.99)	$ (105,293.42)	$ (84,214.40)	$ (73,039.51)	$ (292,459.32)	$ (457,689.68)	
17	Dual Fuel - General Service	$ (6,379.98)	$ (19,260.02)	$ (17,813.99)	$ (15,649.91)	$ (59,103.90)	$ (131,240.34)	
18	Total RRR	$ (4,061,087.22)	$ (5,193,783.35)	$ (5,328,475.54)	$ (5,173,852.94)	$ (19,757,199.05)	$ (58,805,837.51)	
	Transmission - Base Rates							
19	Residential	$ (44,498.06)	$ (132,894.61)	$ (113,766.07)	$ (115,715.41)	$ (406,874.15)	$ (1,220,622.45)	
20	General Service	$ (25,675.96)	$ (83,705.51)	$ (77,468.50)	$ (77,827.17)	$ (264,677.14)	$ (794,031.42)	
21	Large Light & Power	$ (103,318.94)	$ (163,671.79)	$ (171,750.61)	$ (164,512.60)	$ (603,253.94)	$ (1,809,761.82)	
22	Large Power	$ (569,642.40)	$ (582,484.36)	$ (624,438.52)	$ (603,588.76)	$ (2,380,154.04)	$ (7,140,462.12)	
23	Municipal Pumping	$ (432.91)	$ (1,618.88)	$ (1,590.01)	$ (1,565.22)	$ (5,207.02)	$ (15,621.06)	
24	Lighting	$ (1,349.34)	$ (3,063.30)	$ (2,612.96)	$ (2,578.35)	$ (9,603.95)	$ (28,811.85)	
25	Dual Fuel - Residential	$ (6,434.63)	$ (22,650.52)	$ (18,115.81)	$ (15,712.04)	$ (62,913.00)	$ (98,456.57)	
26	Dual Fuel - General Service	$ (1,372.42)	$ (4,143.15)	$ (3,832.16)	$ (3,366.51)	$ (12,714.24)	$ (28,232.26)	
27	Total TCR	$ (752,724.66)	$ (994,232.12)	$ (1,013,574.64)	$ (984,866.06)	$ (3,745,397.48)	$ (11,135,999.55)	
	All Riders - Base Rates							
28	Residential	$ (320,510.10)	$ (957,197.52)	$ (819,413.55)	$ (833,469.14)	$ (2,930,590.31)	$ (8,791,770.93)	
29	General Service	$ (184,937.64)	$ (602,909.04)	$ (557,984.98)	$ (560,572.24)	$ (1,906,403.90)	$ (5,719,211.70)	
30	Large Light & Power	$ (744,176.09)	$ (1,178,879.13)	$ (1,237,068.24)	$ (1,184,935.76)	$ (4,345,059.22)	$ (13,035,177.66)	
31	Large Power	$ (4,667,443.02)	$ (4,769,675.59)	$ (5,117,192.48)	$ (4,945,667.44)	$ (19,499,978.53)	$ (58,499,935.59)	
32	Municipal Pumping	$ (3,118.06)	$ (11,660.32)	$ (11,452.70)	$ (11,273.42)	$ (37,504.50)	$ (112,513.50)	
33	Lighting	$ (9,645.54)	$ (22,167.62)	$ (18,747.69)	$ (18,564.64)	$ (69,125.49)	$ (207,376.47)	
34	Dual Fuel - Residential	$ (46,346.34)	$ (163,143.74)	$ (130,483.54)	$ (113,168.96)	$ (453,142.58)	$ (709,153.57)	
35	Dual Fuel - General Service	$ (9,885.28)	$ (29,841.93)	$ (27,601.34)	$ (24,248.19)	$ (91,576.74)	$ (203,346.81)	
36	Total	$ (5,986,062.07)	$ (7,735,474.89)	$ (7,919,944.52)	$ (7,691,899.79)	$ (29,333,381.27)	$ (87,278,486.23)	

		Total Rider Cash ADJ-IS-4	Continuing Rider Cash ADJ-IS-4	Total Rider Cash ADJ-IS-40	Continuing Rider Cash ADJ-IS-40	Base Rider Cash Rate Case Est.	Actual's Jan-April 2017 MP Annualized /1	Adjustment for Base Rider Cash
37	Residential	$ 11,865,348.00	$ (1,359,982.00)			$ 10,505,366.00	$ 8,791,770.93	$ (1,713,595.07)
38	General Service	$ 7,722,914.00	$ (885,184.00)			$ 6,837,730.00	$ 5,719,211.70	$ (1,118,518.30)
39	Large Light & Power	$ 17,998,789.00	$ (2,062,984.00)			$ 15,935,805.00	$ 13,035,177.66	$ (2,900,627.34)
40	Large Power	$ 82,534,938.00	$ (27,650,445.00)	$ 7,478,143.00	$ (2,505,194.00)	$ 59,857,442.00	$ 58,499,935.59	$ (1,357,506.41)
41	Municipal Pumping	$ 205,571.00	$ (23,562.00)			$ 182,009.00	$ 112,513.50	$ (69,495.50)
42	Lighting	$ 270,465.00	$ (31,000.00)			$ 239,465.00	$ 207,376.47	$ (32,088.53)
43	Dual Fuel - Residential	$ 1,216,209.00	$ (139,399.00)			$ 1,076,810.00	$ 709,153.57	$ (367,656.43)
44	Dual Fuel - General Service	$ 335,362.00	$ (38,439.00)			$ 296,923.00	$ 203,346.81	$ (93,576.19)
45	Total	$ 122,149,596.00	$ (32,190,995.00)	$ 7,478,143.00	$ (2,505,194.00)	$ 94,931,550.00	$ 87,278,486.23	$ (7,653,063.77)

Note

1/ Annualization for all classes other than Dual Fuel is Total Actuals January to April mutliplied by 3. Dual Fuel is annualized on ratio of budget to actuals. See page 2 for details.

