

August 15, 2014

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

RE: Comments of the Minnesota Department of Commerce, Division of Energy Resources
Docket No. E015/D-14-318

Dear Dr. Haar:

Attached are the Comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

Minnesota Power's 2014 Remaining Life Depreciation Petition.

The petition was filed on April 15, 2014 by:

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

The Department recommends **approval, with modifications**. The Department is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ CRAIG ADDONIZIO Financial Analyst

CA/ja Attachment



BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS OF THE MINNESOTA DEPARTMENT OF COMMERCE DIVISION OF ENERGY RESOURCES

DOCKET NO. E015/D-14-318

I. SUMMARY OF MINNESOTA POWER'S PROPOSAL

On April 15, 2014, Minnesota Power (MP or the Company) submitted its 2014 Remaining Life Depreciation Petition (2014 Depreciation Petition). The Company has reviewed its remaining lives and estimated salvage value for its thermal, hydroelectric and wind production facilities and proposes to extend the life of its Laskin Energy Center plant, as well as the lives of all of its hydroelectric generating facilities. For all other units, the Company proposes one-year adjustments to reflect the passage of time. Additionally, the Company proposes to slightly reduce the salvage rates for its Boswell and Taconite Harbor Energy Centers and introduce for the first time a salvage rate for its Hibbard Renewable Energy Center. The Company proposes to leave the salvage rate for the Laskin Energy Center unchanged. Finally, for the Company's general plant accounts for which it uses remaining-life depreciation, the Company proposes one-year passage-of-time remaining life adjustments and no changes to salvage rates.

The Department estimates that the effect of MP's proposed depreciation rates is a decrease in annual depreciation expense of \$3.9 million, or approximately 5.6 percent, relative to what depreciation expense would be if the Company were to retain its current depreciation rates.¹

¹ See Department Attachment No. 1. In Appendix A to the 2014 Depreciation Petition, the Company estimates that the proposed depreciation rates would result in a decrease of \$2.4 million. However, as discussed below, MP filed the 2014 Depreciation Petition before its Petition in Docket No. E015/D-13-275 (the 2013 Depreciation Docket) came before the Commission. The salvage rates the Commission ultimately approved in the 2013 Depreciation Docket were higher than the rates assumed to be "current" in the 2014 Depreciation Petition. The Department recalculated the effect of the proposed depreciation parameters incorporating the salvage rates approved by the Commission in the 2013 Depreciation Docket.

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Analyst assigned: Craig Addonizio

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II. DEPARTMENT ANALYSIS

The Department examined MP's 2014 Depreciation Petition for compliance with filing requirements and previous Orders from the Minnesota Public Utilities Commission (Commission), consistency with the Company's Integrated Resource Plan and reasonableness of the proposed depreciation parameters and the resulting accruals.

A. DEPRECIATION RULES

Minnesota Statutes Section 216B.11 and Minnesota Rules, parts 7825.0500-7825.0900 require public utilities to seek Commission certification of their depreciation rates and methods. Utilities must use straight-line depreciation unless the utility can justify a different method. Additionally, utilities must review their depreciation parameters and rates annually to determine if they are generally appropriate, and must file depreciation studies at least once every five years. Once certified by order, depreciation parameters remain in effect until the next certification.

As required, MP employs a straight-line depreciation method, and files annual depreciation studies for its generation assets.

B. PRIOR COMMISSION ORDERS

1. Comparison of Depreciation Remaining Lives and Resource Planning Remaining Lives

The Commission's June 2, 2014 Order in the 2013 Depreciation Docket, required MP to include in its 2014 Depreciation Study "a comparison of the remaining lives used in its depreciation filing and current resource plan and an explanation of any differences." The Company provided this information on pages 8-13 of its 2014 Depreciation Petition. After review, the Department concludes that the remaining lives assumed in the 2014 Depreciation Petition are generally consistent with the remaining lives assumed in the Company's most recent resource plan (Docket No. E015/RP-13-53) and that the Company has adequately explained any differences.

The Department recommends that the Commission require MP to continue to provide in future remaining life depreciation studies a comparison of the remaining lives used in its depreciation filing and in the utility's then-current resource plan, and an explanation of any differences.

2. Depreciation Expense Calculated Without Decommissioning Uncertainties

The Commission's Order in the 2013 Depreciation Docket also required MP to provide in the 2014 Depreciation Petition "an analysis comparing its depreciation expense calculated using its current decommissioning probabilities to its depreciation expense calculated using a 100% decommissioning probability." In Docket No. E015/D-12-378 (the 2012 Depreciation Docket), the Department questioned whether MP's use of decommissioning probabilities is consistent with the requirement of straight-line depreciation. In short,

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decommissioning probabilities are used to adjust the amount of decommissioning expense included in overall depreciation expense to reflect the uncertainty surrounding the retirement dates of the depreciating assets.² As a unit ages and its retirement date becomes more certain, its decommissioning probability will be adjusted upwards, and its decommissioning expense will increase as a result. Depending on its timing and size, a change in a decommissioning probability could cause a significant increase in depreciation expense towards the end of an asset's life. The Commission has initiated a generic docket (Docket No. E,G-999/Cl-13-626) to investigate decommissioning probabilities.

MP included the required analysis in Appendix B of its 2014 Deprecation Study. MP's analysis indicated that its 2014 depreciation expense would increase by \$2.2 million dollars, or 3.3 percent if all decommissioning probabilities were set to 100 percent. The Department concludes that MP has complied with the Commission's Order and notes that this calculation was intended for informational purposes only and does not have any impact on MP's proposed depreciation parameters.

The Department recommends that the Commission require MP to include in its next remaining life depreciation study an analysis comparing its depreciation expense calculated using its current decommissioning probabilities and its depreciation expense calculated without decommissioning uncertainties.

3. Supplemental Depreciation

Lastly, the Commission's Order in the 2013 Depreciation Docket also required MP to provide in the 2014 Depreciation Petition a schedule of its supplemental depreciation expense recorded in 2013 as ordered by the Commission in the 2012 Depreciation Docket and a summary of supplemental depreciation expense to be recorded in the future. The Company included this schedule in Appendix C of its 2014 Depreciation Petition. After review, the Department concludes that MP has reasonably complied with this requirement.

The Department recommends that the Commission require MP to continue to provide in future remaining life depreciation filings a summary of supplemental depreciation expense recorded in the prior year, as well as the supplemental expense to be recorded in the future.

C. REASONABLENESS OF PROPOSED DEPRECIATION PARAMETERS

1. Remaining Lives

In its 2014 Depreciation Petition, MP proposed a six-year extension to the remaining life of Laskin Energy Center (Laskin). The Company also proposed to set the remaining lives of all of its hydroelectric generating facilities to 50 years. As shown in Table 1 below, the current remaining lives of the Company's hydroelectric generating facilities ranged from 7.8 years to

 $^{^{2}}$ See the Department's July 27, 2012 Comments in the 2012 Depreciation Docket for a more detailed explanation.

