Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Date: August 18, 2016 .....**Agenda Item # **4**

Company: Minnesota Power

Docket No. E-015/D-15-711

In the Matter of Minnesota Power's 2015 Remaining Life Depreciation Petition

Issue: Should the Commission approve Minnesota Power's 2015 Remaining Life Depreciation petition in which the Company has requested:

- The remaining lives of all facilities to be adjusted for one year's passage of time, with the exception of Laskin Energy Center;
- New salvage rates for each of its thermal and wind generation facilities based on a new decommissioning study; and
- The remaining lives of all general plant accounts to be adjusted for one year's passage of time, with no changes to salvage rates?

Should the Commission approve the Department's recommendation to approve Minnesota Power's proposed remaining lives and salvage rates, except for the lives and salvage rates proposed for Taconite Harbor Energy Center and Sappi Cloquet Generator No. 5 and the salvage rate proposed for Laskin Energy Center?

Staff: Ann Schwieger ..... (651) 201-2238

Relevant Documents

Minnesota Power – Initial Filing & Attachments A1, A2, B, C & D .....July 30, 2015
Department – Comments - Public..... October 30, 2015
Department – Comments – Trade Secret..... October 30, 2015
Large Power Intervenors - Comments..... October 30, 2015
Minnesota Power – Reply Comments..... May 18, 2016
Minnesota Power – Reply Comments – Trade Secret ..... May 18, 2016

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Statement of the Issue

Should the Commission approve Minnesota Power's 2015 Remaining Life Depreciation petition in which the Company has requested:

- The remaining lives of all facilities to be adjusted for one year's passage of time, with the exception of Laskin Energy Center;
- New salvage rates for each of its thermal and wind generation facilities based on a new decommissioning study; and
- The remaining lives of all general plant accounts to be adjusted for one year's passage of time with no adjustment to salvage rates?

Should the Commission approve the Department's recommendation to approve Minnesota Power's proposed remaining lives and salvage rates, except for the lives and salvage rates proposed for Taconite Harbor Energy Center and Sappi Cloquet Generator No. 5 and the salvage rate proposed for Laskin Energy Center?

Background

July 31, 2015: Minnesota Power (MP) submitted its 2015 Remaining Lives Depreciation Petition and requested the Commission approve:

- The remaining lives of all facilities to be adjusted for one year's passage of time, with the exception of Laskin Energy Center (LEC);
- New salvage rates for each of its thermal and wind generation facilities based on a new decommissioning study; and
- The remaining lives of all general plant accounts to be adjusted for one year's passage of time, with no changes to salvage rates.

October 30, 2015: The Department filed its comments and recommended the Commission:

- Approve MP's proposed remaining lives and salvage rates, except for the lives and salvage rates proposed for Taconite Harbor Energy Center (THEC) and Sappi Cloquet Generator (SCG) No. 5;
- Approve a remaining life of six rather than twelve years for THEC;
- Approve a remaining life of two rather than ten years for SCG No. 5;
- Approve MP's proposed salvage rates, except for the salvage rates proposed for LEC and THEC;
- Approve a salvage rate of negative 26.02 percent for LEC;
- Approve a salvage rate for THEC based on the 2015 Decommissioning Study that includes either (a) an updated coal pile remediation cost estimate or (b) the coal pile remediation cost estimate from the 2013 Decommissioning Study.

October 30, 2015: The Large Power Intervenors (LPI) filed comments and requested that Minnesota Power address how it concluded that LEC has only a fifteen-year remaining life.

May 18, 2016: Minnesota Power submitted reply comments and requested the Commission approve a remaining life of twelve years for THEC, a remaining life of ten years for SCG, and a salvage rate of negative 15.29 percent for LEC.

Remaining Lives

The Company requested the Commission approve one year's passage of time to account for the decrease of service lives for all of its generation facilities and general plant accounts, with one exception, LEC. The following estimates of plant remaining lives remain in dispute:

Remaining Lives	MP	DOC	LPI
Taconite Harbor Energy Center	12 years	6 years	No recommendation
Sappi – Cloquet	10 years	2 years	No recommendation
Laskin Energy Center	16[1] years	16 years	25-30 years

Laskin Energy Center

MP proposed a life extension for LEC based on MP's completion of the conversion of LEC Units 1 & 2 to gas peaking generation facilities in June of 2015. The Company proposed to extend the service life of the LEC by six years, or through 2030.