Minnesota Power
Annualization of Dual Fuel Revenue Credited to Base Rates

	Total 2017 Test Year Est 1/ a	Total Jan - Apr Est /1 b	Percentage c = b/a	Actuals Jan - Apr d	Total 2017 Annualized e = d/c
Boswell 4 - Base Rates					
Dual Fuel - Residential	$ (232,332.00)	$ (148,458.00)	63.90%	$ (97,770.26)	$ (153,007.32)
Dual Fuel - General Service	$ (64,064.00)	$ (28,851.00)	45.03%	$ (19,758.60)	$ (43,874.21)
Total BEC4	$ (296,396.00)	$ (177,309.00)		$ (117,528.86)	$ (196,881.53)
Renewable - Base Rates					
Dual Fuel - Residential	$ (694,976.00)	$ (444,083.00)	63.90%	$ (292,459.32)	$ (457,689.68)
Dual Fuel - General Service	$ (191,636.00)	$ (86,303.00)	45.03%	$ (59,103.90)	$ (131,240.34)
Total RRR	$ (886,612.00)	$ (530,386.00)		$ (351,563.22)	$ (588,930.02)
Transmission - Base Rates					
Dual Fuel - Residential	$ (149,501.00)	$ (95,530.00)	63.90%	$ (62,913.00)	$ (98,456.57)
Dual Fuel - General Service	$ (41,224.00)	$ (18,565.00)	45.03%	$ (12,714.24)	$ (28,232.26)
Total TCR	$ (190,725.00)	$ (114,095.00)		$ (75,627.24)	$ (126,688.83)
All Riders - Base Rates					
Dual Fuel - Residential	$ (1,076,809.00)	$ (688,071.00)	63.90%	$ (453,142.58)	$ (709,153.57)
Dual Fuel - General Service	$ (296,924.00)	$ (133,719.00)	45.03%	$ (91,576.74)	$ (203,346.81)
Total	$ (1,373,733.00)	$ (821,790.00)		$ (544,719.32)	$ (912,500.38)

Note
1/ Source: MP Exhibit___(MAP) Supplemental Direct Schedule E-2: Boswell 4 page 85, Renewable page 74, Transmission page 79.

Reconciliation with DOC Annualization (DOC Ex. ___ NAC-26)

$ 89,373,876.81	DOC Total Annualized Recom NAC-26, page 2.
$ 87,278,486.23	MP's Annualized, page 1, column [f] line 45.
$ 2,095,390.58	Difference
$ (1,634,157.96)	Reverse DOC Annualized Dual Fuel built into Residential and General Service class: actuals Jan - April $(544,719.32) x 3 = $(1,634,157.96)
$ (461,232.62)	MP's Annualized, page 1, column [f] lines 43+44 less Test Year Estimate column [e] lines 43+44.
$ (0.00)	

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's 2017 Remaining Life Depreciation Petition	Docket No. E015/D-17-___ 2017 REMAINING LIFE DEPRECIATION PETITION

SUMMARY

Pursuant to Minn. Stat. §§ 216B.08 and 216B.11, and Minn. Rules 7825.0600 and 7825.0700, Minnesota Power hereby petitions the Minnesota Public Utilities Commission (Commission) for approval of its Petition. This Petition establishes the 2017 remaining lives and salvage rates for all of Minnesota Power's production plant assets, along with certain general plant accounts. The remaining lives and salvage rates will be used to determine depreciation expense for these assets effective January 1, 2017.

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's 2017 Remaining Life Depreciation Petition	Docket No. E015/D-17-___ 2017 REMAINING LIFE DEPRECIATION PETITION

I. INTRODUCTION

Minnesota Power hereby petitions the Minnesota Public Utilities Commission (Commission) for approval of its 2017 Remaining Life Depreciation Petition (Petition). Minnesota Power is requesting that the remaining lives of all facilities be adjusted for one year's passage of time except for Boswell Energy Center (BEC) and Hibbard Renewable Energy Center (HREC). Minnesota Power requests that the remaining life of HREC be extended until 2029 and the remaining life of all portions of the BEC be consolidated into one remaining life and be extended until 2050.

Minnesota Power believes BEC should be treated as one unit for depreciation and should have one period for cost recovery because the units share critical infrastructure making them difficult to be separated and because the entire facility has been well maintained to extend operations to 2050. Furthermore, treating BEC as one unit for depreciation purposes will create certainty with regard to recovery of costs the company has invested in BEC on behalf of customers, while reducing customers' annual costs.