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22.3 years. Thus, the Company is proposing life extensions for these facilities ranging from 27.7 years to 42.2 years. MP proposed one-year reductions to the remaining lives of all other generating units to reflect the passage of time.

Table 1
Proposed Life Extensions

	Remair	ning Life	
	Current	Proposed	Extension
Laskin Energy Center	11.0	17.0	6.0
Hydro Electric Production Plants			
Prairie River HE Station	7.8	50.0	42.2
Thomson HE Station	18.1	50.0	31.9
Fond du Lac HE Station	16.7	50.0	33.3
Winton HE Station	22.3	50.0	27.7
Knife Falls HE Station	16.3	50.0	33.7
Scanlon HE Station	16.1	50.0	33.9
Little Falls HE Station	8.8	50.0	41.2
Blanchard HE Station	17.8	50.0	32.2
Sylvan HE Station	8.0	50.0	42.0
Pillager HE Station	11.8	50.0	38.2
Birch Lake Reservoir	22.3	50.0	27.7
Boulder Lake Reservoir	18.6	50.0	31.4
Fish Lake Reservoir	18.6	50.0	31.4
Island Lake Reservoir	18.6	50.0	31.4
Rice Lake Reservoir	18.6	50.0	31.4
Whiteface Reservoir	18.6	50.0	31.4
Gauging Stations	18.2	50.0	31.8
White Iron Lake Reservoir	22.3	50.0	27.7

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a. Laskin Energy Center

In Minnesota Power's most recent Integrated Resource Plan, Docket No. E015/RP-13-53 (the 2013 IRP), the Commission approved a plan to convert Laskin from a coal-fired unit providing base load and peaking energy to a natural gas-fired peaking unit by the end of 2015 at a cost of \$14 million.³ The Department notes that Laskin's gross plant balance on December 31, 2013 was \$80.0 million. On page 11 of its 2014 Depreciation Petition, the Company stated that it believes that a gas peaking generation facility has a 15-year life. Based on this belief, MP proposed a remaining life of 17 years for Laskin, implying a retirement year of 2030, or 15 years after the conversion to natural gas is scheduled to be completed.

In Information Request No. 5, the Department asked MP to explain why it proposed a life extension in this Docket, rather than waiting until the converted plant is placed in service. In its response, MP explained that its requested life extension is based on the Commission's approval of the conversion plan in the 2013 IRP, and on MP's expenditures to date on this project of approximately \$4 million. Additionally, MP noted that in Docket No. E015/D-07-316 (MP's 2007 Depreciation Docket), the Commission approved a life extension of Boswell Unit 3 based on a Commission-approved improvement project that was not placed in service until late 2009.

The Department agrees that the approved conversion project will result in a life extension for Laskin, and that the Company's assumed 15-year life is reasonable, though conservative. However, the Department questions whether the proposed life extension should take place now or in the future. The 2007 Boswell Unit 3 life extension notwithstanding, the Department generally prefers that life extensions resulting from specific capital projects such as installation of environmental controls or refueling projects (rather than expensive. but expected, maintenance and replacement) occur when those projects are placed in service, or are close to being placed in service. In this case, the depreciation parameters the Commission eventually approves in this Docket will take effect January 1, 2014, nearly two years before the conversion project is expected to be placed in service, and therefore nearly two years before MP's ratepayers will receive any operational benefits from the project. Because depreciation on the new assets will not begin until those assets are placed in service, if the Commission were to approve the requested life extension for Laskin in this Docket MP would enjoy the benefits of lower depreciation expense without a corresponding decrease in rates beginning January 1, 2014, and MP's ratepayers would not receive any of the financial benefits of the life extension unless and until the Company files a rate case which reflects the new, longer life.

³ See MP's response to Department Information Request No. 5, part d, included with these Comments as Attachment No. 2.

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Based on this, the Department recommends that the Commission approve a remaining life of 11 years for Laskin, which reflects a reduction of one year from Laskin's most recently approved remaining life to account for the passage of time. MP can propose a life extension for Laskin in a future depreciation study, at which time the Department and the Commission can reevaluate the progress of the conversion project and its expected in-service date.

b. Hydroelectric Facilities

Historically, the remaining lives of the Company's hydroelectric facilities (HE facilities) have been linked to the expiration of the facilities' licenses from the Federal Energy Regulatory Commission (FERC). Because those licenses of its facilities expire at different times, the current remaining lives of MP's HE facilities range from 8.7 to 22.3 years. As noted above, MP proposed to set the remaining life of all of its HE facilities to 50 years, which translates to remaining life extensions ranging from 27.7 years to 42.2. On page 6 of its 2014 Depreciation Petition, MP stated that its proposed life extensions are based largely on significant capital investments in these facilities, due primarily to the historic rainfall event in 2012 which damaged the Company's Thomson Station facility, as well as planned capital investments.

In its response to Department Information Request No. 7, MP explained its reason for setting a single remaining life for all of its HE Facilities, explaining that it manages and operates all of its HE facilities as a single overall system.⁴

Additionally, MP quantified the capital investments it has made in its HE facilities in the last several years. The Department notes that, over the period 2009-2013, MP invested \$31 million in its HE facilities, which represents a third of those facilities' 2013 end-of-year plant balance.⁵ In addition, following the historic rainfall event in 2012, MP has initiated a \$90 million project to repair and improve the Company's Thomson HE Station.⁶ A significant portion of this (approximately \$30 million) is expected to be placed in service in 2014. In its response to Department Information Request No. 7, MP also stated that the capital investments MP has recently completed or plans to complete are designed to extend the remaining lives of its HE facilities well in excess of the current licenses. MP stated that it expects to successfully relicense these facilities as their current licenses expire. Lastly, in response to Department Information Request No. 6, MP stated that in its internal engineering judgment, these facilities can be expected to last at least 50 years with routine maintenance.⁷

While the Department understands that relicensing is not a trivial process, the Department agrees that it is appropriate to set remaining lives for MP's HE Facilities that extend beyond the current expiration dates of the facilities' licenses. MP's proposed remaining lives are more consistent with the Company's operational plans for these facilities, and are

⁴ See Attachment No. 3.

⁵ See MP''s 2010-2014 Depreciation Petitions.

⁶ See Docket No. E015/M-14-577.

⁷ See Attachment No. 4.

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achievable with routine maintenance. Based on this, and the significant planned capital investments in the Company's HE facilities over the period 2009-2014, the Department concludes that the proposed life extensions are reasonable.

2. Salvage Rates

In the 2014 Depreciation Petition, MP proposed new salvage rates for its Laskin, Boswell, and Taconite Harbor plants. MP also proposed to establish, for the first time, a salvage rate for its Hibbard Renewable Energy Center. These salvage rates are based on a 2013 decommissioning study, conducted by the Company for use in the 2014 Depreciation Petition.⁸ The Company's proposed rates are summarized in column [c] of Table 2 below.