The LPIs filed comments and requested that Minnesota Power address in its reply comments how it concluded that the remaining life of the Laskin Energy Center is 15-years, rather than a 25 to 30 year remaining life, which is similar to the life of a new gas turbine peaking plant. LPI noted that several recent studies[2] examining natural gas power plants have assumed that facilities that appear similar to the newly converted LEC have a 25 to 30 year life. It may be that specific technologies used by MP only have a 15-year life but LPI does not believe the Petition contains that supporting information. The LPI's recommended a remaining life between 25 and 30 years because the assumed life of MP's facilities impacts LPI, and ratepayers generally, as the assumptions used will ultimately impact electric rates.

In its response to LPI the Company stated that in June of 2015, the Company completed a refueling project at Laskin that converted the plant from a coal-fired baseload plant to a natural gas peaking plant. MP concluded that LEC has a 15-year remaining life because, in the conversion of the plant to natural gas, the existing boiler and turbine were not replaced. The additions and changes were confined to the firing system and gas supply. MP stated that because

[1] MP, Petition, p. 7

[2] *See e.g.*, Gas Fired Power at 4, Int'l Energy Agency Energy Technology Systems Analysis Programme (April 2010), *available at* http://www.iea-etsap.org/web/e-techds/pdf/e02-gas_fired_power-gs-ad-gct.pdf; Julianne M. Klara & John G. Wimer, Natural Gas Combined-Cycle Plant, U.S. Department of Energy National Energy Technology Laboratory (2007), *available at* http://www.netl.doe.gov/KMD/cds/disk50/NGCC%20Plant%20Case_FClass_051607.pdf.

it did not add a new gas turbine, a 30-year life would not be appropriate.

The Department concluded that a life extension for Laskin is reasonable based on the new plant investments. Because the investments were small relative to LEC's gross plant balance, and the majority of the plant's existing assets, which remain in place, were not directly improved, the Department does not expect a long life extension. The Department agreed that MP's proposed six-year life extension for Laskin is reasonable.

Taconite Harbor Energy Center (THEC)

Minnesota Power's Taconite Harbor Energy Center currently has two operating coal fired units with a combined capacity of 150 MW. In this filing, the Company requested that the Commission allow it to continue to recover the remaining plant balances over the current remaining life of the plant, which is 2026. MP proposed a one-year passage-of-time adjustment for Taconite Harbor, resulting in a remaining life of 12 years based on the plant's current anticipated retirement date of December 31, 2026. The effect of MP's proposal is that the Company would continue to depreciate THEC for six years after it plans to cease coal operations at the plant.

The Department asked MP to explain why it would be reasonable to continue to record a depreciation expense for six years after retirement of THEC. MP responded that the Company is exploring future options for the plant, including refueling, repurposing, or retiring the plant. The Company stated there are valuable port, rail and other associated infrastructure at the facility site that may help spur future economic development and business growth opportunities. The Company stated that it is possible that some of the infrastructure at the plant will not be retired in 2020, which means that a 2026 retirement date is reasonable for depreciation purposes.

Based on the information the Company submitted in its 2015 IRP, the Department recommended a six-year remaining life for THEC. The Department made the recommendation in order to match the depreciable life with the operational life, and to prevent ratepayers from continuing to pay for a plant well after it has retired. The Department noted that any future authorized capital additions would appropriately be depreciated over their useful life as determined at that time.

The Department stated it understands that shortening THEC's remaining life to six years will result in the plant's annual depreciation expense doubling, which will negatively impact MP until the Company files a rate case. The Department argued that it is best to match expenses to the periods in which they are incurred based on information known at a given time, which also promotes intergenerational equity among ratepayers. If THEC is refueled or repurposed, some of its assets will be retired in 2020, and some will not. The average remaining life for the individual assets at the plant will be later than 2020. In recognition of this possibility, the Commission could approve a remaining life between six and twelve years for THEC. However, the Department concluded that a six-year remaining life is conservative and reasonable. The Department estimated that this change will result in an increase in annual depreciation expense of $8.8 million relative to MP's proposal.