The primary driver behind the extension to 2050 is the BEC4 retrofit that, when combined with the BEC3 retrofit completed in 2009, justifies an extended life for the length of time the equipment may operate. To determine this time frame, Minnesota Power obtained an opinion from Burns & McDonnell that is included in Appendix C. Burns & McDonnell analyzed the status of each individual Boswell unit and concluded: "Industry experience has shown that with proper maintenance and investments into replacements and upgrades (environmental, performance, and otherwise), that similar coal fired facilities have achieved physical lives well past their originally planned lives. From our knowledge of the BEC facilities, we don't see any reason that the BEC facility

is an outlier. Therefore, based upon industry experience, we see no technical reasons that Boswell Energy Center could not physically be operated until 2050, with appropriate maintenance and investments into replacements and upgrades."[1] Minnesota Power seeks to properly account for BEC's expected accounting remaining life and to be in accordance with Minn. Stat. § 216B.11 to "fix proper and adequate rates and methods of depreciation" for BEC.

Minnesota Power is also asking the Commission to determine that it may consider the operational life for BEC as separate from the useful remaining life for cost recovery purposes. While Minnesota Power believes the proposed useful life of 2050 is the right cost recovery timeframe, the company also understands the thoughtfulness needed in evaluating such an extension given the uncertainty of potential future regulatory and environmental regulations. Overall, the company believes that BEC's remaining life for cost recovery purposes should be established so there is certainty for customers and for the company regarding costs as we enter a phase of retiring coal generation.

Minnesota Power's request for a remaining life for depreciation purposes that is different from the expected remaining life for economic purposes is not contrary to Generally Accepted Accounting Principles (GAAP). In Minnesota, utilities are required to follow the Federal Power Commission ("FPC") uniform system of accounts and all FPC orders, pronouncements, rules and regulations.[2] This body of pronouncements is generally referred to in the industry as FERC accounting. The FPC defines depreciation expense for FERC accounting purposes. It states that utilities must use a method of depreciation that allocates, in a systematic and rational manner, the service value of depreciable property over the service life of the property. It also states that the estimated useful service lives of depreciable property must be supported by engineering, economic, or other depreciation studies. Further, it states that utilities must use percentage rates of depreciation that are based on a method of depreciation that allocates in a systematic and rational manner the service value of depreciable property to the service life of the property. FERC accounting, not unlike GAAP for nonutility entities, depreciates the

[1] *See* Appendix C, page 3.
[2] *See* Minn. R. 7825.0300, Subpart 2.

remaining balance of the asset over the estimated service life of the asset. But FERC accounting does not consider the additional authority given to this Commission in establishing GAAP for depreciation expenses in Minnesota. In Minnesota, the Commission has additional methods, considerations, and authority to directly determine the annual depreciation expense in the annual Depreciation Certification for utility assets. The Commission, using standard FERC accounting for depreciation as a framework, can deviate from standard FERC accounting in determining the remaining service life or recovery period of an asset and thereby establishes GAAP for depreciation expense in Minnesota. The Commission can make this determination to deviate from standard FERC methods upon proper review of the appropriateness of a utility's proposal in the annual Depreciation Certification. In the annual Depreciation Certification rules,[3] utilities are required to file annually and the Commission considers and approves the specific rates by which utilities depreciate their assets. These depreciation amounts are used for more than just ratemaking purposes. The resulting depreciation expense is a component of the utility's financial statements, used in its other regulatory and external reports such as its filings with FERC and the Securities and Exchange Commission. The rules state that depreciation accounting is "a process of allocation not valuation."[4] Allocation is an important principle when considering the public interest in establishing the recoverable life of an asset for ratemaking purposes. Further, under the Methods for Depreciation Certification Studies in the Minnesota Rules,[5] "No specific methods are prescribed by the Commission in estimating service lives and salvage values."[6] Minnesota Power's proposal is within the methods and authority granted to the Commission to modify traditional FERC accounting for depreciation expense and is thereby allowable GAAP for utilities in Minnesota.

Minnesota Power filed a general rate case on November 2, 2016 (Docket No. E-015/GR-16-664) with a 2017 test year which reflects the BEC being consolidated into

[3] *See* Minn. R. 7825.0600, Subp. 1.
[4] *See* Minn. R. 7825.0500, Subp. 7.
[5] Minn. R. 7825.0800.
[6] Minn. R. 7825.0800.

one remaining life and being extended until 2050. See Appendix C for more information and support for the request to extend the remaining life of all of BEC to 2050.

Minnesota Power proposes to adjust all estimated salvage rates by using one hundred percent decommissioning probabilities in the calculation of these rates. In the Matter of a Commission Inquiry into Decommissioning Policies Related to Depreciation (Docket No. E,G-999/CI-13-626), Minnesota Power was ordered to stopped using decommissioning probabilities starting in its next general rate case, or as of January 1, 2020, if it has not filed a general rate case by that date. Minnesota Power filed its 2016 rate case November 2, 2016 (Docket No. E-015/GR-16-664).

The proposed changes result in an estimated decrease to 2017 annual depreciation expense of $~~25,246,000~~27,249,278.

II. BASIS FOR PREPARING THIS PETITION

On September 1, 2015, Minnesota Power filed its 2015 Integrated Resource Plan (2015 IRP) for the years 2015 to 2029 in Docket No. E015/RP-15-690. The Commission approved Minnesota Power's 2015 IRP on June 9, 2016. For purposes of this Petition, Minnesota Power is utilizing the information and forecast periods provided in the approved 2015 IRP. Minnesota Power will file its next IRP by February 1, 2018.