Table 2 Summary of Salvage Rates

		Salvage Rates:	
	Proposed in	Calculated in	Proposed in
	2013 Depreciation	2013 Depreciation	2014 Petition
	Docket Based on	Docket Based on	Based on
	2009 Decomm. Study	2011 Decomm. Study	2013 Decomm. Study
	[a]	[b]	[c]
Hibbard Renewable Energy Center	n/a	n/a	-2.42%
Laskin Energy Center	-10.87%	-33.95%	-14.5%*
Boswell Energy Center			
Unit 1	-1.82%	-6.92%*	-6.09%
Unit 2	-2.27%	-9.13%*	-7.90%
Unit 3	-4.19%	-4.93%*	-4.50%
Unit 4	-3.84%	-4.88%*	-4.62%
Common	-1.77%	-2.89%*	-2.06%
Taconite Harbor Energy Center	-3.60%	-5.91%*	-4.16%

^{*} Approved in 2013 Depreciation Docket

MP's salvage rates were a source of controversy in the 2013 Depreciation Docket due to the fact that in that Docket, MP proposed salvage rates which were calculated using a decommissioning study conducted in 2009, rather than the then-most recent decommissioning study, conducted in 2011. In that Docket, the Commission ultimately approved the salvage rates based on the 2011 Decommissioning Study for Boswell and Taconite Harbor. For Laskin, the Commission approved a salvage rate based on the 2013 Decommissioning Study (MP's 2014 Depreciation Study had already been filed by the time the 2013 Depreciation Docket came before the Commission). In its June 2, 2014 Order in the 2013 Depreciation Docket, the Commission required MP to submit a compliance filing

⁸ The 2013 Decommissioning Study is contained in Appendix D of the 2014 Petition.

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explaining the differences between the decommissioning estimates produced in the three studies. MP submitted the required filing on May 23, 2014 (May Compliance Filing).

Table 3 summarizes the decommissioning estimates from the 2011 and 2013 Decommissioning Studies by cost category for each of MP's four plants that have non-zero salvage values. Most of the differences seem to be attributable to improved estimates of required person-hours and labor rates. Additionally, MP used current scrap values for steel and copper in each filing, and thus the differences between the studies appear to be reasonable. As shown, the two cost categories that account for most of the differences between the two studies are Project Contingency and Landfill and Pond Closure.

Table 3
Comparison of Decommissioning Estimates from the 2011 and 2013 Decommissioning Studies by Cost Category (\$000s)

		Bosy	well			Hibb	ard	
	2011	2013	\$ Diff.	% Diff.**	2011	2013	\$ Diff.	% Diff.**
Mobilization	150	150	-	-	150	150	-	-
Demolition & Disposal	27,245	25,999	(1,246)	-1.3%	6,603	6,598	(5)	-0.1%
Asbestos Abatement Allowance	1,723	1,691	(32)	0.0%	219	205	(14)	-0.3%
Galbestos Removal & Disposal	518	518	-	-	87	-	(87)	-1.6%
Other Hazardous Material Disposal	205	188	(17)	0.0%	502	81	(421)	-7.7%
Site Grading & Fill	1,717	1,734	17	0.0%	30	507	477	8.7%
Site Restoration	99	102	3	0.0%	-	31	31	0.6%
Landfill and Pond Closure	58,622	56,885	(1,737)	-1.8%	-	-	-	-
Total Project Costs Excl. Contingency	90,279	87,267	(3,012)	-3.1%	7,591	7,572	(19)	-0.3%
Project Contingency*	18,056	8,727	(9,329)	-9.7%	1,518	757	(761)	-13.9%
Total Project Costs	108,335	95,994	(12,341)	-12.8%	9,109	8,329	(780)	-14.3%
Scrap Value	(11,692)	(8,339)	3,353	3.5%	(3,643) (2,815)	828	15.1%
Net Project Costs	96,643	87,655	(8,988)	-9.3%	5,466	5,514	48	0.9%
	Laskin			Taconite	Harbor			
	2011	2013	\$ Diff.	% Diff.**	2011	2013	\$ Diff.	% Diff.**
Mobilization	150	150	_	_	150	150	_	_
Demolition & Disposal	3.760	2.969	(791)	-3.0%	5.867		(985)	-9.0%
Asbestos Abatement Allowance	643	643	-	-	1,869	· L	-	-
Galbestos Removal & Disposal	-	-	-	-	594		30	0.3%
Other Hazardous Material Disposal	205	211	6	0.0%	183	167	(16)	-0.1%
Site Grading & Fill	1,002	1,012	10	0.0%	1,291	764	(527)	-4.8%
Site Restoration	61	63	2	0.0%	132	147	15	0.1%
Landfill and Pond Closure	19,279	7,800	(11,479)	-42.9%	2,744	1,849	(895)	-8.2%
Total Project Costs Excl. Contingency	25,100	12,848	(12,252)	-45.7%	12,830	10,452	(2,378)	-21.8%
Project Contingency*	5,020	1,285	(3,735)	-13.9%	2,566	1,045	(1,521)	-14.0%
Total Project Costs	30,120	14,133	(15,987)	-59.7%	15,396	11,497	(3,899)	-35.8%
Scrap Value	(3,332)	(2,565)	767	2.9%	(4,500) (3,458)	1,042	9.6%
Net Project Costs	26,788	11,568	(15,220)	-56.8%	10,896	8,039	(2,857)	-26.2%

Sources: 2011 Decommissioning Study, filed on March 29, 2013 in Docket No. E015/RP-13-53

²⁰¹³ Decommissioning Study, Appendix D of 2014 Depreciation Petition

^{* 20%} in 2011; 10% in 2013

 $[\]ensuremath{^{**}}$ Calculated as \$ Diff. divided by 2011 Net Project Costs

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On page two of its May Compliance Filing, MP explained that the project contingency is a cost provision meant to address uncertainty in project costs, including regulatory outlooks. On page three of the May Compliance Filing, the Company explained that in its 2004 and 2009 Decommissioning Studies, the Company utilized a contingency of ten percent. In its 2011 Decommissioning Study, MP utilized a contingency of 20 percent and stated that this was the standard contingency used by the engineering firm contracted to conduct the decommissioning study, Burns & McDonnell.⁹ In the 2013 Decommissioning Study, MP reverted back to 10 percent contingency.

In the May Compliance Filing, MP justified the use of the larger contingency in the 2011 Decommissioning Study as a function of the heightened concern around the disposal and storage of coal ash. This concern is directly related to the other major difference between the 2011 and 2013 Decommissioning Studies, Landfill and Pond Closure.

As shown in Table 3 above, the change in the estimated cost of decommissioning the ash ponds is the single largest change between the 2011 and 2013 Decommissioning Studies. Additionally, the Department notes that in the 2009 Decommissioning Study, MP estimated the cost of closing Laskin's ash ponds to be \$4.5 million, less than 25 percent of the amount estimated in the 2011 Decommissioning Study.

