Direct Testimony and Schedules Richard R. Schrubbe

Before the Minnesota Public Utilities Commission State of Minnesota

In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota

> Docket No. E002/GR-21-630 Exhibit___(RRS-1)

Pension and Benefits Expense

October 25, 2021

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Terms and Acronyms

ACM	Aggregate Cost Method
Commission	Minnesota Public Utilities Commission
Company	Northern States Power Company – Minnesota
EEI	Edison Electric Institute
ERISA	Employee Retirement Income Security Act
EROA	Expected Return on Assets
FAS	Statement of Financial Accounting Standard
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
IBNR	Incurred But Not Reported
IRC	Internal Revenue Code
LTD	Long-Term Disability
NSPM	Northern States Power Company – Minnesota
NSPW	Northern States Power Company - Wisconsin
PBGC	Pension Benefit Guaranty Corporation
PBO	Pension Benefit Obligation
Public Service	Public Service Company of Colorado
PVFB	Present Value of Future Benefits
SPS	Southwestern Public Service Company
WACC	Weighted Average Cost of Capital
Xcel Energy	Xcel Energy Inc.
XEPP	Xcel Energy Pension Plan
XES	Xcel Energy Services Inc.

I. INTRODUCTION

1

- 3 Q. PLEASE STATE YOUR NAME AND OCCUPATION.
- 4 A. My name is Richard Schrubbe. I am the Area Vice-President of Financial
- 5 Analysis and Planning for Xcel Energy Services Inc. (XES), which provides
- 6 services to Northern States Power Company Minnesota (NSPM or the
- 7 Company).

8

- 9 Q. Please summarize your qualifications and experience.
- 10 A. As Area Vice-President of Financial Analysis and Planning, I am responsible for
- 11 overseeing the business area leaders of Energy Supply, Transmission,
- Distribution, Gas Engineering & Operations, Nuclear, and Corporate Services
- with respect to budget planning, reporting, and analysis. I oversee the
- accounting for all employee benefits programs, playing a liaison role with the
- Human Resources department, external actuaries, and senior management with
- benefit fiduciary roles. I am also responsible for coordinating the benefits
- operations and maintenance (O&M), and capital budgeting and forecasting
- processes, as well as the monthly analysis of actual results against these budgets
- and forecasts. A summary of my qualifications, duties, and responsibilities is
- 20 included as Exhibit___(RRS-1), Schedule 1.

- 22 Q. What is the purpose of your testimony?
- 23 A. I discuss the pension benefits and other non-cash benefits the Company offers
- 24 to its eligible employees and their families and I present the costs of these
- benefits for the 2022 test year and 2023 and 2024 plan years. In addition, I
- 26 discuss pension cost accounting principles and explain how the Company's

pension expense necessarily reflects the cumulative effect of pension asset gain
and loss experiences.

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I also support the Company's request to include the net rate base increase associated with its benefit costs. This net rate base increase reflects the increase associated with the prepaid pension asset, although that amount is reduced to some extent by the accrued unfunded liability costs associated with the retiree medical and post-employment benefit costs and the accumulated deferred income taxes (ADIT) associated with the prepaid pension asset. I provide a detailed discussion of the accounting and ratemaking treatment of these costs, and I demonstrate why this ratemaking treatment is reasonable.

12

Q. Are there other topics covered in your testimony or changes since
 Your last rate case that you would like to highlight?

15 First, in Docket Nos. E002/GR-12-961 and E002/GR-13-868, the 16 Commission approved a cap and deferral mechanism for XES pension expense, 17 as well as a deferral and 20-year amortization mechanism for NSPM pension 18 I quantify the regulatory assets associated with these deferral expense.¹ 19 mechanisms and explain that the Company proposes to continue using them to 20 set rates in this current case. In addition, the Company proposes to amortize 21 the regulatory asset from the XES pension cap over the three years of the multi-22 year rate plan and to include the regulatory asset associated with the 20-year 23 amortization in rate base. Company witnesses Mr. Gregory Chamberlain and 24 Mr. Benjamin C. Halama discuss the appropriateness of this three-year 25 amortization period.

¹ The two deferral mechanisms are necessary because the XES and NSPM pension plans use different accounting methods. I discuss these accounting methods in detail in Section III of my testimony.

1		Second, in Order Point 6 in Docket No. E002/GR-13-868, the Commission
2		approved the use of a five-year average discount rate for our XES pension plan
3		under Statement of Financial Accounting Standard (FAS) 87. The Company
4		still believes that it is appropriate to use the discount rate established using a
5		single-year bond-matching study, and we reserve the right to propose such a
6		study as the basis for setting the proper discount rate in future cases. However,
7		to reduce the potential number of disputed issues in this case, we have used a
8		five-year average discount rate as ordered by the Commission in our 2013 rate
9		case. I discuss the discount rate and other pension assumptions in detail in
10		Section IV of my testimony.
11		
12		Finally, in Section III of my testimony I discuss pension accounting in detail,
13		including the phase-in and amortization of pension asset gain and loss
14		experiences.
15		
16	Q.	Is any other Company witness addressing pension and benefit issues?
17	Α.	Yes. Company witness Ms. Ruth K. Lowenthal discusses the cash
18		compensation offered by the Company, as well as the steps the Company has
19		taken to help mitigate benefit cost increases. In addition, Company witness Mr.
20		Evan Inglis discusses the appropriateness of the Company's pension investment
21		strategy.
22		
23	Q.	WHAT ORDER POINTS FROM COMMISSION ORDERS DO YOU ADDRESS IN YOUR
24		TESTIMONY?
25	Α.	Table 1 below lists the order points I respond to from Commission Orders in
26		Docket No. E002/GR-13-868 and Docket No. E002/GR-12-961. Table 1 lists
27		the page numbers of my testimony where each is addressed.

Table 1 Order Point Requirements

Order Point Requirements					
Docket No. Order Point	Requirement	Page Numbers			
13-868 7	The Company shall apply the rolling five-year average FAS 87 discount rate when determining the XES Plan cost subject to deferral (or reversal) in subsequent years (i.e., non–rate-case test years) as the 2012 mitigation established in Docket No. E002/GR-12-961 continues.	p. 35			
13-868 10	The qualified pension asset and associated deferred-tax amounts shall be included in rate base. For rate-base purposes, the pension asset is to reflect the cumulative difference between actual cash deposits made by the Company reduced by the recognized qualified pension cost determined under the ACM/FAS 87 methods since plan inception, not to exceed the Company's filed request. The Company shall provide a detailed compliance filing which explains the calculated amount within ten days of the Commission's decision.	p. 67 Schedule 13			
13-868 13	The discount rate used to calculate retiree medical benefit costs for ratemaking purposes shall be set to equal 5.08 percent, the five-year average of the FAS 106-based discount rates.	p.52			
13-868 14	Any amount by which the qualified pension expense allowed in rates exceeds future years' qualified pension expense (calculated using the Commission-approved discount-rate point of reference) the Company shall apply toward the recovery of the accumulated deferred XES Plan costs. "Future years" includes 2015, and each subsequent year's qualified pension expense if not a rate-case test year. The recoverable XES Plan expense amount shall be calculated using the proximate measurement date appropriate for each operating year (12/31/2013 for 2014; 12/31/2014 for 2015, etc.) until the next rate case. The Company shall file annual compliance reports which provide its pension plans' cost-calculation reports, the XES Plan accumulated deferred balance, and the excess rate-level recovery applied toward satisfying the deferral. Deferred amounts shall not be included in rate base.	p. 50 Schedule 11			
12-961 37	The Company shall not be permitted to include a compensating return on the pension's unamortized asset loss balance.	p. 48-49			
12-961 40	In future rate case filings, Xcel shall include for each pension plan schedules of its 2008 market loss amortization, for the entire amortization period, until the 2008 market loss amortization has been extinguished.	P. 18-19 Schedule 3			

1	Q.	How is the remainder of your testimony organized?
2	Α.	I present the remainder of my testimony in the following sections:
3		• Section II, Pension and Benefits Overview, provides a summary of the pension
4		and benefit costs included in our multi-year rate request.
5		• Section III, Pension Cost Accounting, discusses pension accounting
6		principles and describes how the Company calculates its pension
7		expense.
8		• Section IV, Pension Assumptions, presents the primary assumptions used
9		to calculate our pension costs in this case.
10		• Section V, Qualified Pension and 401(k) Match Costs, quantifies the test year
11		and multi-year rate plan expense amounts for qualified pension and
12		401(k).
13		• Section VI, Retiree Medical and FAS 112 Long-Term Disability Benefits,
14		presents information and costs related to our request for recovery of
15		post-retirement healthcare and long-term disability benefits.
16		• Section VII, Benefit Rate Base Assets and Liabilities, discusses ratemaking
17		treatment of both the Company's prepaid benefit costs and unfunded
18		accrued liability costs.
19		• Section VIII, Active Health and Welfare Costs, provides details related to the
20		active healthcare costs included in our rate request.

• Section IX, Workers' Compensation FERC 925 Costs, provides details related to the workers' compensation costs included in our rate request.

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• Section X, *Conclusion*, summarizes the Company's request for recovery of pension and benefit-related costs.

2		
3	Q.	WHAT TYPES OF COSTS ARE INCLUDED IN THE COMPANY'S PENSION AND
4		BENEFITS REQUEST?
5	Α.	With the exception of the workers' compensation costs discussed in Section IX
6		of my testimony, all the Company's pension and benefits costs are recorded in
7		FERC Account 926. The Company has grouped its pension and benefit costs
8		into three categories based on similar budgeting practices and cost recognition
9		requirements. The three categories are: (1) actuarial costs; (2) health and welfare
10		costs; and (3) other retirement costs.
11		
12	Q.	TO PROVIDE CLARITY, PLEASE DESCRIBE HOW DOLLAR AMOUNTS IN YOUR
13		TESTIMONY ARE PRESENTED.
14	Α.	Unless specifically indicated otherwise, all the dollar values presented in my
15		testimony are presented at the NSPM electric, state of Minnesota level.
16		
17	Q.	PLEASE PROVIDE A SUMMARY OF THE PENSION AND BENEFIT COSTS INCLUDED
18		IN THE COMPANY'S MULTI-YEAR RATE REQUEST.
19	Α.	Table 2 below sets forth the benefit amounts incurred in 2020, the forecasted
20		2021 expense amounts, and the forecasted amounts for each year of the multi-
21		year rate plan.