III. PROCEDURAL REQUIREMENTS

Pursuant to Minn. Rules 7825.3200, 7825.3500 and 7829.1300, subp. 3, Minnesota Power provides the following required information.

A. Name, Address and Telephone Number of Utility (Minn. Rules 7825.3500(A) and 7829.1300, subp. 3(A))

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

B. Name, Address and Telephone Number of Utility Attorney (Minn. Rules 7825.3500(A) and 7829.1300, subp. 3(B))

Christopher D. Anderson
Associate General Counsel
Minnesota Power
30 West Superior Street
Duluth, MN 55802
(218) 723-3961
canderson@allete.com

C. Date of Filing and Date Proposed Rates Take Effect (Minn. Rules 7825.3500(B) and 7829.1300, subp. 3(C))

This Petition is being filed on February 1, 2017. Minnesota Power respectfully requests that the Commission approve the Petition, with depreciation rates to become effective as of January 1, 2017.

D. Statute Controlling Schedule for Processing the Filing (Minn. Rules 7829.1300, subp. 3(D))

This Petition is made in accordance with Minn. Stat. § 216B.11 and prior Commission orders. No statutorily imposed time frame for a Commission decision applies to this filing. Minnesota Power requests that this Petition be processed in a timely manner to allow Commission approved depreciation rates to be incorporated into its current rate case (Docket No. E-015/GR-16-664).

E. Utility Employee Responsible for Filing (Minn. Rules 7825.3500(E) and 7829.1300, subp. 3(E))

Debbra A. Davey
Supervisor, Accounting
Minnesota Power
30 West Superior Street
Duluth, MN 55802
(218) 355-3714
ddavey@allete.com

F. Service List

Pursuant to Minn. Rules 7829.0700, Minnesota Power requests that the following persons be placed on the Commission's official service list for this matter:

Christopher D. Anderson
Associate General Counsel
Minnesota Power
30 West Superior Street
Duluth, MN 55802
canderson@allete.com

Debbra A. Davey
Supervisor, Accounting
Minnesota Power
30 West Superior Street
Duluth, MN 55802
ddavey@allete.com

G. Service on Other Parties

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

H. Summary of Filing

A one-paragraph summary accompanies this Petition pursuant to Minn. Rules 7829.1300, subp. 1.

IV. REMAINING LIFE ADJUSTMENTS

Minnesota Power has reviewed its remaining lives and salvage value estimates for thermal, hydroelectric and wind production facilities. Minnesota Power has determined that the remaining lives of all facilities should be adjusted for one year's passage of time except for HREC and BEC. As discussed in Section I. INTRODUCTION, Minnesota Power requests that remaining life of HREC be extended until 2029 and the remaining life of all portions of the BEC be consolidated into one remaining life and be extended until 2050. Minnesota Power filed a general rate case on November 2, 2016 (Docket No. E-015/GR-16-664), with a 2017 test year which reflects the BEC being consolidated into one remaining life and being extended until 2050. See Appendix C for more information and support for the request to extend the remaining life of all of BEC to 2050. Minnesota

Power proposes to adjust all estimated salvage rates by using one hundred percent decommissioning probabilities in the calculation of these rates. In the Matter of a Commission Inquiry into Decommissioning Policies Related to Depreciation (Docket No. E,G-999/CI-13-626), Minnesota Power was ordered to stopped using decommissioning probabilities starting in its next general rate case, or as of January 1, 2020, if it has not filed a general rate case by that date. Minnesota Power filed its 2016 rate case November 2, 2016 (Docket No. E-015/GR-16-664).

For purposes of this Petition, Minnesota Power is utilizing the information and forecast periods provided in the 2015 IRP. Appendix C of the 2015 IRP specifically addresses Minnesota Power's fossil generation resources.

The following schedule indicates proposed remaining lives and salvage rates:

	Proposed Remaining Life (Years)	Proposed Salvage Rate
Thermal Production Plants		
Hibbard Renewable Energy Center	~~8~~13.0	(2.11%)
Laskin Energy Center	14.0	(24.12%)
Boswell Energy Center		
Unit 1	34.0	(16.08%)
Unit 2	34.0	(18.06%)
Unit 3	34.0	(7.92%)
Unit 4	34.0	(7.42%)
Common	34.0	(3.95%)
Taconite Harbor Energy Center	10.0	(7.23%)
Hydroelectric Production Plants		
Prairie River HE Station	47.0	0
Thomson HE Station	47.0	0
Fond du Lac HE Station	47.0	0
Winton HE Station	47.0	0
Knife Falls HE Station	47.0	0
Scanlon HE Station	47.0	0
Little Falls HE Station	47.0	0
Blanchard HE Station	47.0	0
Sylvan HE Station	47.0	0
Pillager HE Station	47.0	0
Birch Lake Reservoir	47.0	0
Boulder Lake Reservoir	47.0	0