MP disagreed with the Department's recommendation and requested the Commission approve

use of the current remaining useful life of twelve years (2026) for THEC. The Company stated it disagrees with the Department's recommendation for the following reasons:

1. *THEC will not be decommissioned in 2020 and refueling, repurposing, and re-missioning opportunities are being considered*

Minnesota Power stated it has no plans to decommission the THEC in 2020 when it proposes to cease electric generation with coal as its primary fuel. Minnesota Power stated it is continuing to develop multiple utility re-missioning and refueling opportunities for THEC to produce electricity that are in the best interests of Minnesota Power customers, and also economically beneficial to the communities and surrounding region.

2. *The Department's recommendation unfairly penalizes Minnesota Power for early action to reduce carbon emissions*

The Commission recently determined in MP's 2015 IRP, the most economic resource alternative for THEC, with the best optionality for customers, is to idle the facility until 2020 at which point the Company will stop using coal to fuel the station. Future refueling and re-missioning options will be considered in Minnesota Power's next Integrated Resource Plan. Minnesota Power stated the Company and its customers should not be penalized for its "economic idling" proposal, which results in substantial carbon emission reductions, by having the depreciation accelerated for the THEC as a result of shortening the remaining life to six years.

3. *Minnesota Power's proposal for the depreciation and useful life for THEC conforms to Generally Accepted Accounting Principles (GAAP) 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 the 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 a determination to deviate from standard FERC methods upon proper review of the appropriateness of a utility's proposal in the annual Depreciation Certification. Minnesota Power stated its proposal to retain the useful life of the THEC through 2026, 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.

4. *The remaining useful life of THEC and the allowance for recovery of the remaining facility investment should be determined in 2015 Plan*

The Commission should not take any action on the Department's recommendation until the future of THEC is determined in the 2015 Plan Docket and through exploration of future options for THEC, as this will have significant financial implications on Minnesota Power and its customers.

5. THEC 2015 Plan proposal warrants allowance to recover costs

Minnesota Power is proactively choosing to cease coal-fired operations at THEC in order to prepare for energy policy changes which will require reductions in carbon emissions. The Commission has the authority to allow the recovery of remaining undepreciated plant balances. The Company believes its current proposal warrants an allowance by the Commission to recover the remaining costs at THEC as the company is proactively choosing to meet the State's energy policy goals of reducing carbon emissions. By taking this proactive approach, the company should be treated in the same manner as would happen if it were ordered to terminate operations before the end of a facility's current remaining useful life. Minn. Stat. § 216B.16, subd. 6 states that if the Commission orders a generating facility to terminate its operations before the end of the facility's physical life in order to comply with a specific state or federal energy statute or policy, the Commission may allow the public utility to recover any positive net book value of the facility as determined by the Commission.

Minnesota Power stated it is recovering the costs in base rates under the existing life. If the life is shortened, either to 2020 or 2017, it would have a significant impact, and would warrant an immediate cost recovery mechanism (like deferral until the next rate case). Minnesota Power requested an immediate cost recovery mechanism if the Commission agrees with the Department on the shorter life. Unlike minor changes to depreciation rates and minor impacts in past depreciation dockets, the Department's recommendation would result in major changes and impacts that warrant an immediate cost recovery mechanism.

6. The current remaining useful life of 2026 for THEC is in the public interest for customers

The electric industry is in a significant state of change. Reliance on more intermittent energy sources and natural gas as an energy source creates new and different electric system dynamics. These dynamics are further amplified in remote northeastern Minnesota where large electric customers dominate MP's system. Minnesota Power is planning to idle Taconite Harbor and preserve the assets so it can be restarted to protect reliability for electric customers in the event of any unforeseen system developments. The Company's electric customers benefit from having Taconite Harbor available to be restarted during a time of great change to the electric industry.

As well, depreciating THEC over six years, as recommended by the Department, would result in higher depreciation costs for customers. Maintaining the remaining useful life of 2026 protects customers from paying these higher costs and provides for an orderly recovery of invested costs that supports the transition of Minnesota Power's small coal fleet. The Department's recommendations would result in additional annual depreciation expense: approximately $9 million if the useful life is 2020 or $25 million if the useful life is 2017. These are material amounts that do not accurately reflect the remaining value or economic benefits of the economic idling for customers.

Staff Analysis

The Commission issued an Order in relation to MP's 2015 Integrated Resource Plan (IRP)[3] regarding THEC between the time of the initial filing in this docket and the date of the briefing papers. The Commission may want to consider its decision in the 2015 IRP when it determines the appropriate remaining life of THEC.