II. PENSION AND BENEFITS OVERVIEW

Pen	sion and Bene	efit Expense	Summary (\$	5)	
FERC Account 926 Pension	n and Benefit C	Costs for NSP	M Electric O	&M, State of	Minneso
FERC 926 Benefit Type	2020 Actual Amounts	2021 Forecast	2022 Test Year	2023 Plan Year	2024 P Year
Actuarial Costs					
Qualified Pension (1)	19,782,032	19,488,214	14,791,342	12,149,016	8,402,8
Deferred Pension Amortization	-	-	5,301,736	5,301,736	5,301,7
FAS 106 Retiree Medical (2)	1,031,046	252,154	224,423	1,189,017	1,383,3
FAS 112 LTD	257,864	284,366	56,305	52,562	49,35
Total Actuarial Costs	21,070,942	20,024,735	20,373,806	18,692,331	15,137,2
Health & Welfare					
Active Health Care	29,983,304	32,457,123	33,464,827	33,998,879	35,785,3
Misc Ben Programs, Life, LTD	3,034,295	3,334,027	3,382,452	3,389,264	3,451,0
Total Health & Welfare	33,017,599	35,791,150	36,847,279	37,388,143	39,236,
Other Retirement					
401(k) Match	9,284,970	9,007,773	9,130,477	9,353,005	9,625,5
Deferred Comp Match	38,302	37,031	38,071	41,782	45,77
NMC Employer Ret. Contr.	844,597	807,569	788,727	808,053	832,32
Ret. & Comp Consulting	219,291	275,309	364,597	365,032	366,90
Total Other Retirement	10,387,160	10,127,682	10,321,872	10,567,872	10,870,
Total FERC 926	64,475,700	65,949,319	67,543,139	66,647,919	65,243,

¹⁾ Reflects NSPM calculated under the Aggregate Cost Method using a 20-year amortization. XES amount calculated using the 5-year average discount rate and the amount (deferred) / amortized resulting from XES pension costs being above or below the 2011 cap amount approved by the Commission in Docket No. E002/GR-12-961 and continued in Docket No. E002/GR-13-868. For 2022-2024 the Company has compared the amount to the forecasted expense, which is the amount that the company is seeking to reset the cap to in this rate filing.

Q. Is the Company seeking to recover the forecasted pension and Benefits expense as shown in Table 2 as part of its multi-year rate plan?

A. Yes. Mr. Halama has incorporated the forecasted amounts into the 2022 test year and the 2023 and 2024 plan year revenue requirements. As discussed in

⁽²⁾ Calculated using the 5-year average discount rate.

2		included in FERC Account 926 are formulaic, are calculated in accordance with
3		accounting rules and standards, are based on actuarial assumptions specific to
4		the Company, and in some cases reflect specific regulatory treatment applied in
5		prior Commission Orders.
6		
7	Q.	How do the amounts of Pension and Benefit expense in 2022, 2023, and
8		2024 COMPARE TO THE ACTUAL AMOUNTS INCURRED IN PRIOR YEARS?
9	Α.	Exhibit(RRS-1), Schedule 2 to my testimony contains a comparison of the
10		pension and benefit expense amounts in 2022-2024 to the amounts of actual
11		expense in prior years and the forecasted amount for 2021.
12		
13		III. PENSION COST ACCOUNTING
14		
15	Q.	WHAT TOPIC DO YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?
16	Α.	In this section I discuss pension accounting principles and describe how the
17		Company calculates its test year pension expense.
18		
19	Q.	IN ORDER TO ESTABLISH THE CONTEXT FOR YOUR DISCUSSION OF THE
20		CALCULATION OF PENSION EXPENSE, PLEASE DESCRIBE THE QUALIFIED
21		PENSION PLANS THE COMPANY OFFERS.
22	Α.	The Company has two qualified pension plans: the NSPM Plan and the XES
23		Plan. Employees of NSPM are eligible to participate in the NSPM Plan, whereas
24		employees of XES are eligible to participate in the XES Plan.

detail throughout my testimony, our forecasts of the pension and benefit costs

2		THE SAME WAY?
3	Α.	No. Pension costs under the NSPM Plan are determined under the Aggregate
4		Cost Method (ACM), whereas pension costs for the XES Plan are determined
5		in accordance with FAS 87.2 The history of the Company's use of these two
6		different accounting methods is explained below, but the ultimate goal of both
7		methods is the same - to provide an actuarially sound basis to calculate and
8		recover over the course of an employee's career the amount of money that will
9		be necessary to satisfy the Company's pension obligation to that employee. In
10		effect, both methods allow the Company to reflect a current expense associated

Q. ARE THE PENSION COSTS ATTRIBUTABLE TO EACH PLAN ACCOUNTED FOR IN

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A. The Nature of Pension Expense

with a future liability.

- Q. IS PENSION EXPENSE SIMPLY A CASH OUTLAY IN THE TEST YEAR, LIKE MANY OTHER COMPONENTS OF OPERATION AND MAINTENANCE EXPENSE?
- A. No. Pension expense represents an accrual for a future liability rather than the cash to pay benefits in a given year. Thus, pension expense is more similar to our nuclear decommissioning accrual, which is an expense in our cost of service, than it is to, say, contractor expense for our vegetation management, which more closely represents cash that flows out the door in a given year.

- Q. WHY IS THE DISTINCTION BETWEEN A PRESENT ACCRUAL AND A PRESENT CASHOUTLAY IMPORTANT?
- A. A more current cash outlay, such as vegetation management (we still use accrual accounting for this cost), is not materially affected by a number of assumptions

² In 2009 FAS 87 was renamed Accounting Standards Codification 715-30, but I will continue to refer to the standard in this testimony as FAS 87 for ease of reference.

1		about longer-term future conditions, but only by timing differences in the billing
2		for the costs. In contrast, the current accrual for a substantial and distant future
3		liability is affected by both past events and future forecasts. We must know
4		what happened in the past and must have a forecast of what will happen in the
5		future in order to derive the most accurate measure of the current year expense
6		associated with that future liability.
7		
8	Q.	WHY ARE PAST EVENTS TAKEN INTO CONSIDERATION FOR PURPOSES OF
9		CALCULATING PENSION EXPENSE?
10	Α.	A fundamental component of pension expense is the experience from prior
11		years. That is, the current year's pension expense is determined by knowing the
12		existing value of the assets in the trust, as well as the forecasted future liability.
13		To the extent the existing value of the assets is higher than initially forecasted,
14		the level of expense is reduced, as there is less future cost to be recognized in
15		the current period. To the extent the existing value of the assets is lower than
16		initially forecast, then the expense level is higher.
17		
18	Q.	WHAT IS THE PROCESS FOR TAKING THE PAST EVENTS INTO ACCOUNT?
19	Α.	The elements used to calculate pension costs are established at the beginning
20		of each year based on actuarial studies that account for factors such as the
21		expected salary increases, expected mortality rates, the Expected Return on
22		Assets (EROA), the discount rate and other factors. At the end of the year, the
23		assumptions are trued up to actual experience, and the differences give rise to

gains or losses.

1 Q.	WHY IS IT NECESSARY TO TRUE-UP THE PROJECTIONS TO ACTUAL EXPERIENCE?
2 A.	The Company makes projections so that it can reflect the most accurate
3	forward-looking level of pension expense on its income statement. For
4	example, our projection of future pension liability is based on our best estimate
5	of how long employees will stay with the Company because pension benefits
6	are designed to grow with years of service. But circumstances change over the
7	course of a year, and the assumptions we made at the beginning of the year may
8	have changed. To make our pension expense projections for the following year
9	as accurate as possible, we incorporate the differences between the projections
10	and actual experience from the prior years in our calculation of annual pension

expense.

- Q. What do you mean when you say that the Company accounts for the
 Changes that have occurred?
 - A. Pension accounting systematically tracks the differences between the Year 1 forecast assumptions and the Year 1 actual experience, and then it includes a portion of that difference into the Year 2 pension expense as a gain or loss. (I explain in the next part of my testimony why only a portion is incorporated into the Year 2 pension expense calculation.) Deviations that reduce the level of the Present Value of Future Benefits (PVFB) are gains. Deviations that increase the PVFB are losses. The treatment of cumulative gain and loss experiences is a key component of the annual pension expense calculation, as I will discuss in the next subsection of my testimony.

B. Treatment of Gain and Loss Experiences

- 2 Q. What foundational concepts are necessary to understand how gain
- 3 AND LOSS EXPERIENCES ARE INCORPORATED INTO THE CALCULATION OF
- 4 CURRENT PENSION EXPENSE?
- 5 A. The first concept is that asset gains and losses must be distinguished from
- 6 liability gains and losses. I will explain below the difference between those types
- 7 of gains and losses.

8

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- 9 The second concept involves the phase-in of asset gains and losses. As I will
- discuss in more detail below, asset gains and losses are phased into an
- amortization "pool," for lack of a better term, over a five-year period. Liability
- gains and losses are not phased in, but instead are placed into the amortization
- pool in a single year.

- The third concept involves amortization. FAS 87 asset and liability gains and
- losses that enter the amortization pool are amortized over the remaining service
- lives of existing employees if they fall outside a "corridor." If the FAS 87 gains
- or losses are within the corridor, they are not amortized. I will discuss the
- 19 corridor and the mechanics of the amortization in more detail below. ACM
- 20 gains and losses are treated a bit differently, but the concepts are similar. As
- with FAS 87, asset gains and losses are phased in over a five-year period. After
- accounting for the phase-in of asset gains and losses, the Company calculates
- 23 the difference between the market-related value of the pension plan assets and
- 24 the PVFB owed by the Company, and the difference is spread over the
- 25 remaining service lives of existing employees. As I will explain below, this is
- not an amortization in the same sense as the FAS 87 amortization, but it

1		achieves similar results in that it results in the spreading of unrecognized gains
2		and losses over a period of years.
3		
4	Q.	STARTING WITH THE FIRST CONCEPT YOU MENTIONED, PLEASE EXPLAIN THE
5		DISTINCTION BETWEEN ASSET GAINS AND LOSSES AND LIABILITY GAINS AND
6		LOSSES.
7	Α.	The dollars in the pension trust are invested in assets such as stocks, bonds, real
8		estate, and commodities, among other things. Each year the Company forecasts
9		the average return that those assets will produce in that year, which is referred
10		to as the expected return on assets, or EROA. Asset gains or losses arise when
11		the actual returns on the pension trust assets in a given year are greater than or
12		lesser than the expected return on assets. Suppose, for example, that the plan
13		expects a seven percent return on its pension trust assets, which total \$1 billion.
14		The expected return for that year would be \$70 million. If the actual return in
15		that year is nine percent, the plan will have returns of \$90 million, and the asset
16		gain will be \$20 million. Of course, the opposite can also occur. If the expected
17		return is seven percent and the actual return on the assets is five percent, the
18		plan has a return of only \$50 million and therefore suffers a \$20 million asset
19		loss. ³
20		
21		The plan must also account for factors that affect the PVFB, such as the
22		discount rate, the expected number of retirements, and wage increases. Liability
23		gains and losses arise when those components of pension expense differ from

³ It is important to distinguish between an actual loss and an actuarial loss. The \$20 million asset loss discussed in the text does not represent an actual loss in the value of the trust. To the contrary, the trust has gained \$50 million in return under this example. But because the \$50 million of actual return is less than the \$70 million of expected return, it is considered a \$20 million actuarial loss.