	Proposed Remaining Life (Years)	Proposed Salvage Rate
Hydraulic Production Plants (continued)		
Fish Lake Reservoir	47.0	0
Island Lake Reservoir	47.0	0
Rice Lake Reservoir	47.0	0
Whiteface Reservoir	47.0	0
Gauging Stations and White Iron Lake Reservoir	47.0	0
Other Production Plants		
Taconite Ridge I Wind	26.0	(0.31%)
Bison 1 Wind – Phase 1	28.0	(0.95%)
Bison 1 Wind – Phase 2	29.0	(0.93%)
Bison 2 Wind	30.0	(0.35%)
Bison 3 Wind	30.0	(0.42%)
Bison 4 Wind	32.0	0.03%
Community Solar Garden	24.0	0

As mentioned above, Minnesota Power used one hundred percent decommissioning probabilities to calculate the above salvage rates and to calculate the salvage rates used in its 2016 rate case with a 2017 test year filed November 2, 2016 (Docket No. E-015/GR-16-664).

Minnesota Power will continue to address the reconciliation between remaining lives and the latest approved Integrated Resource Plan (currently the 2015 IRP) in a reasonable and timely manner. Minnesota Power received approval of its 2015 IRP on June 9, 2015. As reconciliation issues are addressed, Minnesota Power will review its remaining lives, making any adjustment based on the factors known at that time.

Within the 2015 IRP, Minnesota Power recognized that a key factor in the latter portion of the long-term plan period will be the aging of its generation fleet and uncertainty of carbon and other environmental compliance policies. The following is a discussion of Minnesota Power's production facilities and the proposed remaining lives of these facilities.

Solar Production Facility

In September 2015, Minnesota Power filed a petition for approval of its Community Solar Garden Pilot Program (Docket No. E015/M-15-825). Minnesota Power received Commission approval with modifications on July 27, 2016. Minnesota Power is developing this 40 kW solar generation system as part of the company's Plan for meeting Minnesota's Solar Energy Standard (SES) by the year 2020. As reported in the 2015 SES Progress Report (Docket No. E015/M-16-342), Minnesota Power needs approximately 32 MW of solar energy to meet the SES by 2020, with 4 MW of the total needed to meet the Small Scale Carve Out. This Community Solar Garden Pilot Program project consisted of building a 40 kW solar generation system on company-owned property in Duluth, Minnesota and was placed in-service at the end of 2016. All production assets of the solar production facility have estimated remaining lives through 2041.

Hydroelectric Production Facilities

All of Minnesota Power's hydroelectric facilities hold Federal Energy Regulatory Commission (FERC) licenses and the facilities are being maintained in accordance with the terms of these licenses. The reservoirs, dams and gauging stations are expected to have a useful economic and operating life matching that of the hydro stations they support. All of Minnesota Power's hydroelectric production plant facilities have estimated remaining lives through 2063 which agree with the remaining lives in the 2015 IRP.

Wind Production Facilities

Taconite Ridge I Wind Energy Center, a 25 MW wind production facility with ten turbines, was placed in-service in June 2008 and has an estimating remaining life of 2043. Bison Phase 1, a 36.8 MW wind production facility with sixteen wind turbines, was placed in-service in November 2010 and has an estimated remaining life of 2045. Bison Phase 2, a 45.0 MW wind production facility with fifteen wind turbines, was placed in-service in December 2011 and has an estimated remaining life of 2046. Bison 2 and 3, which are each a 105 MW wind production facility with thirty-five wind turbines, were placed in-service on December 2012 and have estimated remaining lives through 2047. Bison 4, a 204.8 MW wind production facility with sixty-four wind turbines, was placed

in-service in December 2014 and has an estimated remaining life of 2049. These wind facilities are an integral part of the company's renewable plan for obtaining 25 percent of its electricity for its retail customers from renewable energy sources by the year 2025. Minn. Stat. § 216B.1691. The estimated remaining lives noted above of all production assets at these wind facilities agree with the remaining lives in the 2015 IRP.

Regulated Thermal Production Facilities

Minnesota Power's thermal units have remaining lives that agree with the remaining lives in the 2015 IRP, with the exception of HREC and BEC. As discussed in Section I. INTRODUCTION, Minnesota Power requests that the remaining life of HREC be extended to 2029 and the remaining life of all portions of the BEC be consolidated into one remaining life and be extended until 2050. Minnesota Power filed a general rate case on November 2, 2016 (Docket No. E-015/GR-16-664), with a 2017 test year which reflects the BEC being consolidated into one remaining life and being extended until 2050. See Appendix C for more information and support for the request to extend the remaining life of all of BEC to 2050.

The table below lists the proposed remaining lives of the facilities and the 2015 IRP remaining lives:

Thermal Production Plant	Proposed Remaining Life	2015 IRP Remaining Life
Hibbard Renewable Energy Center	2049	2024
Laskin Energy Center	2030	2030
Taconite Harbor Energy Center	2026	2026
Boswell Energy Center		
Unit 1 (see below)	2050	No later than 2022
Unit 2 (see below)	2050	No later than 2022
Unit 3	2050	2034
Unit 4	2050	2035
Common	2050	2030

Hibbard Renewable Energy Center (HREC)

HREC units 3 and 4, located at the M. L. Hibbard Facility, operate as peaking resources and have been providing a portion of Minnesota Power's spinning reserves

since 2004. The proposed salvage rate for Hibbard decreased due to lower decommissioning cost estimates primarily as a result of using a land fill that is closer and results in less disposal costs. The current remaining life of these units is estimated to extend to 20249 which is five years longer than ~~agrees with~~ the remaining life for depreciation in the 2015 IRP.