In the 2015 IRP Order, the Commission agreed with Minnesota Power and the Large Power Intervenors that idling Taconite Harbor Units 1 and 2 would provide the Company with needed flexibility to call the units back into service for reliability purposes as it transitions away from coal-fired operations. The idling of these units will also allow the Company to take advantage of inexpensive replacement energy offered in the wholesale market.

The Commission Order required Minnesota Power to idle Taconite Harbor Units 1 and 2 in 2016, retaining the ability to restart them to address reliability or emergency needs on the transmission system, and cease coal-fired operation by the end of 2020. The Commission stated it will consider future refueling and re-missioning opportunities for these units in the context of the Company's next resource plan, which will be filed on February 1, 2018.

To monitor costs and operations during idling, the Commission required annual reports from the Company with the following information:

- Whether THEC Unit 1 and 2 were selected in MISO's annual capacity auction;
- Whether the units will receive capacity accreditation in each MISO planning year;
- How often the units were dispatched in the previous planning year;
- For the previous and upcoming planning year, how much fuel was and will be delivered to the THEC site; and
- Quantification and demonstration of how and why the economic idling of the units is in ratepayers' interests.

Staff notes that this docket is the Company's 2015 depreciation filing and decisions made in this filing will affect the net operating income the Company reported in its 2015 MN jurisdictional annual report. Minnesota Power filed its initial filing in this docket on July 30, 2015. There were multiple extensions requested by both MP and the Department, with final comments in this docket submitted on May 18, 2016.

Staff does not recommend adjusting the remaining life of THEC and recommends leaving the remaining life at 2026. The plants were used and useful in 2015 and the Company is entitled to recover its annual depreciation expense for 2015. The life of THEC is being monitored by interested parties through both the IRP process and the Company's annual depreciation filings. With the uncertainty surrounding the future of the plant, this issue will be revisited in depth by all interested parties in the Company's 2018 IRP.

[3] Docket No. E-015/RP-15-690, In the Matter of Minnesota Power's 2015-2029 Integrated Resource Plan.

Sappi Cloquet Generator No. 5

MP's Sappi/Cloquet Generator No. 5 (S/C5 or SCG) is an approximately 25 megawatt generator installed at Sappi's paper mill in Cloquet, MN. Sappi owns the boiler and other infrastructure at the facility, and operates and maintains the generator. MP owns the generator and the energy output, pays for the fuel and operations and maintenance (O&M) costs related to S/C5, and makes monthly payments to Sappi for the use of Sappi's infrastructure. In its Petition, MP did not request a change to the remaining life of its S/C5, which currently runs through 2024.

The Company stated that Sappi Cloquet exercised an option within the contract to transfer ownership of the generator from Minnesota Power to Sappi Cloquet on July 1, 2016. The Company requested the assets be treated as normal retirements and the remaining depreciable balance be depreciated over the remaining useful life of the plant which is currently estimated to be 2024. MP stated that maintaining the current remaining life would allow the Company to recover the undepreciated portion of S/C5 without significant impacts to ratepayers.

The Department concluded that a reasonable remaining life for S/C5 for depreciation purposes is one that matches the expected operational life. The Department recommended a two-year remaining life for S/C5. A two-year remaining life will result in S/C5 being fully depreciated when it is removed from MP's operations, and ratepayers in subsequent years will not have to pay for a generator that is providing no energy or other benefits. The Department estimated that the change will increase annual depreciation expense by $1.1 million relative to MP's proposal.

Minnesota Power disagreed with the Department's recommendation and requested approval of the remaining life of ten years for Sappi for the following reasons:

1) Minnesota Power will be left with unrecovered costs if Sappi exercises its option to buy the generator. Because it is difficult to predict exactly how long an asset will be productive, assets often remain in service for time periods different than their estimated useful lives. In the case of a premature retirement, the Company should be able to recover all of the plant's direct cost even though the plant did not operate as long as expected. As the Company has proposed for THEC Unit 3, Minnesota Power proposes that the remaining plant balance continue to be depreciated over the original useful life of 2024 as a way to recover these costs without significant impacts to ratepayers. MP customers continue to benefit from the capacity of the S/C5 unit on the broader capacity system capability

2) Adjusting the remaining life so that the assets are fully depreciated by December 2016 results in higher depreciation expense over a significantly shorter period, which negatively impacts Minnesota Power's ratepayers. Minnesota Power proposes that the remaining plant balance continue to be depreciated over the original useful life of 2024 to avoid these negative impacts to ratepayers.