1		expectations. For example, if the Company assumes a four percent discount
2		rate at the beginning of the year but the actual discount rate measured at year
3		end for the next year turns out to be five percent, the Company will have a
4		liability gain because the higher discount rate reduces the amount the Company
5		must set aside to satisfy future pension liabilities.
6		
7	Q.	IS THE DISTINCTION BETWEEN ASSET GAINS AND LOSSES AND LIABILITY GAINS
8		AND LOSSES IMPORTANT?
9	Α.	Yes. The distinction is important because, as I will discuss in more detail below,
10		the asset gains and losses are phased in over time, whereas the liability gains and
11		losses are not. Therefore, they must be tracked separately.
12		
13	Q.	HAVE YOU PROVIDED ANY EXAMPLES OF THE DISTINCTION BETWEEN ASSET
14		GAINS AND LOSSES AND LIABILITY GAINS AND LOSSES?
15	Α.	Yes. Exhibit(RRS-1), Schedule 3 shows the asset gains and losses and the
16		liability gains and losses from 2008 to 2020.
17		
18	Q.	When the Company has asset gains or liability gains, does it
19		WITHDRAW THOSE AMOUNTS FROM THE TRUST AND TREAT THEM AS EARNINGS?
20	Α.	No. Federal law requires that all the gains and losses stay within the pension
21		trusts, which means that they affect the amount of pension expense in
22		subsequent years. Generally speaking, if there is an asset or liability gain, it
23		reduces the Company's pension expense in the following years. If there is an
24		asset or liability loss, it increases pension expense in the following years. Thus,
25		the Company treats gains and losses symmetrically in the sense that both must
26		remain in the pension trust and both affect future pension expense.

1	Q.	TURNING TO	THE SECOND	CONCEPT YOU	U IDENTIFIED	EARLIER,	PLEASE
2		EXPLAIN WHAT	Γ YOU MEAN BY	THE "PHASE IN	" OF GAINS OR	LOSSES.	

3 The term "phase in" is used to describe the process of moving asset gains or Α. 4 losses into an amortization pool. Under FAS 87 and the ACM, the asset gains 5 or losses are incorporated into the calculation of pension expense over a period 6 of five years. Thus, 20 percent of a gain or loss is phased into the amortization 7 pool during the first year after the gain or loss occurs; another 20 percent is 8 phased into the amortization pool during the second year after the gain or loss 9 occurs, and so forth until the fifth year, when the full amount of the gain or loss 10 is phased in. The gains and losses that enter the amortization pool are then 11 amortized over a specific period of years if they satisfy the criteria I discuss 12 below. Unlike asset gains or losses, liability gains and losses are not phased in.

13

- Q. Why are asset gains and losses phased in but not liability gains and
 Losses?
- A. The assumptions used to establish pension liability (e.g., mortality rates, discount rates, etc.) typically do not vary greatly from year to year, and therefore, the drafters of FAS 87 did not consider it necessary to require the phase-in of liability gains and losses. In contrast, the market returns on pension fund assets can vary greatly from year to year. Because of the effects that such volatility would have on businesses' income statements, the drafters of FAS 87 decided that it was appropriate to phase-in market gains and losses.

- 24 Q. Are each year's gains or losses considered in isolation?
- A. No. After the phase-in is completed, the current year's gains and losses are aggregated with the previously accumulated gains and losses.

1	Q.	PLEASE DISCUSS THE THIRD CONCEPT YOU MENTIONED — THE AMORTIZATION
2		OF GAINS AND LOSSES.
3	Α.	In addition to phasing the asset gains or losses into the amortization pool, the
4		Company must undertake an analysis to determine whether it will actually
5		amortize those gains or losses.
6		
7	Q.	How does the Company determine whether it will amortize gains or
8		LOSSES?
9	Α.	It depends on which plan is under review, because the analysis for FAS 87 is
10		not the same as the analysis for the ACM. For FAS 87, which governs the XES
11		Plan, the Company aggregates its current year's gains or losses with the other
12		accumulated gains or losses to calculate a net unamortized gain or loss. That
13		net unamortized gain or loss is then compared to the present value of the
14		projected benefit obligation (PBO) and to the market-related value of the assets
15		in the pension trust. If the net unamortized gain or loss is outside a 10-percent
16		corridor – that is, if it is more than 10 percent of the greater of the PBO or the
17		market-related value of the trust assets - the Company must amortize that net
18		gain or loss. If the net unamortized gain and loss is within the corridor,
19		amortization does not occur.
20		
21		If amortization of the unrecognized gains or losses is required, the amortization
22		amount is equal to the amount of the unrecognized gain or loss in excess of the
23		corridor divided by the average remaining future service of the active
24		participants in the plan. For the Company's FAS 87 plan this is approximately
25		11 years.

1	For the ACM, which governs the NSPM Plan, the Company simply compares
2	the market-related value of the pension trust assets to the PVFB. If the market-
3	related value of the assets is greater than the PVFB, the plan is overfunded and
4	there is no pension expense. Thus, there is nothing to be amortized. If the
5	market value is less than the PVFB, the plan is underfunded, which means there
6	is pension expense that is amortized over the remaining service lives of the
7	employees within the actuarial formula.
8	
9	Note, however, that I am using the term "amortization" as a type of shorthand
10	insofar as the ACM is concerned. The difference between the market value of
11	trust assets and the PVFB is not truly amortized in the sense that the amount is
12	established in Year 1 and then that amount is fixed and recovered according to
13	a schedule that provides for annual payments over the next several years.
14	Instead, the Company undertakes the following process each year:
15	1) it calculates the difference between the market-related value of the assets
16	and the PVFB;
17	2) if the PVFB exceeds the market-related value, the Company calculates
18	the number of years over which to recover the difference; and
19	3) the difference is divided by the number of years to determine the amount
20	of pension expense that would need to be recovered in the current year
21	in order to fund the shortfall.
22	
23	In Year 2, however, this entire process is repeated, and the Company comes up
24	with a new shortfall amount and a new period over which to fund it. The

amount and the schedule from Year 1 are no longer relevant, because the Year

2 calculation "resets" the amount and the period over which the amount is to

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26

27

be funded.

1		in short, prior years experience, whether positive or negative, is incorporated
2		into the calculation of the current period recognition of pension expense.
3		Exhibit(RRS-1), Schedule 4 contains a decision tree for FAS 87 and a
4		decision tree for the ACM. Both show the process for determining whether to
5		amortize gains or losses.
6		
7	Q.	Order Point 40 of the Commission's September 3, 2013 Order in
8		DOCKET NO. E002/GR-12-961 IS RELATED TO PRIOR PERIOD GAINS AND
9		LOSSES. IT REQUIRES THE COMPANY TO "INCLUDE FOR EACH PENSION PLAN
10		SCHEDULES OF ITS 2008 MARKET LOSS AMORTIZATION, UNTIL THE 2008
11		MARKET LOSS AMORTIZATION HAS BEEN EXTINGUISHED." IS THE COMPANY
12		PROVIDING THAT INFORMATION?
13	Α.	Yes. Exhibit(RRS-1), Schedule 3 shows the estimated 2008 Market Loss
14		amortization by year and plan, as well as the Company's experience in each year
15		since 2008. Schedule 3 also depicts the phase-in of the asset gains or losses, as
16		well as the amortization of the net unamortized balances of gains and losses,
17		with the acknowledgement that our effort to break apart the NSPM Plan
18		provides a similar look but against a different construct than the look at the FAS
19		87 tracked gains and losses.
20		
21	Q.	Why does Schedule 3 not show the 2008 market loss amortization
22		UNTIL IT HAS BEEN EXTINGUISHED, AS DIRECTED BY ORDER POINT 40?
23	Α.	In accordance with the requirements of ACM and FAS 87 accounting standards,
24		the amortization amount is re-determined each year as described below and
25		does not follow a fixed schedule with a pre-determined end.

For FAS 87, each year the remaining amortizable gain or loss is divided by the
average remaining service period for active employees. The average remaining
service period for active employees is approximately eleven years and is re-
determined each year based on the active participants in the plan. Even though
we still have an open plan that allows new hire participation, the average
remaining service period has remained relatively constant and is expected to
continue to be approximately eleven years. Since the denominator of the
amortization equation remains approximately eleven in all years, the
amortization amount will gradually decline, but will never be fully
amortized. This is similar to what would happen if a 30-year mortgage was re-
financed each year into a new 30-year mortgage (the payments will decline, but
the payment period is reset each year to 30 years)

For ACM, the concept is the same as FAS 87, except instead of amortizing gains and losses, the unfunded liability is amortized each year. The amortization period for ACM is determined each year using the 20-year amortization basis, which at a 6.60 percent discount rate is approximately eleven years. Using the same amortization factor each year leads to declining amortization payments, but because the amortization factor is reset each year, the amount will not be fully extinguished until there is no unfunded liability. Schedule 3 shows the first twenty years of payments for both FAS 87 and ACM.

- Q. Do the amounts on Schedule 3 set forth the Company's pension expense in the test year?
- A. No. The discussion of pension expense up to now has been only about how the pension asset gain and loss experiences are recorded and carried forward for incorporation into the current year's pension expense. In Section C below I will

1	describe how the current year's pension expense is calculated under the ACM
2	and how that current pension expense incorporates past pension asset gain and
3	loss experiences. I will also explain how the current pension expense
4	incorporates liability gains and losses. In Section D, I provide the same types
5	of information for FAS 87.