On page 4 of the May Compliance Filing, MP stated that the Laskin ash ponds consist of five cells (A, B, C, D and E) covering about 125 acres. Cell E is the only cell currently operating. MP explained that in 2002, it submitted a closure plan to the Minnesota Pollution Control Agency (MPCA) that included relocating all ash from Laskin Cells A and B to Cell E upon closure of Cell E, anticipated in 2017. At the time, ash relocation was not required, but was considered to be the lowest cost closure option for these cells. The MPCA approved this plan in 2008.

MP stated that in between submitting the closure plan in 2002 and receiving final approval in 2008, the Company, in an attempt to minimize customer costs, reviewed alternative options for leaving the ash in Cells A and B in place. During that time, no regulatory requirements were put in place that would have required ash relocation. Based on MP's review of alternative options, and the lack of consequential regulatory changes, in 2009, MP conducted a decommissioning study in which it assumed that cells A and B would be capped in place, and that the ash in those cells would NOT be relocated to Cell E, in spite of the fact that its approved closure plan required ash relocation.

On December 22, 2008, an ash dike ruptured at an 84-acre solid waste containment area at the Tennessee Valley Authority's Kingston Fossil Plant, releasing 1.1 billion gallons of coal ash fly slurry, the largest such spill in U.S. history. MP explained in the May Compliance Filing that after the spill, there was an increase in the scrutiny of coal ash storage. The spill

⁹ May Compliance Filing, page 4.

¹⁰ MP stated that because Cells C and D were clarifying ponds and contain de minimus amounts of ash, no closure activities are required.

¹¹ See MP's response to Department Information Request No. 1, part b, included with these Comments as Attachment No. 5.

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prompted the Environmental Protection Agency (EPA) to inspect MP's ash systems, and in 2010 the EPA proposed a new rule to regulate coal ash to address the risks associated with its disposal (the Coal Combustion Residuals proposed rule, or CCR rule). As a result of this heightened scrutiny, MP decided to use more conservative assumptions in the 2011 Decommissioning Study, and assumed that ash from cells A and B would be relocated to Cell E. MP explained that Cell E was considered to be the most likely final repository for all ash waste due to its general conformance with the landfill requirements in the EPA's proposed rule. This change explains the large increase in landfill and pond closure costs from the 2009 Decommissioning Study to the 2011 Study.

On November 12, 2013, the Commission approved MP's 2013 Resource Plan, which included a plan to convert Laskin's fuel source from coal to gas. On page five of the May Compliance Filing, MP stated that following the Commission's Order, which made certain that Laskin's ash ponds will be retired soon, MP launched a closure plan study for Laskin's ash ponds and hired a third-party engineering firm to evaluate closure options. During the course of this study, which is still ongoing, MP discovered that the ash in Cells A and B has not dewatered (drained) as expected, and thus cannot be relocated with traditional earthmoving equipment. This will significantly increase the costs associated with ash relocation. Thus, the Company believes, again, that the lowest-cost option for customers is to cap Cells A and B in place, as assumed in the 2009 Decommissioning Study. This assumption in the 2013 Decommissioning Study accounts for the large reduction in the Landfill and Pond Closure cost category relative to the 2011 Study. On page six of its May Compliance Filing, MP stated that it has had discussions with MPCA and has "introduced the possibility that ash transport from Cells A and B may not be feasible."

Also on page six of the May Compliance Filing, the Company stated that it made a judgment to revert to the lower contingency of ten percent. MP stated that this decision was based, in part, on the Company's view that the EPA would likely develop and propose closure options that would allow capping the ash in place on its pursuit of additional ways to reduce costs to customers, while maintaining compliance with ash pond regulations.

While it may be possible that the final closure of Laskin's ash ponds will involve capping Cells A and B in place, the Department questions whether this is a reasonable assumption given that MP's current MPCA-approved plan involves relocating the ash from Cells A and B to Cell E, and any change to that plan will require MPCA approval.¹⁵ It appears that the only significant development between the 2011 and 2013 Decommissioning Studies is the discovery that the ash in Cells A and B is not draining as expected, and will therefore be more expensive to relocate. The Company appears to believe that the increase in expected costs alone is reason enough to assume that ash relocation will not be required.

¹² May Compliance Filing, page 5.

¹³ Docket No. E015/RP-13-53.

¹⁴ May Compliance Filing, page 6.

 $^{^{15}}$ See MP's response to Department Information Request 2, included with these Comments as Attachment No. 6

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With respect to contingencies, there does not appear to be a general industry standard with respect to contingency percentages. For example, Xcel uses a 15 percent contingency, while Interstate Power & Light uses historical averages to set salvage rates for its production plant, rather than demolition studies, and does not appear to explicitly include any contingencies. Therefore, on its own, MP's assumed contingency of 10 percent appears to be reasonable, particularly for units other than Laskin. But when viewed in the context of MP's past filings, it is difficult to see how MP could believe that risks for Laskin, have decreased since the 2011 Decommissioning Study. While there is more certainty surrounding the timing of the closure of Laskin's ash ponds, there does not seem to be any reduction in uncertainty surrounding the required closure plan. It may be appropriate for MP to set its contingency assumptions on a unit-by-unit basis.

In spite of the uncertainty surrounding Laskin's salvage rate, the Department recommends that the Commission approve all of the salvage rates proposed in the 2014 Depreciation Petition. In its response to Department Information Request No. 2, MP stated that it is in the second year of the ash pond closure study discussed above, and that the second year of the study is focused on the variables that create the greatest cost uncertainty. The Company's response indicated that much of this work is expected to take place in September 2014. Additionally, the Department notes that the EPA is required to take final action on its proposed CCR rule to regulate coal ash in December 2014. Given these expected developments, the Company, the Department, and the Commission will likely be in a better position to assess MP's ash pond closure assumptions in MP's next remaining life depreciation filing. Therefore, the Department recommends that the Commission require MP to include in its next remaining life depreciation filing an update on the findings and conclusions from its ongoing ash pond closure study, as well as an assessment of the EPA's CCR rule and the impacts it will have on the Company.

III. RECOMMENDATIONS

The Department recommends that the Commission:

- 1. Approve MP's proposed remaining lives, except for the remaining life proposed for Laskin;
- 2. Approve a remaining life of 11 years for Laskin;
- 3. Approve MP's proposed salvage rates;
- 4. Require MP to provide in its next remaining life depreciation filing an update on the findings and conclusions from its ongoing ash pond closure study, as well as an assessment of the EPA's CCR rule and the impacts it will have on the Company.