Staff Analysis

In 2000, MP acquired a 15 year ownership interest in S/C5 at Sappi's Cloquet paper mill as a non-regulated asset. The turbine generator was operated as an unregulated asset until the

Company's 2008 rate case,[4] in which the Commission determined that S/C5 should be included in rate base and expenses for the test year.

In the 2008 rate case the Department recommended that the Sappi facility should be included in the test year revenue calculations, as regulated utility property. The Department noted that this rate case was the Commission's first opportunity to consider whether to require the inclusion of Sappi in the regulated rate base.

Minnesota Power and the LPIs recommended that the Sappi generator should not be included in rate base. They argued that the Sappi generator is not a stand-alone facility capable of producing meaningful amounts of electricity unless the paper mill is operating. As a consequence, it is unclear what portions of the Sappi generator are properly included in rate base. They also argued that effect on ratepayers would be minimal. MP stated it would not oppose inclusion of the turbine generator in a future rate case, if allowed to recover reasonable costs.

The ALJ concluded that the Sappi generator should be included in rate base. First, the ALJ found that since the Sappi generator's output does not go directly to Sappi's Cloquet mill, the Sappi generator is not physically a cogeneration facility. Rather, all of the Sappi generator's output goes into MP's retail distribution system and is therefore available to all of the Company's retail customers. Conversely, Sappi obtains all of the electrical power needed to operate its Cloquet mill from MP's retail distribution system, like other retail customers. MP has supplied the Sappi mill and has operated the Sappi facility since it was constructed. Although Sappi owns the property on which the facility was constructed and some of the infrastructure, it has never been directly involved in its operation.

The ALJ further found that while Sappi also possesses an option to purchase the facility that is exercisable in 2016, there was no evidence at the time that Sappi was involved in negotiations to do so. Moreover, the ALJ noted, any exercise of that option will not occur before MP files its next rate case. In addition, if Sappi indicates an intent to purchase the Sappi generator in 2016, there will have to be a proceeding before the Commission during which removal of the Sappi generator from the rate base could be considered. In these circumstances, the ALJ concluded, the Sappi generator should be accorded rate base treatment now.

The ALJ further stated that if his recommendation to place the Sappi generator in rate base were adopted, MP's revenue and O&M expenses should be adjusted to reflect that decision. With respect to those adjustments, the ALJ found that MP has shown that its revenue estimates are reasonable and should be adopted and that the Department has shown that its O&M cost calculation is reasonable. (Staff questions why a remaining life of 15 years was assigned to S/C5 in the 2008 rate case, and perhaps again in the 2009 rate case, and in subsequent remaining lives petitions filed since the 2008 and 2009 rate cases, when the remaining life could have been set to match the remaining length of the contract.)

[4] Docket No. E-015/GR-08-415, In the Matter of the Application of Minnesota Power for Authority to Increase Electric Service Rates in Minnesota, Commission Order Dated May 4, 2009, pp. 30-32

The Commission adopted the ALJ's recommendation and required the Sappi generator to be included in rate base. In addition, the Commission adopted the ALJ's recommendation to approve appropriate adjustments resulting from the decision to include the Sappi generator in rate base. Specifically, the Commission will approve MP's revenue estimates for the Sappi generator and the Department's O&M cost calculation. As a consequence, rate base will increase by $3,844,016 and test year net income will increase by $466,433.

The Commission required MP to include in its next rate case filing: 1) full information on the status of the Sappi/MP arrangement, 2) schedules of rate base, revenues and expenses sufficient to properly review for inclusion in rate base, and 3) arguments supporting MP's position on whether the Sappi generator should or should not continue to be incorporated into the rate base. However, it appears the Commission's Order in the 2009 rate case is silent with respect to this issue.[5]

Staff notes that this docket is the Company's 2015 depreciation filing and decisions made in this filing will affect the net operating income the Company reported in its 2015 MN jurisdictional annual report. Minnesota Power filed its initial filing in this docket on July 30, 2015.

Sappi exercised its option to buy the generator and the closing on the transfer to Sappi took place on June 30, 2016. Sappi became self-generating and MP will buy any excess generation. At this time staff does not recommend adjusting the remaining life of S/C5. The plants were used and useful in 2015 and the Company is entitled to recover its annual depreciation expense for 2015.