7

C. Calculation of Pension Expense under the ACM

8 Q. WHY DOES THE NSPM PLAN USE THE ACM TO ACCOUNT FOR PENSION 9 EXPENSE?

10 NSPM began using the ACM to calculate pension expense in 1975. Although 11 FAS 87 became the new standard for pension accounting for financial reporting 12 purposes in 1987, it was made subject to the effects of rate regulation as 13 provided for by FAS 71, which allowed regulated entities such as the NSPM Plan to reflect the "rate actions of a regulator" and the "effects of the rate-14 setting process" by regulatory agencies, such as the Commission. The authority 15 16 provided by FAS 71 allowed the NSPM Plan to continue using the ACM for 17 ratemaking purposes, as it had before 1987, and the Commission approved this 18 continued use.

- Q. Please summarize the ACM and explain how pension costs are calculated under that method.
- 22 A. The ACM is based on a normalized level of long-term cash funding 23 requirements measured as a constant percentage of payroll. Under the ACM, 24 the pension cost is the normalized amount that would need to be paid into the 25 pension fund each year to fund earned benefits. Based on specific actuarial 26 assumptions such as the discount rate, projected salary levels, and mortality, the 27 PVFB is calculated and compared to the phased-in market-related value of plan

1	assets. The difference between the PVFB and the market value of assets is the
2	unfunded liability that must be funded over the future working lives of current
3	employees. I have included a summary of the ACM in Exhibit(RRS-1),
4	Schedule 5, along with a comparison to the FAS 87 method for calculating
5	pension expense.

- 7 Q. PLEASE PROVIDE AN EXAMPLE OF HOW THE ACM WORKS.
- 8 Suppose the Company determines, based on actuarial studies, that it will 9 ultimately need \$3 billion to fund its pension liability, which is the PVFB. If the market value of assets in the Company's NSPM Plan trust is currently \$2.5 10 11 billion, there is a \$500 million difference that will need to be funded. The ACM 12 requires that the Company fund that amount based on the period approved by 13 the Commission or the remaining future working lives of its employees, which 14 is approximately 11 years. The Company then sets the pension expense at a 15 levelized percentage of payroll based on the amount needed and the time 16 remaining to fund the pension liability.

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- Q. How are the pension asset gain and loss experiences incorporated
 into the ACM calculation?
 - A. Recall that the ACM is calculated by comparing asset values to the PVFB. Thus, if there is an asset gain from the prior year, the phased-in amount of that asset gain is added to the market-related value of the assets; and if there is an asset loss, the phased-in amount of that loss is subtracted from the market-related value of the assets. Insofar as the PVFB is concerned, if there is a liability gain from the prior year, the PVFB is reduced by that amount. If the plan has a liability loss from the prior year, the PVFB grows by that amount. The difference between the asset value and the PVFB after incorporating the asset

1		and liability gains and losses is the amount that is placed into the amortization
2		pool and netted with the cumulative unrecognized gain and loss experiences.
3		
4	Q.	PLEASE PROVIDE AN EXAMPLE OF HOW THE CALCULATION WORKS.
5	A.	Consider the example set forth earlier – the market value of assets is \$2.5 billion
6		and the PVFB is \$3.0 billion, which creates a funding obligation of \$500 million
7		in Year 1. Now suppose the following events occur:
8		• The actuarially determined EROA for Year 1 was seven percent, but the
9		fund actually earned six percent. In that instance, the fund would have
10		an asset loss of \$25 million (\$2.5 billion x $.01 = 25 million).
11		• The actual discount rate in Year 1 was 25 basis points higher than the
12		actuaries had assumed, which reduced the PVFB by \$15 million. Thus,
13		the fund has a liability gain of \$15 million for Year 1.
14		• The pension fund paid out \$175 million in benefits in Year 1, which is
15		exactly equal to the expected earnings on the plan's assets during that
16		year ($$2.5$ billion assets x .07 EROA = $$175$ million).
17		
18		Because the amounts paid out as benefits equal the EROA, the only changes
19		that need to be incorporated in the Year 2 pension expense are the asset loss
20		and the liability gain. The Year 1 asset loss was \$25 million, but under the phase-
21		in rules, only \$5 million (i.e., 20 percent) of that loss is reflected in the market
22		value of assets in Year 2. On the other hand, the entire \$15 million liability gain
23		is recognized in Year 2, so the Year 2 asset value drops by \$5 million and the
24		Year 2 PVFB drops by \$15 million. Now the difference between the market
25		value of the assets and the PVFB is \$490 million instead of \$500 million. That
26		\$490 million is then spread over the amortization period approved by the

Commission.

1	Q.	IN THAT EXAMPLE, WHAT HAPPENS TO THE ASSET LOSSES THAT HAVE NOT BEEN
2		PHASED IN AND AMORTIZED YET?
3	Α.	The amount is reflected on the Company's books as an increase to the liability
4		offset by a regulatory asset, resulting in no change to the net balance sheet
5		amount of the pension plan. As discussed earlier, an additional amount of the
6		asset losses will be phased into the amortization pool each year for the next four
7		years and will reduce the regulatory asset by a corresponding amount each year,
8		all else being equal.
9		
10	Q.	THE NSPM PLAN CURRENTLY HAS PRIOR-PERIOD ASSET LOSSES AND PRIOR-
11		PERIOD LIABILITY LOSSES, BOTH OF WHICH INCREASE THE AMOUNT OF PENSION
12		EXPENSE IN THE CURRENT YEAR. HAVE THE COMPANY'S CUSTOMERS
13		BENEFITED FROM ASSET GAINS AND LIABILITY GAINS IN THE PAST?
14	Α.	Yes. For many years the Company had significant gains because its pension
15		plan investments benefited from a significant and prolonged upward market
16		movement, and customers reaped the benefits through market gains that
17		exceeded the EROA. Mr. Inglis discusses the Company's pension plan
18		investments in more detail in his testimony.
19		
20	Q.	Is the Company asking its customers to restore losses from prior
21		YEARS?
22	Α.	No. We are simply calculating the current year's pension expense, which is
23		affected by cumulative gain and loss experiences. Expense is determined by
24		prior experience, and customers have benefitted from the prior gains.
25		Therefore, it is reasonable, appropriate, and necessary to reflect both prior-

period gain and loss experiences in current pension expense.

1	Q.	HOW HAVE THE PRIOR GAIN EXPERIENCES BEEN INCORPORATED INTO THE
2		COMPANY'S PENSION EXPENSE?

A. Prior gain experiences have been incorporated in the same way the prior loss experiences were incorporated. For the NSPM Plan, the asset gains and liability gains reduced the amount that needed to be funded, which reduced the pension expense charged to customers. For the XES Plan, the asset gains and liability gains have offset the service costs and interest costs that our customers would otherwise have paid in rates.

- 10 Q. Do you have data to show how customers have benefited from pension asset gains?
- 12 Yes. Exhibit (RRS-1), Schedule 6 quantifies the significant benefits that the 13 Company's pension assets have provided to customers. Schedule 6 shows the 14 Xcel Energy Pension Plan (XEPP) Trust activity since its inception in 1950. 15 Although Schedule 6 reflects more than just the NSPM Plan, it does 16 demonstrate the overall value of the pension assets, which include the NSPM 17 assets.⁴ Since 1950, the Company has contributed approximately \$1.5 billion 18 into the trust while earning approximately \$4.7 billion in investment returns, 19 which helped pay for approximately \$4.6 billion in payments to employees. For 20 many years these asset returns enabled the Company to recognize pension 21 benefit costs at or very close to zero and to make no pension contributions. 22 These low or nonexistent pension expense amounts were reflected in our rate 23 cases, which means that customers paid much less in annual pension cost than 24 they would have paid in the absence of the pension asset gains.

⁴ As of December 31, 2020, the NSPM Plan owned 50 percent of the total XEPP plan assets.

1	Q.	What has the Company done with those gains?
2	Α.	By law, earnings on pension trust assets cannot be removed from the trust fund.
3		Therefore, the net gains on the pension asset have been used to reduce the
4		pension expense charged to our customers and have mitigated cash funding
5		requirements.
6		
7	Q.	IS THERE ANY OTHER WAY IN WHICH CUSTOMERS HAVE BENEFITED FROM THE
8		PENSION ASSET GAINS?
9	Α.	Yes. For more than 50 years the Company's pension plan has provided a
10		market-competitive employee benefit, which allowed us to attract and retain
11		employees that helped us build, operate, and maintain the electrical system that
12		continues to provide safe, reliable electric service. The pension asset gains have
13		helped the Company provide that benefit at a much lower cost than would have
14		been possible without the asset gains.
15		
16		D. Calculation of Pension Expense under FAS 87
17	Q.	PLEASE PROVIDE AN OVERVIEW OF FAS 87.
18	Α.	FAS 87 is an accounting standard adopted by the Financial Accounting
19		Standards Board (FASB) in 1987 to govern employers' accounting for pensions.
20		Under FAS 87, pension cost is generally made up of five components of costs,
21		but a sixth component can be required provided certain criteria are met during
22		the year. The five main components of FAS 87 pension cost are:
23		1) the present value of pension benefits that employees will earn during the
24		current year (service cost).
25		2) increases in the present value of the PBO that plan participants have

earned in previous years (interest cost).

1		3) expected investment earnings during the year on the pension plan assets,
2		or EROA.
3		4) recognition of prior-period gains or losses (e.g., investment earnings
4		different from assumed or amortization of unrecognized gains and
5		losses).
6		5) recognition of the cost of benefit changes the plan sponsor provides for
7		service the employees have already performed (amortization of
8		unrecognized prior service cost).
9		
10	Q.	TAKING EACH OF THESE FIVE COMPONENTS IN ORDER, HOW IS THE SERVICE
11		COST COMPONENT CALCULATED?
12	Α.	The service cost component recognized in a period is the actuarial present value
13		of benefits attributed by the pension benefit formula to current employees'
14		service during that period. In effect, the service cost is the value of benefits that
15		the employees have earned during the current period. Actuarial assumptions
16		are used to reflect the time value of money (the discount rate) and the
17		probability of payment (assumptions as to mortality, turnover, early retirement,
18		and so forth).
19		
20	Q.	NEXT, HOW IS THE INTEREST COST COMPONENT CALCULATED?
21	Α.	The interest cost component recognized in a fiscal year is determined as the
22		increase in the plan's total PBO due to the passage of time. Measuring the PBO
23		as a present value requires accrual of an interest cost at a rate equal to the
24		assumed discount rate. Essentially, the interest cost identifies the time value of
25		money by recognizing that anticipated pension benefit payments are one year

closer to being paid from the pension plan.