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5. Require MP to continue to provide in future remaining life depreciation studies a comparison of the remaining lives used in its depreciation filing and in the utility's then-current resource plan, and an explanation of any differences;

- 6. Require MP to include in its next remaining life depreciation study an analysis comparing its depreciation expense calculated using its current decommissioning probabilities and its depreciation expense calculated without decommissioning uncertainties;
- 7. Require MP to include in its next remaining life depreciation petition a summary of supplemental depreciation expense recorded during 2014, as well as a summary of supplemental depreciation expense to be recorded in the future;

/ja

Department Calculation of Effect of Proposed Depreciation Parameters on Depreciation Expense 2014

			Cur	Current Proposed Rates	G	Proposed Rate	Proposed Rates - Dec. 2013 Decomm. Costs	omm. Costs	Effect of
	Depreciable	Depreciation	Remaining	Salvage	2014	Remaining	Salvage	2014	Rate Changes
	Plant Balance	Reserve	Life (01 /01 /14)	Value	Annual	Life (01/01/14)	Value	Annual	to 2014
Steam Generation	74/34/33	CT /10 /71	(07/07/14)	(tr /ro/ro)	occida:	(++ /+0 /+0)	(tr /ro /ro)	ippion	inning
Hibbard SE Station:	86,787,487	50,093,020	11.0	%00:0	3,335,861	11.0	-2.42%	3,526,793	190,932
Laskin Energy Center	79,791,987	52,959,071	11.0	-14.50%	3,491,159	17.0	-14.50%	2,258,986	(1,232,173)
Boswell Energy Center:	1,066,980,611	421,886,200			36,025,071			35,722,372	(302,699)
Unit No. 1	46,701,347	22,782,857	11.0	-6.92%	2,468,202	11.0	-6.09%	2,432,964	(35,238)
. Unit No. 2	36,004,767	22,861,362	11.0	-9,13%	1,493,695	11.0	-7.90%	1,453,435	(40,260)
Unit No. 3	450,167,039	122,824,106	21.0	-4.93%	16,644,579	21.0	-4.50%	16,552,402	(92,177)
Unit No. 4	354,606,502	164,801,698	22.0	4.88%	9,414,073	22.0	-4.62%	9,372,165	(41,908)
Common	179,500,956	88,616,177	16.0	-2.89%	6,004,522	16.0	-2.06%	5,911,406	(93,116)
Taconite Harbor Energy Center	154,605,927	49,134,992			9,550,523			9,261,494	(289,029)
Structure/Unit	149,597,502	44,626,290	13.0	-5.91%	8,754,802	13.0	-4.16%	8,553,421	(201,381)
Ash Ponds*	5,008,425	4,508,702	1.0	-5.91%	795,721	1.0	-4.16%	708,073	(87,648)
Cloquet Energy Center	8,225,802	5,301,693	11.0	0.00%	265,828	11.0	0.00%	265,828	1
Total Steam Generation	1,396,391,814	579,374,976		ANTIBERT PARAMETERS OF SECURITY AND SECURITY ASSESSED.	52,668,442		I	51,035,473	(1,632,969)
Wind Generation									
Bison 1A	76,089,393	7,752,056	31.0	0.00%	2,204,430	31.0	%00'0	2,204,430	1
Bison 1B	73,284,514	2,090,094	32.0	0.00%	2,224,826	32.0	0.00%	2,224,826	•
Bison 2	150,367,219	5,942,260	33.0	0.00%	4,376,514	33.0	0.00%	4,376,514	1
Bison 3	150,322,344	4,448,301	33.0	0.00%	4,420,426	33.0	0.00%	4,420,426	•
Subtotal Bison	450,063,470	20,232,711	;	,	13,226,196		,	13,226,196	
Taconite Ridge I Energy Center	47,116,499	4,849,559	29.0	\ %00.0 0.00	1,457,481	29.0	%00:0	1,457,481	
otal Willia delletation	451,12,500	20,002,210			10000111			7,000,61	
Hydroelectric Production Plants									
Prairie River HE Station	5,109,867	821,411	7.8	0.00%	549,802	20	0.00%	85,769	(464,033)
Thomson HE Station	25,694,188	14,855,700	18.1	0.00%	598,811	20	0.00%	216,770	(382,041)
Fond du Lac HE Station.	18,436,905	3,612,008	16.7	0.00%	887,718 102,983	200	0.00%	296,498	(59T,22U) (67 063)
WILLION HE SCAUOLI	3,031,110	1 779 317	22.3 18.3	%0000	95,933	8 6	%00:0	30.078	(57,033)
Scanlon HF Station	2,528,194	1.496.798	16.1	%00.0 %00.0	63.963) (C	%00.0	20,578	(43.367)
Little Falls HE Station	7,813,849	4,113,045	8.8	0.00%	420,546	20	0.00%	74,016	(346,530)
Blanchard HE Station	9,874,571	5,542,918	17.8	0.00%	243,351	20	0.00%	86,633	(156,718)
Sylvan HE Station	2,191,000	1,481,450	8.0	%00.0	88,694	20	0.00%	14,191	(74,503)
Pillager HE Station	2,047,253	1,283,942	11.8	0.00%	64,687	20	0.00%	15,266	(49,421)
Birch Lake Reservoir	304,571	211,152	22.3	0.00%	4,189	20	0.00%	1,868	(2,321)
Boulder Lake Reservoir	483,407	312,431	18.6	0.00%	9,192	20	0.00%	3,420	(5,772)
Fish Lake Reservoir	945,803	200,690	18.6	0.00%	40,060	50	0.00%	14,902	(25,158)
Island Lake Reservoir	1,459,633	1,025,031	18.6	0.00%	73,366	200	%00.0 0.00%	8,692	(14,6/4) (765)
nice Lake neservoir Whieface Reservoir	1.078.938	571.220	18.6	%00.0 %00.0	27.297	20	0.00%	10.154	(17.143)
Gauging Stations	125,451	59.730	18.2	0.00%	3,611	20	0.00%	1.314	(2,297)
White Iron Lake Reservoir	28,934	13,391	22.3	0.00%	269	20	0.00%	311	(386)
Total Hydroelectric Production Plants	86,553,608	40,165,492			3,225,208		1 1	927,761	(2,297,447)
Total Generation	1,980,125,391	644,622,738			70,577,327			66,646,911	(3,930,416)

Note: This Attachment is an update to Appendix A of MPs 2014 Depreciation Petition. The current salvage rates have been updated to reflect the salvage rates approved by the Commission in Docket No. E015/D-13-275.