Through conversations with representatives of the utility it was determined that MP will file a rate case in November of 2016, using a 2017 test year. The issue of removing the asset from rate base and the associated cost recovery could be addressed during the course of the rate case proceeding. This seems like the most logical place to deal with the removal of the assets from test year plant in service and test year expenses and whether any additional recovery of undepreciated assets should be considered.

The other option would be to revisit the issue in the Company's 2016 depreciation filing. If the Commission were to determine that removal of the asset is appropriate in the depreciation filing, the expenses associated with the asset could be removed from the Company's depreciation expense, but the asset could not be removed from rate base. The Company would reflect a lower depreciation expense in 2016, which benefits the Company. The Company would also be allowed to recover a return on and a return of the undepreciated portion of the asset which remains in rate base. Both are a benefit to the Company.

Salvage Rates

Minnesota Power proposed new salvage rates for each of its thermal and wind facilities based on a Decommissioning Study of its assets completed in 2015. The Company proposed no changes to

[5] Docket No. E-015/GR-09-1151, In the Matter of the Application of Minnesota Power for Authority to Increase Rates for Electric Service in Minnesota, Commission Order Dated November 2, 2010

the salvage rates of its other generation facilities and its general plant accounts. The Department reviewed the 2015 Decommissioning Study and the resulting salvage rates and concluded that they are reasonable, with two exceptions described below.

Salvage Rates	MP	DOC – initial position
Taconite Harbor Energy Center	Negative 4.66 percent	Approve a salvage rate for THEC based on the 2015 Decommissioning Study that includes either (a) an updated coal pile remediation cost estimate or (b) the coal pile remediation cost estimate from the 2013 Decommissioning Study.
Laskin Energy Center	Negative 15.29 percent	Negative 26.02 percent

Taconite Harbor Energy Center

The 2015 Decommissioning Study inadvertently omitted the estimated cost of Taconite Harbor coal pile remediation. The Department recommended using the number from the 2015 study if it was available in time for use in this filing. If not, Department recommended using the coal pile remediation number from the 2013 Decommissioning Study and update the number in MP's next depreciation filing.

MP agreed with the Department's recommendation to include an updated coal pile remediation cost from its 2015 Decommissioning Study. MP proposed an updated THEC salvage rate of negative 5.23 percent based on an updated coal pile remediation cost estimate of $1.1 million. The effect of the Company's proposal would increase depreciation expense by $0.1 million.

Staff finds the Company's recommendation to be reasonable. The Commission may want to ask the Department if they agree to the adjustment as the Department did not file response comments indicating whether it agrees or disagrees with the Company's proposed adjustment.

Laskin Energy Center

Minnesota Power proposed salvage rate for Laskin based on the decommissioning cost estimate in its 2015 Decommissioning Study. The 2015 Decommissioning Study did not account for the Environmental Protection Agency's (EPA) new Coal Combustion Residual (CCR) rule issued in December 2014. To account for the effect of the CCR rule, Minnesota Power conducted a Supplemental Study for Laskin. The Department concluded this cost estimate represents the best estimate of LEC's landfill and pond closure costs and recommended using the estimate from the supplemental study.

In its Petition, MP proposed a salvage rate of negative 15.29 percent for Laskin, based on a decommissioning cost estimate of $15.3 million, which includes estimated landfill and pond closure costs of $8.2 million.

The Department stated that the salvage rate for Laskin was a source of controversy in Docket No E-015/D-13-275 (MP's 2013 Depreciation Docket), due to the fact that MP proposed salvage rates based on a 2009 Decommissioning Study, rather than a more recent study conducted in

2011. The Department recommended using the results of the 2011 Decommissioning Study. The Commission ultimately approved a salvage rate for Laskin based on the 2013 Decommissioning Study, which was completed before the 2013 Depreciation Docket was concluded. For Laskin in particular, the differences in cost estimates between the various studies were significant, as summarized in the Department's table[6] below.

Year of Decommissioning Study	Laskin Decommissioning Cost Estimate
2009	$8.6 million
2011	$26.8 million
2013	$11.7 million

The wide variation in LEC's decommissioning cost estimates in the 2009, 2011, and 2013 decommissioning studies is largely the result of changing assumptions regarding the treatment of the facility's ash ponds.

MP provided the Department with an updated cost estimate for landfill and pond closure for Laskin, based on the Supplemental Laskin Study. The Department considers this cost estimate to represent the best estimate of LEC's landfill and pond closure costs as it is based on a plan that complies with the new CCR rule, whereas the estimate included in the 2015 Decommissioning Study does not.