- 1 Q. How is the third component, EROA, calculated?
- A. The EROA is determined based on the expected long-term rate of return on the market value of plan assets. The market value of plan assets is a calculated value that recognizes changes in the fair value of assets in a systematic and rational manner over not more than five years. The EROA is an offset to the service costs and interest costs, and therefore it reduces the amount of pension

expense.

- 9 Q. CAN YOU PROVIDE AN EXAMPLE OF HOW THE INVESTMENT EARNINGS REDUCE 10 THE AMOUNT OF PENSION EXPENSE?
 - A. Yes. Assume that the pension trust fund has a beginning asset balance of \$500 million and the expected EROA in that year is eight percent. The expected return is \$40 million (\$500 million x 8 percent). This amount will be used to offset the other components within the pension cost determination. Further assume that these other components are as follows: Service Cost (\$25 million), Interest Cost (\$20 million), and Loss Amortization (\$30 million). The net periodic pension cost for the year would be \$35 million as shown in Table 3:

Table 3

Annual Pension Expense Example

	Am	ounts in Million	s	
Service Cost	Interest Cost	Loss Amortization	EROA	Total
\$25	\$20	\$30	\$(40)	\$35

As shown in Table 3, the pension cost would have been \$75 million in the absence of the investment earnings. If the actual earned return in a particular year is higher than the EROA, customers will enjoy even more savings in future years as the asset gain is phased into pension expense.

1	Q.	HAVE THE COMPANY S CUSTOMERS EXPERIENCED THOSE TYPES OF SAVINGS IN
2		PRIOR YEARS?
3	Α.	Yes. As I explained previously, the Company's annual pension cost included in
4		rates has been significantly lower in prior years as a result of the earnings on the
5		FAS 87 pension assets because those earnings helped reduce the amounts
6		contributed by customers, relative to the true cost of the pension benefits.
7		
8	Q.	WITH REGARD TO THE FOURTH COMPONENT, WHAT ARE THE UNRECOGNIZED
9		GAINS AND LOSSES?
10	Α.	The unrecognized gains and losses are the asset gains or losses and the liability
11		gains or losses that I discussed earlier. The asset gains or losses occur because
12		the actual earned return on assets was different from the EROA in prior years.
13		The liability gains or losses occur because the actual values experienced in prior
14		years, such as the discount rate and wage assumptions, were different from what
15		was expected. The asset gains or losses are phased in according to the five-year
16		schedule I discussed earlier, and then they are netted with not only the liability
17		gains and losses from the previous year, but also the unamortized gains and
18		losses from prior years. If the net unamortized gains or losses fall outside the
19		ten-percent corridor, they are amortized over the remaining service lives of the
20		Company's employees.
21		
22	Q.	PLEASE EXPLAIN IN MORE DETAIL THE PROCESS FOR DETERMINING WHETHER
23		THE GAIN AND LOSS AMOUNT UNDER FAS 87 SHOULD BE AMORTIZED.
24	Α.	As noted in the decision tree that appears in Exhibit(RRS-1), Schedule 4,
25		the determination of the gain or loss amortization is a multi-step process
26		composed of the following steps:

1		1) Tł	ne Company first determines whether it has an asset gain or loss by
2		co	omparing the actual return on assets for the prior year to the EROA for
3		th	e prior year.
4		2) To	the extent there is an asset gain or a loss, the Company phases in 20
5		ре	ercent of that gain or loss. The Company will also phase in portions of
6		ga	ins and losses from prior years that have not been fully phased in. They
7		ar	e phased in at the rate of 20 percent per year.
8		3) Th	ne Company then calculates the gain or loss on the PBO by comparing
9		th	e actual year-end PBO from the prior year to the expected year-end
10		PI	BO for the prior year.
11		4) Tł	ne Company next aggregates the cumulative net gains and losses from
12		all	prior years to arrive at the cumulative unrecognized gains or losses.
13		5) If	the cumulative unrecognized gains and losses are more than 10 percent
14		of	the greater of the PBO or the market value of assets, the balance of
15		ga	ins and losses that falls outside the corridor is amortized over the
16		av	rerage expected remaining years of service of the Company's
17		en	nployees.
18			
19	Q.	Is this t	THE SAME PROCESS THAT THE COMPANY HAS FOLLOWED SINCE THE
20		ORIGINA	TION OF THE XES PLAN?
21	Α.	Yes. The	e Company was required to set the phase-in period, as well as the basis
22		for amor	rtizing gains and losses at the time it adopted FAS 87, and it is not

permitted to deviate from that basis from year to year.

1	Q.	WITH RESPECT TO THE FIFTH COMPONENT OF THE PENSION COST
2		CALCULATION, WHAT IS UNRECOGNIZED PRIOR SERVICE COST?
3	Α.	Plan amendments can change benefits based on services rendered in prior
4		periods. FAS 87 does not generally require the cost of providing such
5		retroactive benefits (prior service cost) to be included in net periodic pension
6		cost entirely in the year of the amendment, but instead provides for recognition
7		over the future years.
8		
9	Q.	How is unrecognized prior service cost amortized?
10	Α.	Unrecognized prior service cost is amortized over the expected remaining years
11		of service of the participants impacted by the benefit change. Also, there is no
12		ten-percent corridor for this purpose.
13		
14	Q.	How has the Company treated the asset gains of the XES Plan?
15	Α.	As noted earlier in connection with the NSPM Plan, all net asset gains have
16		been used to reduce pension expense.
17		
18	Q.	DOES THE AMORTIZATION AMOUNT OF UNRECOGNIZED GAINS AND LOSSES
19		REPRESENT THE ENTIRE FAS 87 EXPENSE?
20	Α.	No. As I discussed earlier, it is only one component of the FAS 87 pension
21		expense. The service costs, interest costs, EROA, and recognition of prior
22		service costs are also components of the FAS 87 expense.
23		
24	Q.	YOU HAD MENTIONED PREVIOUSLY THAT A SIXTH COMPONENT OF PENSION
25		COST CAN BE REQUIRED; WHAT IS THAT?
26	Α.	A sixth component, FAS 88 settlement accounting, can be required provided

certain criteria are met during the year. Settlement accounting is required if

lump-sum payments to employees in a year are greater than the sum of the
service cost and interest cost components recognized for that year. This
criterion for settlement accounting was met in 2017 and 2018 for the XEPP.
The XEPP's participant population has a significant proportion of participants
at or nearing retirement age. The Company has seen significantly more lump-
sum pension payouts in 2017 and 2018 than in years past, thus exposing the
plan to settlement accounting requirements for the first time. The Company
did not experience a settlement in 2019 and 2020, but it did experience a FAS
88 settlement in the third quarter of 2021. Because the final FAS 88 settlement
amount was not known at the time the Cost of Service amounts were finalized,
the amounts are not included in the 2021 forecast included in Table 2 above.
When settlement accounting is triggered, the Company is immediately required
to recognize a portion of unrealized losses currently deferred as a regulatory
asset. When settlement accounting is not triggered, the unrecognized gain or
loss is amortized over a much longer period of time.

Q. Does settlement accounting result in an increase in the overall pension expense?

No. Settlement accounting is not an increase in the overall pension expenses, but rather an acceleration of the timing of when the pension expense will be recognized. Since the 2017 and 2018 FAS 88 settlements are part of the total recognized FAS 87 pension cost, they were factored into the cap and deferral mechanism for XES pension expense that was mentioned above. The deferred amount is described in more detail below. As I mentioned previously, the 2021 settlement expense is not included in the Cost of Service in this case but will be applied to the XES pension cap, and any additional deferrals will be included in future rate cases.

1	Q.	DID THE XEPP FAS 88 SETTLEMENT AFFECT ONLY MINNESOTA CUSTOMERS?
2	Α.	No. The other Xcel Energy other operating companies (i.e., Northern States

- 3 Power Company Wisconsin (NSPW), Public Service Company of Colorado
- 4 (Public Service), and Southwestern Public Service Company (SPS)), also have
- 5 employees in the XEPP. As a result, they were also subject to this provision,
- 6 requiring them to also immediately recognize a portion of their unrealized losses
- 7 as required by FAS 88.

- 9 Q. How do other XCEL energy jurisdictions address the FAS 88 settlement charges?
- 11 A. NSPW requested deferred accounting treatment for the 2017 and 2018 pension
- settlement charges, which was granted. NSPW also received approval to
- amortize and include the deferred balances in 2020 rates as part of Interim
- Order 4220-UR-124. FAS 88 settlement charges are captured in pension
- 15 expense trackers employed by Public Service and SPS.

16

- 17 Q. DOES THE ACM ALSO HAVE A SETTLEMENT ACCOUNTING PROVISION?
- 18 A. No. The ACM does not have a settlement accounting provision.

- 20 E. Pension Funding
- Q. DO THE ACM AND FAS 87 ALSO GOVERN HOW RETIREMENT PLANS MUST BE
- 22 FUNDED?
- 23 A. No. The funding of retirement plans is determined based upon prudent
- business practices as limited by the provisions of the Employee Retirement
- Income Security Act (ERISA), the Pension Protection Act, and the Internal
- Revenue Code (IRC). Under those laws and regulations:
- There are minimum required contributions.

- There are maximum contributions that can be deducted for tax purposes.
 - The plan sponsor has a fiduciary responsibility to prudently protect the interests of the plan participants and beneficiaries.

Over the long run, the cumulative employer contributions made to a plan in accordance with ERISA, the Pension Protection Act, and the IRC rules will be roughly equal to the cumulative pension expense recorded under both the ACM and FAS 87; but in the short and intermediate run, there can be significant differences. The cumulative difference between pension contributions and recognized pension expense gives rise to a prepaid pension asset or a pension liability, both of which I will explain in greater detail later in my testimony.