Laskin Energy Center (Laskin)

Laskin units 1 and 2 are sister units – similar in design and intended operation. Laskin is treated as one unit and has one remaining life for purposes of computing annual depreciation accruals. Ongoing reinvestment has maintained the units in good overall condition. Minnesota Power completed the conversion of units 1 and 2 of its Laskin Energy Center to gas peaking generation facilities in June 2015. On June 20, 2016 the MPCA approved Minnesota Power's modified Laskin ash cell closure plan. The current remaining life of Laskin is estimated to extend to 2030 which agrees with the remaining life in the 2015 IRP.

Taconite Harbor Energy Center (THEC)

At THEC, units 1 and 2 have been fitted with Mobotec multi-emission control technology designed to reduce NO_X, SO_2 and mercury emissions and electrostatic precipitator upgrades to reduce particulate emissions. Minnesota Power treats THEC as one unit with one remaining life for purposes of computing annual depreciation accruals and proposes continuing to treat THEC in this manner. Minnesota Power identified that the investment in retrofit technology for THEC unit 3 is not in the best interest of its customers. To protect affordability for customers in the near term and further reduce emissions in the region, Minnesota Power ceased coal operation for THEC unit 3 in May 2015. Minnesota Power announced on July 9, 2015 the company's plan to cease coal operations at THEC units 1 and 2 in 2020 and economically idle THEC units 1 and 2 in the fall of 2016. Minnesota Power requests that the remaining net plant balances of all Taconite Harbor units be recovered over the current remaining life of the plant, which is 2026. The current remaining life of 2026 agrees with the remaining life in the 2015 IRP.

Boswell Energy Center (BEC)

For BEC, Minnesota Power is requesting that the life of all the BEC units – units 1 and 2 (BEC1&2), unit 3 (BEC3), unit 4 (BEC4) and BEC Common Facilities (BEC Common) – be consolidated into one remaining life and be extended until 2050. The extension request is based primarily on the significant multi-emission retrofit work done at BEC 3 (Docket No. E015/M-06-1501) and BEC 4 (Docket No. E015/M-12-920), and to reduce the annual costs of BEC for customers. Minnesota Power believes it is appropriate to combine all of BEC into one remaining life because the units share critical infrastructure making them difficult to be separated and because the entire facility has been well maintained to extend operations to 2050. Furthermore, treating BEC as one unit for depreciation purposes will create certainty with regard to recovery of costs the company has invested in BEC on behalf of customers, while reducing customers' annual costs. See Appendix C for more information and support for the request to extend the remaining life of all of BEC to 2050. The proposed remaining life for BEC to 2050 is beyond the remaining life of all the BEC facilities in the 2015 IRP.

BEC1&2 are sister boilers – similar in design and intended operation. Both units provide base load energy and ancillary services. The units operate with emission control equipment including low NOx burners and bag houses to control particulates and mercury emissions. Minnesota Power has installed additional NOx emission reduction control systems including Rotating Opposed Fired Air and selective non-catalytic reduction at BEC1&2. In September 2014 Minnesota Power reached a settlement with the Environmental Protection Agency (EPA) regarding Notice of Violations the company received in 2008 and 2011 and entered into a Consent Decree which was approved by the U.S. District Court for the District of Minnesota. Provisions of the Consent Decree require that, by no later than December 31, 2018, BEC1&2 must be retired, refueled, repowered, or emissions rerouted through existing emission control technology at BEC. The company was required to notify the EPA no later than December 31, 2016, whether it will retire, refuel, repower, or reroute BEC1&2. Minnesota Power's 2015 IRP filed with the MPUC on September 1, 2015 outlined Minnesota Power's preferred option to reroute emissions from BEC1&2 through existing emission control technology at BEC3. In the Commission Order for the 2015 IRP, the Commission stated that Minnesota

Power has not demonstrated at this time that its proposed investment in SO_2 reduction at BEC1&2 is reasonable. In addition, the Commission ordered Minnesota Power to retire BEC1&2 when sufficient energy and capacity are available, but no later than 2022. As a result of the Provision of the Consent Decree and the Commission not supporting Minnesota Power's preferred option to reroute emissions from BEC1&2 filed in the IRP, the current plan is to retire BEC1&2 in 2018.

BEC3 provides base load energy operating at a high load factor. BEC3 operates with the most mature, commercially available technology to significantly reduce emissions of mercury and well-established control technologies that have the ability to meet Best Available Control Technology performance standards to significantly reduce NO_X, SO_2 and PM.

BEC4 provides base load energy operating at a high load factor and is jointly-owned by Minnesota Power (80 percent) and WPPI Energy (20 percent). The unit operates with NO_X emission reduction control systems including low NO_X burners and selective non-catalytic reduction, along with a high efficiency turbine rotor. Minnesota Power completed the environmental retrofit project on BEC4 in December 2015 as a multi-pollutant solution for reducing mercury, particulate matter, sulfur dioxide, and other hazardous air pollutants being addressed by EPA regulations while also reducing plant wastewater contemplated for regulation under EPA's Effluent Limit Guidelines. Minnesota Power installed a semi-dry flue gas desulfurization system, fabric filter and powder activated carbon injection system to achieve compliance with the Minnesota Mercury Emission Reduction Act (MERA), the EPA Mercury and Air Toxics Rule, 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 emission reduction required by MERA while positioning the facility for compliance with other regulatory programs over the long term.