Docket No. E015/D-14-318 Department Attachment No. 2 Page 1 of 2

State of Minnesota DEPARTMENT OF COMMERCE DIVISION OF ENERGY RESOURCES

Utility Information Request

Docket Nu	ımber:	E015/D-14-318	1	Date of Request: July 7, 2014		
Requested	d From:	Debbra A. Davey, Minnesota P	ower	Response Due: July 17, 2014		
Analyst Re	equesting	g Information: Craig Addonizi	io			
Type of Inquiry:		[]Engineering []_	Rate of Retu Forecasting CIP	L 2		
lf you feel	your res	ponses are trade secret or privi	ileged, please i	indicate this on your response.		
Request No.						
5	Refe	erence: Proposed Life Extensio	n for Laskin			
	a.	Please explain the basis for M facilities have useful lives of 1		er's belief that gas peaking generation		
	b.	Please explain why MP is proposing to extend the life of Laskin now, rather than waiting until next year, when the additions necessary to convert Laskin into a gas peaking facility are placed in service.				
	c.	What portion of Laskin's ending 2013 gross plant balance (\$80.0 million) is expected to remain in service after it is converted into a gas peaking facility?				
	d.	d. How much plant will be added to Laskin's gross plant balance pursuant to its conversion into a gas peaking facility?				
Respons		·	Made Strange Systems	urces of information:		
Departn						
m.1 1						

Response:

Docket No. E015/D-14-318
Department Attachment No. 2
Page 2 of 2

- **5 a.** The basis for MP's belief that gas peaking generation facilities have useful lives of 15 years is internal engineering judgment that this is the estimated life of that equipment.
- 5 b. MP is proposing to extend the life of Laskin now rather than waiting until next year for several reasons. First, in MP's 2013 Integrated Resource Plan (IRP) MP proposed to refuel Laskin Units 1 and 2 to operate on natural gas by 2015. The Commission found that proposal reasonable and approved MP's 2013 IRP. As a result, MP is proceeding with its plan to convert Laskin to natural gas. Second, the conversion of Laskin to natural gas is part of MP's "EnergyForward" plan, our strategic plan which includes the addition of natural gas as a generation fuel source. We are moving forward with this plan, and year-to-date have spent approximately \$4 million on this project. Third, in the past we have requested life extensions, which have been approved by the Commission, prior to when the additions were actually made. For example, in MP's 2007 Remaining Life Depreciation Petition a request was made, and approved by the Commission, to extend the life of Boswell Unit 3 until 2034, based on the Boswell 3 Environmental Improvement Plan filed with the Commission on October 27, 2006, (Docket No. E015/M-06-1501). The additions related to this improvement plan were placed in-service November 2, 2009, but facts were present several years earlier indicating a longer remaining life. Accordingly, MP believes it is now in a position to extend the life of Laskin to its new estimated remaining life through December 2030, as MP is moving forward with this plan, and this has been an approved approach in the past.
- **5 c.** The vast majority of these assets are expected to be required to serve the new mission; however, some assets will no longer be used after the conversion to a natural gas plant in 2015. In MP's 2013 IRP the estimate of the assets expected to be retired upon conversion was approximately \$5 million. The latest estimate is expected to be lower than that amount, but the actual amount is still being refined as conversion plans are finalized.
- **5 d.** The latest estimate for the capital project to convert Laskin to a natural gas peaking facility is slightly under \$14 million.

Response by:	List sources of information:
Title:	
Department:	
Telephone:	

Docket No. E015/D-14-318 Department Attachment No. 3 Page 1 of 3

State of Minnesota

DEPARTMENT OF COMMERCE DIVISION OF ENERGY RESOURCES

Utility Information Request

Docket Nur	mber:	E015/D-14-318		Date of R	equest: Ju	ıly 7, 2014
Requested	From:	Debbra A. Davey, Minne	sota Power	Respon	se Due: J	uly 17, 2014
Analyst Red	questing	Information: Craig Ad	Idonizio			
Type of Inq	uiry:	[X]Financial []Engineering []Cost of Service	[]Rate of I []Forecast	ting []	Rate D Conser Other:	-
If you feel y	our res _l	oonses are trade secret o	or privileged, plea	ase indicate	this on you	r response.
Request No.						
7	Refe	rence: Proposed Life Ext	tensions for Hydı	aulic Produc	tion Faciliti	ies
	a. b.	The Department notes to capital additions greater appropriate to extend the additions in 2013. Historically, the remaining have not all been identically remaining life for all of its second control of the control of the capital	than \$100,000 e lives of the 12 ng lives of Minne cal. Please expla	in 2013. Plo facilities tha sota Power's ain why MP is	ease explai t did not ha hydraulic proposing	in why MP believes it is ave significant capital generating facilities
Response Ti				t sources of inf	formation:	
Departme	ent:				~~	
Talanha	ana:					

Response:

Docket No. E015/D-14-318 Department Attachment No. 3 Page 2 of 3

7 a. In the past five years Minnesota Power has made the following investments over \$100,000 in the following hydroelectric facilities. Since 2008, 13 of our 19 hydroelectric facilities have had investments. Extending remaining lives of all these facilities to 50 years is based on capital investments MP has completed in the past or plans to complete in the future.

2012 - \$0.2 million Blanchard HE Station, \$0.8 million Little Falls HE Station, and \$0.2 million Thomson HE Station.

2011 - \$0.3 million Blanchard HE Station, \$0.8 million Fish Lake Reservoir, \$1.2 million Fond Du Lac HE Station, \$0.3 million Thomson HE Station, and \$0.8 million Winton HE Station.

2010 - \$0.3 million Knife Falls HE Station, \$0.2 million Little Falls HE Station, \$0.7 million Prairie River HE Station, \$0.2 million Scanlon HE Station, \$0.3 million Whiteface Reservoir, and \$0.8 million Winton HE Station. Also, Birch Lake only has \$0.3 million of total assets and in 2010 \$36,000 was invested. Reconstruction of the Birch Lake dam began in 2013 and will be complete in 2014.

2009 - \$0.2 million Fond Du Lac HE Station, \$1.7 million Little Falls HE Station, \$0.4 million Prairie River HE Station, and \$1.5 million Thomson HE Station. Also, Boulder Lake Reservoir only has \$0.6 million of total assets and in 2009 \$59,000 was invested.

2008 - \$0.4 million Knife Falls HE Station and \$0.9 million Thomson HE Station.

7 b. Minnesota Power owns and is licensed by the FERC to operate the largest hydroelectric system in Minnesota, which includes seven hydroelectric "projects" (excluding Rapids Energy Center). The largest project is the St. Louis River Project, which includes nine developments (the Fond du Lac, Thomson, Scanlon and Knife Falls generation facilities and Fish Lake, Rice Lake, Island Lake, Boulder Lake, and Whiteface Reservoirs). The other projects are Winton (including Birch Lake Reservoir), Prairie River, Blanchard, Little Falls, Sylvan, and Pillager. Minnesota Power operates all of these developments as an overall system and achieves economies of scale in doing so. The system is remotely monitored and operated from the Thomson control room, where Minnesota Power's Hydro Operations Department controls the generating units at each station and can remotely operate a limited number of spillway gates at certain dams. Minnesota Power also maintains an appropriate level of Hydro Operations Department staff to operate, maintain and respond to operational challenges such as the 2012 flood. Operating the overall system leads to operational efficiencies and a lower overall megawatt hour cost; therefore, Minnesota power intends to continue to manage and operate the system as a whole.