IV. PENSION ASSUMPTIONS

- Q. PLEASE SUMMARIZE THE PRIMARY PENSION ASSUMPTIONS USED TO DETERMINE THE MULTI-YEAR RATE PLAN PENSION COST.
- A. The primary pension assumptions used to determine the multi-year rate plan pension costs are the discount rate and the EROA. The Company used the following assumptions in Table 4 to determine 2021-2024 pension expense:

Table 4
22
2021-2024 Pension Assumptions

Company – Accounting Method	Discount Rate	EROA
NSPM – Aggregate Cost Method (ACM)	6.60%	6.60%
XES – FAS 87 (ASC 715)	2.65%	6.60%

1	Q.	Has the Company provided objective, verifiable measures to
2		EVALUATE THE ASSUMPTIONS?
3	Α.	Yes. We have provided objective, verifiable measures where they are available.
4		For example, we used benchmark indexes to evaluate the reasonableness of the
5		discount rate produced by our bond-matching study, which we used in
6		determining the Company's five-year average discount rate. For the EROA
7		assumptions, we gathered information from the 2020 Edison Electric Institute
8		(EEI) survey results for fiscal year 2020, and we compared those other utilities'
9		assumptions to ours. The results are shown on Exhibit(RRS-1),
10		Schedule 7.
11		
12	Q.	WHAT DOES THE COMPARISON SHOW?
13	Α.	The EROA and wage increase assumptions used for the NSPM Plan and the
14		XES Plan are at or near the average of the 43 EEI companies who responded
15		to the survey.
16		
17		1) The NSPM Plan discount rate of 6.60 percent is much higher than the
18		average discount rate of 2.70 percent for the 43 EEI companies who
19		responded to the survey. This is because the ACM requires that the
20		discount rate be set equal to the EROA, which affects only companies
21		using ACM. A higher discount rate assumption lowers the cost, so the
22		NSPM discount rate assumption lowers pension cost as compared to
23		other utilities, all else equal.
24		
25		2) Regarding the XES Plan discount rate, as I noted earlier in my testimony,
26		the Company continues to believe that the correct method to arrive at
27		the FAS 87 discount rate is performing a bond-matching study for a

single year. However, we have used a five-year average discount rate in this case, consistent with prior Commission orders, to reduce the number of contested issues and to allow the parties to focus instead on the Company's proposed multi-year rate plan. The XES FAS 87 five-year average discount rate is 3.64 percent, compared to the EEI survey average of 2.70 percent.

3) The NSPM Plan and the XES Plan EROA assumptions of 6.60 percent are slightly lower than the 6.68 percent average for the EEI companies.

A. Discount Rate Assumption

Q. Please describe how the 3.64 percent discount rate for the XES Plan
 was determined for this rate case?

A. The Company determined the 3.64 percent discount rate consistent with Order Point 7 in Docket No. E002/GR-13-868, which states: "The Company shall apply the rolling five-year average FAS 87 discount rate when determining the XES Plan cost subject to deferral (or reversal) in subsequent years (i.e., non-rate-case test years) as the 2012 mitigation established in Docket No. E002/GR-12-961 continues." Table 5 below demonstrates how the five-year average discount rate of 3.64 percent was determined.

Table 5
Pension Discount Rate

Current Rate Cas		ent Rate Case	- Using Hist	orical Actuals	}	
Expense Period	2017	2018	2019	2020	2021	Five-Year
Measurement Date	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	Average
XES FAS 87	4.11%	3.60%	4.31%	3.48%	2.71%	3.64%

2		RATE TO INCORPORATE THE MOST RECENT MEASUREMENT DATE?
3	Α.	Yes. As we have done in prior rate cases, the Company will provide an updated
4		five-year average discount rate in Rebuttal Testimony to incorporate the most
5		recent measurement date of December 31, 2021, which will be available in late
6		January or early February of 2022.
7		
8	Q.	Please describe how the discount rates listed above in Table 5 for
9		THE FIVE-YEAR AVERAGE DISCOUNT RATE WERE DETERMINED.
10	Α.	The Company uses multiple reference points to set the discount rate. The
11		primary basis for valuation is a bond-matching study that is performed as of
12		December 31 of each year. The bond-matching study selects a matching bond
13		for each of the individual projected payout durations within the plan based on
14		projected actuarial experience, as compiled by the Company's actuary, Willis
15		Towers Watson. The bonds selected must have a rating of Aa/AA or higher
16		and not have a pending review as of December 31. In addition, the bond may
17		not have an inconsistent rating between agencies where any agency rates the
18		bonds below Aa/AA. If bonds are not available for a specific duration within
19		the plan, a bond with the next closest shorter duration is used to determine the
20		discount rate.
21		
22		The Company also uses other reference points to validate the rate calculated by
23		the bond-matching study, including the Merrill Lynch Corporate (AA-AAA)
24		15+ Bond Index. In addition to these reference points, the Company also
25		reviews general survey data provided by Willis Towers Watson and EEI to
26		assess the reasonableness of the discount rate selected.

Q. WILL THE COMPANY PROVIDE AN UPDATED FIVE-YEAR AVERAGE DISCOUNT

The Company has consistently used the bond-matching approach, along with the corroborating methods, because it provides the most accurate discount rate of the available alternatives that meet applicable standards of FAS 87. Further information pertaining to the determination of discount rates is provided in Exhibit___(RRS-1), Schedule 8. These standards and the review processes described below support the use of the discount rates used in determining the five-year average discount rate above that is used to determine pension expense for the XES Plan.

Α.

Q. DESCRIBE THE FINANCIAL VALIDATION PROCESS AND CONTROLS THAT ARE IN
 PLACE REGARDING SETTING THE DISCOUNT RATE.

The Company has a senior leadership team that reviews preliminary discount rates in late December with potential year-end scenarios. Because discount rates are not set until the December 31 rates are available, the review at the initial meeting is primarily to set expectations. Year-end discount rates are developed using a bond-matching study applied to projections of future cash outflows for benefit payments, as I described earlier. Bond-matching study results are reviewed jointly with the Company Controller, the area vice president in charge of benefits accounting, and representatives from Willis Towers Watson. Each individual bond is analyzed to consider any attributes that would make it inappropriate for the bond-matching study. This includes any known risk of downgrade to the bond, any deviation in yield from other bonds of the same duration, and the total outstanding and traded value of the bond. The results of the study are compared to publicly available sources such as the Merrill Lynch Corporate (AA-AAA) 15+ Bond Index to validate the reasonableness of the discount rate determined using the bond-matching study. Any unusual

1		deviations between these numbers are researched to understand the underlying
2		drivers.
3		
4		Bonds selected in the bond-matching study are revalidated by Willis Towers
5		Watson prior to the filing of the Company's 10-K to ensure that individual
6		bonds selected have not been downgraded or put on watch. In addition,
7		employee data used to determine the projected future payments is compared to
8		previous years for reasonableness of the headcount and pay rate information,
9		both internally and by Willis Towers Watson. Final discount rates are
10		communicated back to the senior leadership for approval, and the final
11		approved rate is included in the meeting minutes. Final approved discount rate
12		assumptions are then provided to the audit committee as part of the Company's
13		critical accounting policies.
14		
15		In addition to the year-end discount rate analysis, discount rates are regularly
16		recalculated over the course of the year by Goldman Sachs, Willis Towers
17		Watson, and independently by Company personnel using projected cash flows
18		combined with publicly published Merrill Lynch Corporate (AA-AAA) 15+
19		Bond Index to understand the expected impact of changing rates as market
20		conditions change. Changes in the 10-year Treasury rate and the Merrill Lynch
21		Corporate (AA-AAA) 15+ Bond Index are used as indicators that pension
22		discount rates are likely deviating from current assumptions and will often drive
23		incremental estimates of expected discount rates.
24		
25	Q.	How was the 6.60 percent NSPM Plan discount rate determined?
26	Α.	Pension expense for the NSPM Plan is based on the ACM, which requires use

of the long-term EROA as the discount rate. Thus, the determination of the

1		appropriate level of EROA, which is discussed below, also addresses the
2		appropriateness of the ACM discount rate.
3		
4	Q.	WHAT IS YOUR CONCLUSION REGARDING THE DISCOUNT RATES USED FOR THE
5		XES PLAN AND THE NSPM PLAN?
6	Α.	The test year discount rates for the XES Plan of 3.64 percent and the NSPM
7		Plan of 6.60 percent are reasonable, and in the case of NSPM Plan are well
8		above the average rates used by other companies. As I have indicated, the
9		Company does not necessarily agree with the use of a five-year average, but we
10		are proposing it in this case, consistent with the Commission's decision in our
11		2013 rate case, to reduce the number of contested issues, which will help the
12		parties focus on evaluating the merits of our multi-year proposal.
13		
14	Q.	WILL THE COMPANY UPDATE ITS PROPOSED DISCOUNT RATE?
15	Α.	Yes. Consistent with the past practice, the Company will recalculate its test year
16		pension cost using a measurement date of December 31, 2021, to capture the
17		most current pension position and to provide an update to all elements of cost.
18		
19		B. EROA Assumption
20	Q.	WHAT IS THE TEST YEAR EROA?
21	Α.	The test year EROA is 6.60 percent. In the Company's 2015 rate case, the
22		Company's EROA assumption was 7.25 percent.
23		
24	Q.	WHY DID THE COMPANY LOWER THE EROA ASSUMPTION?
25	Α.	The Company decreased the EROA assumption primarily because the risk-free
26		interest rates (e.g., U.S. Treasury Bonds), which are a building block of asset

returns, have continued to fall. A lower risk-free rate generally reduces forward looking expected returns.

3

- 4 Q. How was the test year EROA assumption determined?
- 5 The EROA is, and must be, determined based on the long-term expected rates 6 of return as dictated by the requirements of the ACM and FAS 87. The 7 Company bases investment return assumptions on expected long-term 8 performance for each of the investment types included in our pension asset 9 portfolio – equity investments (such as corporate common stocks), fixed-10 income investments (such as corporate bonds and U.S. Treasury securities), and 11 alternative investments (such as private equity, hedge fund-of-funds and real 12 assets). In reaching return assumptions, the Company considers the actual 13 historical returns achieved, as well as the long-term return levels projected and 14 recommended by investment experts in the marketplace. Xcel Energy 15 continually reviews its pension investment assumptions in order to maintain 16 investment portfolios that provide adequate rates of return at appropriate levels 17 of risk. Further information pertaining to the determination of EROA is 18 provided in Exhibit___(RRS-1), Schedule 8.

- Q. DESCRIBE THE FINANCIAL VALIDATION PROCESS AND CONTROLS THAT ARE IN
 PLACE REGARDING SETTING THE EROA ASSUMPTION.
- A. The Xcel Energy Treasury group, along with Goldman Sachs, establishes a target investment mix. This investment strategy and mix are then presented at the PTAC meeting for approval by the committee. The target portfolio investment mix has an expected long-term return based on Goldman Sachs' long term expected asset class returns. The expected long-term returns are validated for reasonableness by comparing them against expected returns

provided by Willis Towers Watson, and in some cases, other investment
advisory groups' returns. The range around the median return helps account
for the differences in factors associated with the constructions of the underlying
asset class return, risk, and correlation forecasts. Key contributing factors may
include, but are not limited to: time horizon, construction methodology,
valuation assessment, interest rate forecast, inclusion of expected alpha, fees, or
term premium, and inflation assumptions. The validated long term expected
returns for each plan are then included in the assumptions provided for
Executive review, and upon approval are included in the Xcel Energy's critical
accounting policies provided to the audit committee.