The Department substituted the landfill and pond closure estimate from the Supplemental Laskin Study for the same estimate in the 2015 Decommissioning Study and calculated a new salvage rate for Laskin of negative 26.02 percent. The Department recommended that the Commission approve the Department's modified salvage rate for Laskin.

Minnesota Power disagreed with the Department's recommendation and requested approval of the salvage rate of negative 15.29 percent for Laskin as proposed in the Petition. Minnesota Power stated it has provided an amended closure plan to the Minnesota Pollution Control Agency (MPCA) and the MPCA will determine the scope of the Laskin ash pond decommissioning. Once the scope is determined, which is expected before the Company files its 2016 Remaining Life Depreciation Petition, Minnesota Power will have an approved plan. At that time Minnesota Power's decommissioning study will be updated with a known and supportable estimate.

As the Department noted in its Comments, there has been volatility in LEC's ash pond decommissioning cost estimates. Because of this, Minnesota Power proposed to update the salvage rate in its 2016 filing. The Company stated that the cost estimate of $16 million for landfill and pond closure at Laskin that the Department recommended using is subject to MPCA approval and the final cost estimate is highly dependent on that approval. The cost estimate used in this filing is the mid-point of a range between $12 million and $24 million. The Company

[6] Sources: MP Depreciation Finings and 2013 IRP.

expects an updated engineering estimate will be completed in 2016, based on the approved MPCA plan, and an appropriate cost estimate will be developed. The Company believes it is reasonable and more appropriate to wait one year and update the 2016 Remaining Life Depreciation Petition with more accurate information.

Staff finds the Company's recommendation to be reasonable. The Commission may want to ask the Department if they are agreeable to the Company's proposal as the Department did not file response comments indicating whether it agrees or disagrees with the Company's proposal.

Due Dates

Minnesota Power requested the Commission make depreciation filings due at the same time as the Integrated Resource Plan (IRP) in the years the Company is ordered to file an IRP. If the IRP is due before April 15, the Company requested the due date for the depreciation filing remain at April 15. (MP's next IRP is due February 1, 2018.)

The Department stated it does not object to Minnesota Power's proposal to have its depreciation filing due on the same date as its IRP in the years the Company files an IRP, but did not make a recommendation for the Commission to consider.

The Department stated it does not strongly oppose MP's proposal, the Department views it as unnecessary. Electric utilities generally file depreciation petitions annually, so if a utility files an IRP a few months after depreciation petition, and the assumptions in the IRP are not consistent with the depreciation petition, the assumptions can be reflected in the next depreciation petition. Additionally, when comparing depreciation filings to IRPs, the Department generally looks for consistency between the current depreciation filing and the Company's most recently approved IRP, rather than its most recently filed IRP. A recently filed, but as yet unapproved IRP may contain proposed changes that have not been fully reviewed by the Department or other parties and that may ultimately be rejected by the Commission. It could be difficult for the Department and, more importantly the Commission, to reach informed conclusions on any such changes proposed in a depreciation petition.

Staff agrees with the Department on this issue. When reviewing the depreciation filing staff would look to the Company's most recently approved IRP, rather than its most recently filed IRP. It is up to the Company if it wants to file an IRP at the same time as it submits its depreciation filing.

Staff notes that in the Commission's last decision on MP's remaining life depreciation petition for 2014, MP was required

> In future remaining-life depreciation filings the Company shall provide a comparison of the remaining lives used in its depreciation filing to the Company's most recent

integrated resource plan and explain any differences.[7]

The Order does not specify whether most recent integrated resource plan means the most recently authorized plan or the pending plan. Regardless, for 2016 and 2017, the most recent will mean the 2015-2029 plan authorized in 2016.

Decommissioning Probabilities

MP uses decommissioning probabilities to estimate the probability of a plant being retired at the end of its remaining life. The Commission's Order in MP's 2014 Depreciation Docket required MP to include in its Petition an estimate of what its depreciation expense would be with 100 percent decommissioning probabilities. The Company's Petition included a calculation of this estimate. MP's depreciation expense would be approximately $2.7 million higher if did not use decommissioning probabilities.

The Department concluded that MP met this requirement.