Response by:	List sources of information:
Title:	
Department:	
Telephone:	

Response (continued):

Docket No. E015/D-14-318 Department Attachment No. 3 Page 3 of 3

7 b. (continued):

Historically, the remaining lives were different due to the remaining lives for these facilities being linked to the expiration of the facilities FERC licenses. MP plans to relicense the facilities and anticipates successful relicensing. Many capital investments MP has recently completed or plans to complete in the future are designed to extend the remaining lives of these facilities well in excess of the licenses. Our internal engineering judgment is that it is reasonable to extend the estimated remaining lives of these facilities to 50 years.

Response by:	List sources of information:
Title:	
Department:	
Telephone:	

State of Minnesota

DEPARTMENT OF COMMERCE DIVISION OF ENERGY RESOURCES

Docket No. E015/D-14-318 Department Attachment No. 4 Page 1 of 3

Utility Information Request

Docket Nur	mber:	E015/D-14-31	8		Date of	Request:	July 7, 2014	
Requested	From:	Debbra A. Dave	ey, Minneso	ota Power	Respo	onse Due:	July 17, 2014	
Analyst Red	questing	g Information:	Craig Add	onizio				
Type of Inq	uiry:	[X]Financia []Enginee []Cost of \$	ring	[]Rate of R []Forecasti []CIP		[]Rate []Cons []Othe	servation	
If you feel y	our res	ponses are trade	e secret or	privileged, plea	se indicat	e this on y	our response.	
Request No.								
6	Refe	erence: Propose	d Life Exte	nsions for Hydra	aulic Prod	uction Faci	lities	
	a.			or the 50 year li why 50 years, ra			nesota Power's hydr ').	aulic
,	b.	extensions are the capital inve	based on ' stments M	current and pla P expects to ma	nned cap ake in the	ital investn future whi	proposed hydro life nents" Please de ch are necessary fo proposed 50 year	scribe
Response	by:			List	sources of	information		
T	itle:							
Departm	ent:					· · · · · · · · · · · · · · · · · · ·		
Telepho	one:							

Response:

Docket No. E015/D-14-318 Department Attachment No. 4 Page 2 of 3

- **6 a.** MP's hydroelectric production facilities are the foundation and an increasingly valuable part of MP's renewable energy portfolio. MP has continually invested in maintenance and capital improvements to maintain value and lengthen the remaining life of these facilities. Historically, remaining lives for these facilities have been linked to the expiration of FERC licenses. MP plans to relicense the facilities as licenses expire and anticipates successful relicensing. Many capital investments MP has recently completed or plans to complete are designed to extend the remaining lives of these facilities well in excess of the licenses, and are expected to function well in excess of 30 years. For example recent significant investment has upgraded or replaced facilities that have lasted about a century (e.g., Thomson forebay embankment, penstocks, gates, valves, generator runners and windings, electrical infrastructure, and concrete dams). Although it is rare and difficult to design beyond 50 years, with routine maintenance, these facilities are expected to last at least 50 years. Our internal engineering judgment is that it is reasonable to extend the estimated remaining lives of these facilities to 50 years.
- **6 b.** The Minnesota Power Hydro Operations Department manages the overall hydro capital plans and in addition to annual budgets has 10-year and 50-year capital plans for its hydro facilities which include major upgrades or replacements.

In the next ten years Minnesota Power anticipates to complete the following improvements:

Blanchard – replace spillway gates, refurbish crane, refurbish unit head gates, overhaul generating units (including runner replacement and electrical rewind as necessary), and upgrade electrical infrastructure including arc-flash safety improvements.

Boulder Lake Reservoir - replace spillway gate.

Fond du Lac - replace spillway gates.

Island Lake Reservoir – reconstruct the fuse plug into a passive overflow spillway, and rebuild sluice gates.

Knife Falls – replace unit head gates, replace spillway gates, overhaul one generating unit (including runner replacement and electrical rewind as necessary), and upgrade electrical infrastructure including arc-flash safety improvements.

Little Falls - replace unit head gates, replace spillway gates, overhaul generating units (including runner replacement and electrical rewind as necessary), upgrade electrical infrastructure including arc-flash safety improvements, and replace roofs.

Pillager – reconstruct dam to increase spill capacity, replace static exciter/voltage regulator, and upgrade electrical infrastructure including arc-flash safety improvements.

Prairie River - rehabilitate unit head gate.

Rice Lake Reservoir - replace spillway gates.

Response by:	List sources of information:
Title:	
Department:	
Telephone:	

Response (continued):

Docket No. E015/D-14-318 Department Attachment No. 4 Page 3 of 3

6 b. (continued)

Scanlon - replace unit head gates, replace spillway gates, overhaul generating units (including runner replacement and electrical rewind as necessary), and upgrade electrical infrastructure including arc-flash safety improvements.

Sylvan - reconstruct dam to improve stability and increase spill capacity, replace rubber dam, and upgrade electrical infrastructure including arc-flash safety improvements.

Thomson - reconstruct portions of the main dam to increase spill capacity, rehabilitate dam 6, lead abate surge tank #2, replace spillway gates, and overhaul generating units 2, 3 and 5 (including runner replacement and electrical rewind as necessary).

Whiteface Reservoir - replace spillway gates.

Winton - replace spillway gates, and overhaul generating unit 2 (including runner replacement and electrical rewind as necessary).

Response by:	List sources of information:
Title:	
Department:	
Telephone:	

State of Minnesota

DEPARTMENT OF COMMERCE DIVISION OF ENERGY RESOURCES

Docket No. E015/D-14-318 Department Attachment No. 5 Page 1 of 3

Utility Information Request

Docket Nu	mber:	E015/D-14-318		Date of Request: July 7, 2014			
Requested	f From:	Debbra A. Davey, Minnes	sota Power	Response Due: July 17, 2014			
Analyst Re	questing	g Information: Craig Ad	donizio				
Type of Inq	quiry:	[X]Financial []Engineering []Cost of Service	[]Rate of R []Forecasti []CIP	ng []	Rate Design Conservation Other:		
If you feel y	your res	ponses are trade secret o	or privileged, plea	se indicate this	on your response.		
Request No.							
1	Refe	erence: Laskin Ash Pond E015/D-13-275	Closure Plan Refe	erenced in Com	pliance Filing in Dock	et No.	
	a.	In the Laskin ash pond of by any laws or regulation	•		•	•	
	b.	At the time the 2002 clo ash from Cells A and B to	•		· ·		
	c.	If the relocation of ash for lowest cost closure option its 2002 closure plan.			•		
Response	e by:		List	sources of inform	nation:		
Т	Title:						
Departm	nent:						

Telephone:

Response:

Docket No. E015/D-14-318 Department Attachment No. 5 Page 2 of 3

1a. When Minnesota Power (MP) proposed Cell E construction, regulations at that time required submittal of a closure Cell E plan along with its initial construction and operating plans in order to receive a construction permit for this new ash cell. It was also anticipated that at the time of Cell E closure, expected approximately 2017, a revised closure plan would potentially need to be submitted to the MPCA to request approval for closure action at that time. This view and intended action remains the course MP is on at this time.