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- 12 Q. Does the Company compare its EROA to other companies?
- 13 A. Yes. The Company compares its EROA to other utilities and also to general 14 industry data. Exhibit___(RRS-1), Schedule 7 shows that the Company's long-15 term EROA assumption of 6.60 percent is slightly lower than the average of 16 6.68 percent for the EEI utilities.

17

- 18 Q. What is your conclusion regarding the 6.60 percent EROA?
- A. The 6.60 percent EROA assumption is reasonable based on the arguments outlined above. Mr. Inglis discusses the reasonableness of the Company's target asset allocation and investment strategy in more detail in his testimony.

22

V. QUALIFIED PENSION AND 401(K) MATCH COSTS

24

- 25 Q. What do you discuss in this section of your testimony?
- A. I quantify the multi-year rate plan expense amounts for qualified pension and the 401(k) match.

A. Qualified Pension Expense

- 2 Q. What is the level of qualified pension expense in each year of the
- 3 MULTI-YEAR RATE PLAN?
- 4 A. The 2022, 2023, and 2024 qualified pension expense amounts are approximately
- \$14.8 million, \$12.1 million, and \$8.4 million, respectively. These amounts
- 6 include costs related to both the NSPM Plan and the XES Plan. Approximately
- 7 75 percent of the Company's qualified pension expense relates to the NSPM
- 8 Plan and 25 percent relates to the XES Plan.

9

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- 10 Q. DO THE NSPM PLAN AND THE XES PLAN DETERMINE THEIR QUALIFIED
- 11 PENSION EXPENSE USING DIFFERENT METHODS?
- 12 A. Yes. As I indicated in an earlier section of my testimony, the ACM continues
- to be used to determine the expense of the NSPM Plan. Thus, the pension
- 14 expense for that plan consists of a levelized percentage of payroll that is
- sufficient to recover the current year's portion of the difference between the
- PVFB and the asset value. In contrast, costs of the XES Plan costs are
- established based on the five elements prescribed by FAS 87 service cost,
- interest cost, the EROA, unrecognized gains or losses, and unrecognized prior
- 19 service costs.

- 21 Q. ARE THE TWO METHODS BASED ON ANY COMMON ASSUMPTIONS?
- 22 A. Yes. To calculate the pension liability under both methods, it is necessary to
- 23 make assumptions about the discount rate and demographics (including
- 24 attrition, expected wage increases, etc.). The assumptions are established at the
- end of each year, and they are used to determine book expense for the
- subsequent year. Accordingly, the 2021 assumptions were finalized as of
- December 31, 2020, and the 2022 assumptions will be finalized as of December

- 31, 2021. The final 2022 assumptions will be available in late January 2023. The
 Company has typically included updated cost amounts in Rebuttal Testimony.
 We also recognize that our updates should be objectively validated when
 possible, and we will provide the available validation measures in both this
 testimony and my Rebuttal Testimony. I provided detailed support for each of
- 6 the two major pension assumptions in the prior section of my testimony.

- Q. What were the amounts of qualified pension expense in the four years prior to the test year, and what does the Company expect them to be over the next few years?
- 11 Table 6 below shows pension expense amounts since 2018 and the Company's 12 current forecast of qualified pension expense. The forecast for 2021 and 13 beyond assumes no changes in assumptions for the EROA, discount rate, plan 14 contributions, wage increases, and employee turnover. The forecast also 15 assumes that actual experience matches these assumptions, including the 16 Company's actual return on assets equaling the EROA in 2021 and all 17 subsequent years. Additionally, where applicable, the amounts reflect the 18 impacts of pension expense being calculated using a five-year average discount 19 rate and applying the two additional mitigation methods that the Commission 20 accepted in Docket No. E002/GR-12-961, including the proposed change to 21 the XES cap discussed below.

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Qualified F	able 6 Pension Expense
	c O&M State of MN
Year	Amount (\$)
2018	20,549,083
2019	21,427,184
2020	19,782,032
2021 Forecast	19,488,214
2022 Test Year	14,791,342
2023 Plan Year	12,149,016
2024 Plan Year	8,402,815

9

- 11 Q. What are the major drivers of the decrease in qualified pension 22 expense?
- 13 A. The major drivers of the changes in qualified pension expense are:
- favorable asset returns in 2019 and 2020
- a decrease in the asset loss amortization
- a reduction in the interest cost arising from lower discount rates
- improved funded status from contributions and expected return on assets
- plan design changes

- Q. Please discuss the recent decrease in the asset loss Amortization
- 22 AND EXPLAIN HOW THIS CONTRIBUTES TO THE DECREASE IN PENSION EXPENSE.
- 23 A. The primary reason for the asset loss amortization decrease was that the XEPP
- earned a 20.91 and 17.49 percentage return in 2019 and 2020, respectively. The
- asset loss amortization was explained in detail in Section III. Also, see
- Exhibit___(RRS-1), Schedule 3, which shows the declining loss amounts in the
- 27 2022-2024 multi-year rate plan.

1	Q.	Please describe how contributions and the expected return on
2		ASSETS CONTRIBUTE TO THE DECREASE IN PENSION EXPENSE.
3	Α.	Because of funding requirements mandated by the Pension Protection Act of
4		2006, the Company has made significant contributions to the pension trust
5		funds in recent years. Those contributions increase the assets upon which the
6		pension plan earns a return, and those returns are an offset to annual pension
7		cost. Thus, the increase in the asset base helps to reduce annual pension cost.
8		
9	Q.	PLEASE DISCUSS HOW PENSION PLAN DESIGN CHANGES CONTRIBUTE TO THE
10		DECREASE IN PENSION EXPENSE.
11	Α.	Plan design changes implemented in 2011 and 2012 significantly reduced benefit
12		levels for newly hired bargaining and non-bargaining employees. Each year as
13		new employees are hired the Company will continue to see increased savings as
14		new employees are enrolled in the revised pension benefit plan. In addition,
15		effective on January 1, 2018, the annual Retirement Spending Account credits
16		were eliminated on a going-forward basis for all non-bargaining employees, and
17		the Social Security Supplement was eliminated for all non-bargaining employees
18		who will not meet certain criteria, including retirement eligibility, by December
19		31, 2022
20		
21	Q.	HAS THE COMPANY PROVIDED THE ACTUARIAL STUDY AND DERIVATION OF
22		THE JURISDICTIONAL AMOUNT?
23	Α.	Yes. The Company has included Exhibit(RRS-1), Schedule 9, which is an
24		actuarial study that supports the qualified pension costs included in the multi-
25		year rate plan. Exhibit(RRS-1), Schedule 10 shows the conversion of the
26		2022 total cost amounts to the NSPM electric O&M, state of Minnesota

amount.

1 **B.** 401(k) Match

- 2~ Q. What is the 401(k) match expense amount in each year of the multi-
- 3 YEAR RATE PLAN?
- 4 A. The 2022, 2023, and 2024 401(k) match expense amounts are approximately
- 5 \$9.1 million, \$9.4 million, and \$9.6 million, respectively.

6

- 7 Q. What were the amounts of 401(k) match expenses in the four years
- 8 PRIOR TO THE TEST YEAR COMPARED TO THE FORECASTED AMOUNTS FOR THE
- 9 MULTI-YEAR RATE PLAN PERIOD?
- 10 A. Table 7 below shows the amounts of 401(k) match expense from 2018 through
- 11 2020, as well as the forecasted amounts in 2021, the 2022 test year, and the
- 12 2023-2024 plan years.

13

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Table 7 401(k) Match Expense

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21

Year	Amount (\$)
2018	9,036,008
2019	9,131,013
2020	9,284,970
2021 Forecast	9,007,773
2022 Test Year	9,130,477
2023 Plan Year	9,353,005
2024 Plan Year	9,625,556

23

2		2022-2024?
3	Α.	The most recent actual 401(k) match, which was from the 2020 plan year, was
4		used as the base year. This base year amount was then increased by the 2021
5		estimated and 2022-2024 budgeted merit increases to derive the amounts in
6		2022-2024.
7		
8	Q.	Why is the amount of 401(k) expense increasing each year?
9	Α.	The 401(k) expense is increasing because the contribution is calculated based
10		on a percentage of salary, and merit salary increases cause the total labor costs
11		to increase each year. Moreover, the Company has experienced an overall
12		increase in 401(k) participation in recent years, and that trend is expected to
13		continue.
14		
15		C. Qualified Pension Deferred Balances
16	Q.	What recent actions have impacted the Company's recovery
17		QUALIFIED PENSION COSTS?
18	Α.	In Docket No. E002/GR-12-961, the Company introduced, and the
19		Commission approved, two alternative cost recovery methods for its qualified
20		pension costs - a twenty-year amortization period for unrecognized pension
21		costs for the NSPM Plan and a "cap and defer" recovery of XES pension costs.
22		In Docket No. E002/GR-13-868, the Commission approved the continuation
23		of those methods, stating:
24 25 26 27 28 29		The Commission will adopt the ALJ's recommendation to require continuation of the qualified pension mitigation approved in the Company's 2012 rate case. As the ALJ recognized, this mitigation method has previously been found to be consistent with the public and ratepayer interests, and this record supports the same conclusion. The Commission will

Q. What assumptions were used to develop the 401(k) match expense for

1 2 3 4 5		therefore again require the Company to extend the NSPM Plan amortization period for unrecognized pension costs from 10 to 20 years; and cap the XES pension expense at the 2011 level of \$6.1 million and defer any excess of this amount to future years.
6	Q.	IS THE COMPANY PROPOSING TO CONTINUE THESE TWO PROPOSALS IN THIS
7		CASE?
8	Α.	Yes. The qualified pension amounts included in this rate case have been adjusted
9		for the extension of the amortization period from 10 to 20 years and the XES
10		pension cap that was previously approved by the Commission in the Company's
11		2012 rate case.
12		
13	Q.	What is the impact from these two changes on 2022 qualified pension
14		EXPENSE?
15	A.	These two changes have reduced the test year qualified pension expense by
16		\$563,036.
17		
18	Q.	How would you characterize the deferred amounts?
19	Α.	These deferred amounts represent shareholder funds that the Company will not
20		recover until a future time period, or a prepayment. The general ratemaking
21		practice is for a utility prepayment to be added to rate base and for a customer
22		prepayment to be subtracted from rate base.
23		
24	Q.	Is the Company currently earning a return on the amounts
25		DEFERRED TO FUTURE YEARS?
26	Α.	No. Although such treatment of these funds would be appropriate in order to
27		make shareholders whole, in Docket No. E002/GR-13-868, the Commission
28		stated that the deferred amounts "will not be included in rate base." Consistent
29		with this Order, the Company has not earned a return on these deferrals.