On October 26, 2015, the Commission issued its Order in Docket No. E,G-999/CI-13-626, the Commission's Inquiry into Decommissioning Policies Related to Depreciation. In that Order, the Commission required MP to stop using decommissioning probabilities when it files its next rate case. Staff notes that this issue will be addressed during the course of the Company's next rate case. The Company has stated its intention to file a rate case in November 2016.

Decision Alternatives

Remaining Lives

1.) Approve MP's proposed remaining lives, except for the lives proposed for Taconite Harbor Energy Center and Sappi/Cloquet Generator No. 5 (MP, Department); AND

Remaining Life – Laskin Energy Center:

2.) Allow MP to depreciate the Laskin Energy Center through the end of 2030, a life extension of six years. (MP); OR

3.) Lengthen the period over which MP is required to depreciate the Laskin Energy Center to 25 to 30 years. (LPI).

Remaining Life - Taconite Harbor:

[7] Order Approving Remaining Lives As Modified, Approving Salvage Rates, And Requiring Filings, In the Matter of Minnesota Power's 2014 Remaining Life Depreciation Petition and Production Plant Depreciation Study, Docket No. E-015/D-14-318, January 16, 2015

4.) Allow MP to continue to depreciate THEC through the end of its current remaining life of 2026, or 12 years. (MP); OR

5.) Shorten the period over which MP is allowed to depreciate THEC to 6 years or 2020. (Department preferred); OR

6.) Determine a remaining life of THEC to be between 6 and 12 years, or 2020 to 2026 based upon what the Commission determines is a reasonable remaining life for the facility. (Department Alternative).

Remaining Life – Sappi/Cloquet Generator No. 5:

7.) Allow MP to continue to depreciate S/C No. 5 through the end of its current remaining life of 10 years or 2024 (MP); OR

8.) Shorten the period over which MP is allowed to depreciate S/C No. 5 to 2 years or 2024 (Department).

Salvage Rates

9.) Approve MP's proposed salvage rates, except for the salvage rates proposed for Taconite Harbor Energy Center and Laskin Energy Center (MP, Department); AND

Salvage Rate – Taconite Harbor:

10.) Approve MP's salvage rate of negative 5.23 percent for THEC, based on the 2015 Decommissioning Study (MP, Department); OR

11.) Require MP to use the coal pile remediation estimate for THEC from the Company's 2013 Decommissioning Study and the resulting salvage rate (Department Initial).

Salvage Rate – Laskin:

12.) Approve a salvage rate of negative 15.29 percent for LEC based on MP's estimated landfill and pond closure costs (MP); OR

13.) Approve a salvage rate of negative 26.02 percent for LEC based on the estimate from the Laskin Supplemental Study. (Department).

Housekeeping Issues

14.) Approve MP's request to have its depreciation filings be due on the same date as its IRPs in years the Company files an IRP (MP); OR

15.) Do not approve MP's request to have its depreciation filings be due on the same date as its IRPs in years the Company files an IRP (Department).

16.) Require MP to include in future depreciation filings a comparison of the remaining lives used in its depreciation filing to the Company's most recent integrated resource plan and explain any differences (MP, Department); OR

17.) Do not require MP to include in future depreciation filings a comparison of the remaining lives used in its depreciation filing to the Company's most recent integrated resource plan and explain any differences.

18.) Require MP to include in its next depreciation filing an analysis comparing its depreciation expense using its current decommissioning probabilities to its depreciation expense using 100 percent decommissioning probabilities (MP, Department); OR

19.) Do not require MP to include in its next depreciation filing an analysis comparing its depreciation expense using its current decommissioning probabilities to its depreciation expense using 100 percent decommissioning probabilities.

20.) Require MP to include in its next depreciation filing a schedule of its supplemental depreciation expense recorded in the prior year as well as the supplemental depreciation expense to be recorded in the future (MP, Department); OR

21.) Do not require MP to include in its next depreciation filing a schedule of its supplemental depreciation expense recorded in the prior year as well as the supplemental depreciation expense to be recorded in the future.

22.) Require MP to make its next depreciation filing on or before September 1, 2016 to establish depreciation parameters and rates to be effective January 1, 2016 (MP, Department); OR

23.) Do not require MP to make its next depreciation filing on or before September 1, 2016 to establish depreciation parameters and rates to be effective January 1, 2016.

Staff Recommendation

1, 2, 4, 7, 9, 10, 12, 14, 16, 18, 20, 22