These plans were submitted to MPCA in the 1998-1999 timeframe, more than fifteen years ago, and it was generally understood that physical conditions, regulatory requirements and construction techniques/materials applicable in the future would shape a final closure plan. It was anticipated that long term closure would be required and the exact details of the final closure would be communicated and approved by the MPCA.

No particular standard required relocation; rather relocation was envisioned as a lower cost and more proximate method to provide sloping material necessary to close the Cell E at end of life. The thinking at the time was that relocating the ash in Cells A and B atop the future Cell E would result in the most efficient and least cost option. It was expected that in order to be properly closed, Cell E would require a "mounding of material," or high slopes, of adequate size and stability, to be placed between the underlying Cell E ash and the new liner/drainage systems, in order to meet construction quality standards applicable at the future closure timeframe. MP assumed that a method of conventional excavation of moving ash from Cells A & B into Cell E was feasible because it was anticipated that the ash would have dewatered through natural drainage and allow for proximate and cost effective relocation.

1 b. Yes, at the time the initial MPCA closure plan was submitted, relocating ash from Cells A and B to Cell E was expected to be the lowest cost closure option. At the time, it was anticipated that the ash condition would change over time, dewatering, becoming easier to excavate with conventional methods, allowing transport of the ash to the closed Cell E and eventually being used as the cover material for Cell E. This plan requires the ash to be of suitable strength to be stacked on-top of Cell E to achieve the slopes and volumes required. Cells A and B sit adjacent to Cell E, and gravel service roads are built around all sides of Cell E and around Cells A and B, offering reasonable construction access.

However, recent tests have shown that the ash has not dewatered at a rate initially estimated and it is questionable and unlikely that this method is still possible, and if possible, may require the addition of cement-like admixtures to increase the strength required to achieve final slopes above Cell E. The requirement of admixtures or alternative relocation construction methods dramatically increase the cost projections and risks of successful execution of such a project.

Response by:	List sources of information:
Title:	
Department:	
Telephone:	

Response (continued):

Docket No. E015/D-14-318 Department Attachment No. 5 Page 3 of 3

- **1 b. (continued)** The method as proposed in 2002, with the conditions anticipated at the time of final closure, was likely the lowest cost construction method that would remove the ash from Cells A and B. Excavations and borings performed in Cell A during exploratory work in 2010-2013 brought into question the potential for liquefaction, a condition that MP felt would not be present after dewatering, when choosing this construction method. Our assumption in choosing this method at the time, as the basis for our preliminary Cell E closure plan, was that removal from Cells A & B to Cell E would be required if it did not pose any hazards during construction and was cost effective. MP is carefully evaluating constructability and hazard potential with field-test work expected to take place in September of 2014.
- 1 c. Removal and relocation of ash, if able to be done with conventional construction techniques in a cost effective manner represents the best possible outcome as the ash is confined to one location for monitoring and maintenance. Cells A and B, and the ash within them, sit adjacent to Cell E, providing potentially the most proximate "fill material" to build the necessary slopes to support the liner and drainage systems of a future Cell E closure. However, if the construction methods are not considered safe or feasible, or if additional environmental impacts or significant additional construction-related cost risks are introduced, it may not be the preferred method. Additionally alternate construction methods increase cost in order to perform the work safely. MP is in the process of studying the preferred and alternative methods in order to choose the most cost effective option while minimizing environmental impacts, in order to be confident in proposing a final closure plan to be submitted to MPCA as part of closing Cell E.

Response by:	List sources of information:
Title:	
Department:	
Telephone:	

Docket No. E015/D-14-318 Department Attachment No. 6 Page 1 of 2

State of Minnesota

DEPARTMENT OF COMMERCE DIVISION OF ENERGY RESOURCES

Utility Information Request

Docket Number:		E015/D-14-318		Date of Request: July 7, 2014			
Requested	l From:	Debbra A. Davey, Minn	esota Power	Resp	onse Due: July 17, 2014		
Analyst Re	questing	g Information: Craig A	ddonizio				
Type of Ind	quiry:	[X]Financial []Engineering []Cost of Service	[]Rate of []Forecas		[]Rate Design []Conservation []Other:		
If you feel	your res	ponses are trade secret	or privileged, ple	ase indica	te this on your response.		
Request No.		-	337775444				
. 2	Refe	erence: Laskin Ash Pond E015/D-13-275		ferenced i	n Compliance Filing in Docket No.		
	a.	Please explain why MP plan to estimate decon	• •	•	not use its MPCA-approved closure		
b. Please explain generally the process MP will have to go through in order to closure plan for Laskin's ash ponds that is different from 2002 closure plated MPCA approval be required? What will the timeline be? Etc.).							
,							
Response	e by:		Lis	t sources of	information:		
Л	Title:						
Departn	nent:						
Telephone:							

Response:

Docket No. E015/D-14-318 Department Attachment No. 6 Page 2 of 2

- **2 a.** Conditions of the ash in Cells A and B were found to be significantly different than those assumed to exist at the time the preliminary closure plan was submitted. Exploratory work performed between 2010 and 2013 brought into question assumptions used in choosing the plan that was the MPCA approved closure plan, as that plan may no longer be feasible based on the condition of the ash. While further exploratory work was taking place, MP felt it was prudent to use a lower value that assumed a cover in place strategy rather than a relocation strategy until MP had more clarity on the preferred construction method and cost. Ultimately, when an ash cell is eventually closed, MP will be required to file with the MPCA to obtain a final approved plan before closure of an ash pond takes place. This plan can be different than the original closure plan due to many changing facts and circumstances.
- **2 b.** MP is currently in the second year of an Ash Pond decommissioning study. The first year focused on exploring traditional, alternative and innovative construction methods in order to minimize cost based on the wet condition of the ash in Cells A and B. The second year is designed to physically explore the variables that create the greatest cost uncertainty including liquefaction potential and groundwater interactions. It has been communicated to the MPCA that MP is exploring these factors in order to create a final closure plan for review and approval. This exploratory work is scheduled to take place in September 2014 and will guide our final cost estimates as well as timing for both construction and regulatory approval. MPCA approval will be required for any method chosen, as well as a post closure monitoring plan.

Response by:	List sources of information:
Title:	
Department:	
Telephone:	

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

Minnesota Department of Commerce Comments

Docket No. E015/D-14-318

Dated this 15th day of August 2014

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.m n.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_14-318_D-14-318
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	Yes	OFF_SL_14-318_D-14-318
Debbra A	Davey	ddavey@allete.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	OFF_SL_14-318_D-14-318
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_14-318_D-14-318
Elizabeth	Goodpaster	bgoodpaster@mncenter.or g	MN Center for Environmental Advocacy	Suite 206 26 East Exchange Str St. Paul, MN 551011667	Electronic Service eet	No	OFF_SL_14-318_D-14-318
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_14-318_D-14-318
Margaret	Hodnik	mhodnik@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	OFF_SL_14-318_D-14-318
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