As discussed above, Minnesota Power is requesting that the life of all the BEC units be extended until 2050 and the proposed remaining life for BEC to 2050 is beyond the remaining life of all the BEC facilities in the 2015 IRP.

General Plant Accounts 3900 and 3928

Minnesota Power has also reviewed its remaining lives and salvage value estimates for certain general plant accounts. These accounts include Account 3900-Structures and Improvements and Account 3928-Transportation Equipment/Fixed-Wing Aircraft.

Minnesota Power recommends no changes except for the passage of one year's time for Account 3900. In Account 3928 the company has one aircraft and for this account the company recommends changing the remaining life for the passage of one year's time. The estimated salvage value for the plane is approximately $500,000, so Minnesota Power proposes reducing the salvage value to 16.4% for Account 3928. The company is planning to retire the plane in the next year or so.

Acct. No.	Class of Utility Plant	Remaining Life (Years)	Net Salvage
3900	Structures & Improvements	20.0	0%
3928	Transportation Equipment Fixed-Wing Aircraft	1.0	16.4%

Appendices

Enclosed in Appendix A, please find depreciation schedules as required by Commission filing requirements, Minn. Rules 7825.0700, subp. 1: Plant in Service, Analysis of Depreciation Reserve, and Summary of Annual Depreciation Accruals. Enclosed in Appendix B is a schedule of supplemental depreciation expense recorded in prior years. Enclosed in Appendix C from Docket No. E015/GR-16-664, is the Direct Testimony of company witness Herb Minke at pages 14-24.

V. FUTURE ADDITIONS OR RETIREMENTS AFFECTING CURRENT CERTIFICATION

Subpart B of this section requires a list of any major future additions or retirements to the plant accounts that the utility believes may have a material effect on the current certification results. Minnesota Power does not have any major future additions or retirements to plant accounts that would materially impact the 2017 depreciation accruals.

Minnesota Power announced on July 9, 2015 the company's plan to cease coal operations at THEC 1 and 2 in 2020 and economically idle THEC 1 and 2 in the fall of 2016. Also, in the Commission Order for the 2015 IRP, Minnesota Power was ordered to retire BEC units 1 and 2 when sufficient energy and capacity are available, but no later than 2022. However, as discussed above, as a result of the Provision of the Consent Decree and the Commission not supporting Minnesota Power's preferred option to reroute emissions from BEC1&2 filed in the IRP, the current plan is to retire BEC1&2 in 2018. As discussed in Section I. INTRODUCTION, Minnesota Power requests that the remaining life of all portions of the BEC be consolidated into one remaining life and be extended until 2050. Minnesota Power filed a general rate case on November 2, 2016 (Docket No. E-015/GR-16-664), with a 2017 test year which reflects the BEC being consolidated into one remaining life and being extended until 2050. See Appendix C for more information and support for the request to extend the remaining life of all of BEC to 2050.

VI. CONCLUSION

Minnesota Power respectfully requests that the Commission approve the Petition. Minnesota Power also requests that this Petition be processed in a timely manner to allow Commission approved depreciation rates to be incorporated into its current rate case (Docket No. E-015/GR-16-664).

Minnesota Power is requesting that the remaining lives of all facilities be adjusted for one year's passage of time except for HREC and BEC. As discussed in Section I. INTRODUCTION, Minnesota Power requests that the remaining life of HREC be extended until 2029 and the remaining life of all portions of the BEC be consolidated into one remaining life and be extended until 2050. Minnesota Power filed a general rate case on November 2, 2016 (Docket No. E-015/GR-16-664), with a 2017 test year which reflects the BEC being consolidated into one remaining life and being extended until 2050. See Appendix C for more information and support for the request to extend the remaining life of all of BEC to 2050.

Minnesota Power proposes to adjust all estimate salvage rates by using one hundred percent decommissioning probabilities in the calculation of these rates. In the

Matter of a Commission Inquiry into Decommissioning Policies Related to Depreciation (Docket No. E,G-999/CI-13-626), Minnesota Power was ordered to stop using decommissioning probabilities starting in its next general rate case, or as of January 1, 2020, if it has not filed a general rate case by that date. Minnesota Power filed its 2016 rate case November 2, 2016 (Docket No. E-015/GR-16-664).

The proposed changes result in an estimated decrease to 2017 annual depreciation expense of $~~25,246,000~~27,249,278.

Date: February 1, 2017

Respectfully submitted,

/s/ Debbra A. Davey

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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 **29th** day of **June**, **2017**, she served Minnesota Power's Letter in **Docket No. E015/D-17-118** on the Minnesota Public Utilities Commission and the Energy Resources Division of the Minnesota Department of Commerce via electronic filing. The persons on the attached service list were served as requested.

Susan Romans

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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MINNESOTA POWER
PRODUCTION PLANT
COMPARISON OF PRESENT AND PROPOSED REMAINING LIVES
2017

			Current Rates			Proposed Rates			Effect of
	Depreciable Plant Balance 12/31/16	Depreciation Reserve 12/31/16	Remaining Life (01/01/17)	Salvage Value (01/01/17)	2017 Annual Accrual	Remaining Life (01/01/17)	Salvage Value (01/01/17)	2017 Annual Accrual	Rate Changes to 2017 Accrual
Steam Generation									
Hibbard SE Station:	93,461,883	53,764,885	8	-1.10%	5,090,635	13	-2.11%	3,205,311	(1,885,324)
Laskin Energy Center	86,433,501	57,409,356	14	-24.00%	3,554,870	14	-24.12%	3,562,279	7,409
Boswell Energy Center:	1,331,403,558	492,059,792			53,271,033			27,698,492	(25,572,541)
Unit No. 1	45,101,081	28,621,210	8	-7.90%	2,505,357	34	-16.08%	698,004	(1,807,353)
Unit No. 2	40,144,937	27,024,581	8	-9.99%	2,141,354	34	-18.06%	599,133	(1,542,221)
Unit No. 3	450,258,763	160,642,947	18	-5.85%	17,553,109	34	-7.92%	9,566,950	(7,986,159)
Unit No. 4	599,540,549	170,825,337	19	-3.69%	23,728,329	34	-7.42%	13,917,680	(9,810,649)
Common	196,358,228	104,945,717	13	-2.06%	7,342,884	34	-3.95%	2,916,725	(4,426,159)
Taconite Harbor Energy Center	141,989,417	58,135,869			9,174,365			9,375,727	201,362
Structure/Unit	136,980,992	53,127,444	10	-5.76%	9,174,365	10	-7.23%	9,375,727	201,362
Ash Ponds*	5,008,425	5,008,425	-	-5.76%	-	-	-7.23%	-	-
Total Steam Generation	1,653,288,359	661,369,902			71,090,903			43,841,809	(27,249,094)
Wind Generation									
Bison 1A	76,533,973	13,973,718	28	-0.95%	2,260,262	28	-0.95%	2,260,262	-
Bison 1B	73,258,168	8,603,654	29	-0.93%	2,252,959	29	-0.93%	2,252,959	-
Bison 2	150,269,187	18,712,866	30	-0.35%	4,402,742	30	-0.35%	4,402,742	-
Bison 3	149,415,160	17,326,319	30	-0.42%	4,423,879	30	-0.42%	4,423,879	-
Bison 4	325,257,649	19,188,481	32	0.03%	9,561,612	32	0.03%	9,561,612	-
Subtotal Bison	774,734,137	77,805,038			22,901,454			22,901,454	-
Taconite Ridge I Energy Center	47,824,453	5,289,179	26	-0.32%	1,641,858	26	-0.31%	1,641,674	(184)
Total Wind Generation	822,558,590	83,094,217			24,543,312			24,543,128	(184)
Hydroelectric Production Plants									
Birch Lake Reservoir	3,588,177	3,591	47	0.00%	76,268	47	0.00%	76,268	-
Blanchard HE Station	11,920,919	5,329,552	47	0.00%	140,242	47	0.00%	140,242	-
Boulder Lake Reservoir	519,530	323,837	47	0.00%	4,164	47	0.00%	4,164	-
Fish Lake Reservoir	945,803	245,397	47	0.00%	14,902	47	0.00%	14,902	-
Fond du Lac HE Station	18,094,873	3,732,563	47	0.00%	305,581	47	0.00%	305,581	-
Gauging Stations	125,451	63,673	47	0.00%	1,314	47	0.00%	1,314	-
Island Lake Reservoir	12,522,498	1,090,295	47	0.00%	243,238	47	0.00%	243,238	-
Knife Falls HE Station	3,556,172	1,832,171	47	0.00%	36,681	47	0.00%	36,681	-
Little Falls HE Station	8,947,421	4,249,205	47	0.00%	99,962	47	0.00%	99,962	-
Pillager HE Station	2,320,626	1,296,654	47	0.00%	21,787	47	0.00%	21,787	-
Prairie River HE Station	4,664,659	957,656	47	0.00%	78,872	47	0.00%	78,872	-
Rice Lake Reservoir	219,176	56,653	47	0.00%	3,458	47	0.00%	3,458	-
Scanlon HE Station	3,570,519	1,453,623	47	0.00%	45,040	47	0.00%	45,040	-
Sylvan HE Station	2,252,289	1,525,518	47	0.00%	15,463	47	0.00%	15,463	-
Thomson HE Station	100,189,337	4,298,901	47	0.00%	2,040,222	47	0.00%	2,040,222	-
White Iron Lake Reservoir	28,934	14,327	47	0.00%	311	47	0.00%	311	-
Whiteface Reservoir	1,295,371	605,391	47	0.00%	14,680	47	0.00%	14,680	-
Winton HE Station	5,161,797	2,548,327	47	0.00%	55,606	47	0.00%	55,606	-
Total Hydroelectric Production Plants	179,923,552	29,627,334			3,197,791			3,197,791	-
Total Generation	2,655,770,501	774,091,453			98,832,006			71,582,728	(27,249,278)

** The ash ponds have a 5 year life, as they are built and filled in on a 5-year cycle. New Ash Ponds with 5 year life added in 2010.*