1	Q.	DOES THE COMPANY PROPOSE TO INCLUDE THE DEFERRED AMOUNT RELATED
2		TO EXTENDING THE AMORTIZATION PERIOD FROM 10 TO 20 YEARS IN RATE
3		BASE AND TO EARN A RETURN ON THOSE AMOUNTS ON A GOING-FORWARD
4		BASIS?
5	Α.	Yes. As I explained earlier, the normal ratemaking treatment of deferred
6		balances is to include them in rate base and to allow a return on them. For
7		example, the ADIT balances that customers have paid to the Company are
8		subtracted from rate base. There is no reason to treat the deferred pension
9		amounts differently.
10		
11	Q.	DID THE COMMISSION PROVIDE ANY OTHER GUIDANCE WITH RESPECT TO THE
12		DEFERRED BALANCE IN DOCKET No. E002/GR-13-868?
13	Α.	Yes. On page 20 of the Docket No. E002/GR-13-868 Order, the Commission
14		directed that, "if approved recovery exceeds future years' pension expense, the
15		Company will apply that amount to recovery of the deferred XES pension
16		expense amounts." The Commission also stated, "The Company shall file
17		annual compliance reports which provide its pension plans' cost-calculation
18		reports, the XES Plan accumulated deferred balance, and the excess rate-level
19		recovery applied toward satisfying the deferral."
20		
21	Q.	HAS THE COMPANY CREATED THE REQUIRED ANNUAL COMPLIANCE FILING
22		THAT INCLUDES THE DEFERRED PENSION BALANCES?
23	Α.	Yes. Exhibit(RRS-1), Schedule 11 provides the requested annual
24		compliance filing, which shows how the deferred amount was built up and how
25		it is expected to unwind over the course of the multi-year plan.

- 1 Q. Does the Company have any other requests related to these deferred balances?
- 3 Yes. The Company proposes to amortize the December 31, 2020 XES Plan 4 cap cumulative deferred balance of \$15,905,207 over the three years of the 5 multi-year plan, or \$5,301,736 per year. Mr. Chamberlain and Mr. Halama 6 discuss the appropriateness of the three-year amortization period. The history 7 of the cumulative deferred balance can be found in Exhibit (RRS-1), 8 Schedule 11, on the Sch B-XES, Page 2. For further discussion around these 9 deferred balances, including a description of the FAS 88 settlement, see the 10 Company's response to Information Requests (IR) DOC-2163 and DOC-2164 11 in Docket No. E002/GR-15-826, which can be found in Exhibit___(RRS-1),

14

12

Schedule 12.

D. Qualified Pension and 401(k) Match Benefits Summary

- Q. Please summarize the Company's request regarding the multi-year
 Rate plan amounts for these three benefits.
- 17 The Company requests that the Commission approve the 2022, 2023, and 2024 Α. 18 qualified pension expense amounts of \$14,791,524, \$12,148,590, and 19 \$8,401,773, and the 401(k) match expense amounts of \$9,130,477, \$9,353,005, 20 and \$9,625,556, respectively. The qualified pension expense amounts include 21 continuing the two normalization methods previously approved and updating 22 the XES Plan cap baseline to the 2022, 2023, and 2024 qualified pension 23 forecasted amounts of \$3,512,911, \$2,473,810 and \$912,369. Finally, the 24 Company requests to amortize the December 31, 2020 cumulative deferred 25 balance related to the XES cap of \$15,905,207 over the three years of the multi-26 year rate plan.

1	Q.	IS IT REASONABLE TO ASK CUSTOMERS TO PAY FOR QUALIFIED PENSION AND
2		401(K) MATCH BENEFIT COSTS?
3	Α.	Yes. It is appropriate that customers pay for these benefits because they reflect
4		a reasonable and necessary level of expense. As explained in more detail in the
5		testimony of Ms. Lowenthal, our compensation and benefits plans are required
6		to attract, retain, and motivate employees needed to perform the work necessary
7		to provide quality services for NSPM customers. Without the pension plan and
8		401(k) matching benefits, the Company would have to pay significantly higher
9		current compensation to attract employees.
10		
11		VI. RETIREE MEDICAL AND FAS 112 LONG-TERM
12		DISABILITY BENEFITS
13		
14	Q.	WHAT DO YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?
15	Α.	I discuss the Company's request to recover the expense for post-retirement
16		healthcare benefits under FAS 106, Employers' Accounting for Post-Retirement
17		Benefits Other Than Pensions, and for post-employment long-term disability
18		(LTD) benefits under FAS 112, Employers' Accounting for Post-Employment
19		Benefits.
20		
21	Q.	PLEASE EXPLAIN THE DIFFERENCE BETWEEN FAS 106 AND FAS 112 LTD
22		BENEFITS.
23	Α.	The FAS 106 benefits are primarily post-retirement healthcare benefits. FAS
24		112 encompasses a number of benefits, including LTD, self-insured workers
25		compensation, and continuation of life insurance.

A. Retiree Medical

- 2 Q. Does the Company still offer FAS 106 retiree medical benefits to its
- 3 ACTIVE EMPLOYEES?
- 4 A. No. The Company eliminated FAS 106 retiree medical benefits for all active
- 5 non-bargaining and bargaining employees more than ten years ago. The current
- 6 expense for retiree medical benefits is a legacy of the prior programs. But even
- 7 though there are no new entrants into the plan, current employees who were
- 8 hired prior to the termination date are still eligible for this benefit.

9

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- 10 Q. Please explain how retiree medical costs are determined.
- 11 A. The components and calculation of FAS 106 are identical to FAS 87, with one
- exception. Unlike FAS 87, FAS 106 asset gains or losses are not phased in
- before they are amortized; instead, the total gain or loss amount is simply
- amortized over the average years to retirement for active employees. Otherwise,
- the FAS 106 benefits are calculated based on assumptions regarding the
- discount rate, the EROA, and the salary or wage levels.

- 18 Q. What are the assumptions regarding the discount rate and the
- 19 EROA FOR THE MULTI-YEAR RATE PERIOD?
- 20 A. The 2022-2024 multi-year rate period reflects an EROA of 4.50 percent for
- both bargaining and non-bargaining employees. It reflects a 3.64 percent
- discount rate, which is the five-year average discount rate.

- Q. Please describe how the 3.64 percent discount rate was determined
 For this rate case.
- 3 A. The Company determined the 3.64 percent discount rate consistent with the
- 5 average discount rate of 3.64 was determined.

4

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FAS 106 Retiree Medical Discount Rate

Table 8

qualified pension expense calculation. Table 8 below shows how the five-year

8	F						
9	Current Rate Case - Using Historical Actuals						
10	Expense Period	2017	2018	2019	2020	2021	Average
10	Measurement						
11	Date	12/3/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	5-Year
12	Discount Rate	4.13%	3.62%	4.32%	3.47%	2.65%	3.64%

13

- Q. WILL THE COMPANY PROVIDE AN UPDATED FIVE-YEAR AVERAGE DISCOUNT
 RATE TO INCORPORATE THE MOST RECENT MEASUREMENT DATE?
- 16 A. Yes. As we have done in prior rate cases, the Company will provide an updated 17 five-year average discount rate in Rebuttal Testimony to incorporate the most 18 recent measurement date of December 31, 2021, which will be available in late 19 January or early February of 2022.

- Q. Please describe how the discount rates listed above in Table 8 for
 The five-year average discount rate were determined.
- A. The process for determining the discount rate for retiree medical is the same as for pension and is built from the same portfolio of bonds developed through the Company's bond-matching study. This common set of bonds is then applied to the plan-specific cash flows to arrive at a weighted average discount rate appropriate for each individual plan.

1	Q.	What were the amounts of FAS 106 retiree medical expense in the
2		FIVE YEARS PRIOR TO THE TEST YEAR, AND WHAT DOES THE COMPANY EXPECT
3		THEM TO BE OVER THE NEXT FEW YEARS?

- As Table 9 below shows, the test year retiree medical costs are the lowest they have been over this time period. This decrease in retiree medical costs has been the norm over the last several years and is primarily due to the fact that, as time passes, fewer employees are eligible for the benefit because it was closed to new participants more than a decade ago. Because of the foregoing factors, the FAS 106 expenses have decreased despite lower discount rates and the amortization of net gains and losses, both of which had the effect of increasing costs. Additionally, the Company implemented plan changes in 2013 to transition Medicare-eligible retirees and dependents to a healthcare exchange, which has also reduced costs. The steep drop in cost in 2021 is primarily due to a lower loss amortization and interest cost. The decreased loss amortization resulted from a net gain in 2020 attributable to:
 - Claims increases being lower than expected.
 - Decrease in liability due to normal operation of the plan.
 - 2020 asset returns being much higher than expected.

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Т	able 9
FAS 106 Retire	e Medical Expense
NSPM Electric	O&M State of MN
Year	Amount (\$)
2018	1,968,757
2019	1,310,993
2020	1,031,046
2021 Forecast	252,154
2022 Test Year	224,423
2023 Plan Year	1,189,017
2024 Plan Year	1,383,318

2		2023 OF THE PLAN YEAR?
3	Α.	Based on the actuarial study provided by Willis Towers Watson, there is a prior
4		service credit that will be fully amortized prior to 2023 that is driving the
5		increase in cost from 2022 to 2023. The prior service credit was created from
6		the previously mentioned 2013 plan change that transitioned all Medicare
7		retirees to Extend Health. The prior service cost was amortized over the
8		average future service to retirement for employees expected to receive benefits
9		from the plan at the time of the plan change (10.2 years) and will be fully
10		amortized in 2023.
11		
12	Q.	HAS THE COMPANY PROVIDED THE ACTUARIAL STUDY AND DERIVATION OF
13		THE JURISDICTIONAL AMOUNT?
14	Α.	Yes. The Company has included Exhibit(RRS-1), Schedule 9, which is an
15		actuarial study that supports the FAS 106 costs for 2021-2024.
16		Exhibit(RRS-1), Schedule 10 shows the conversion of the 2022 total cost
17		amounts to the NSPM electric O&M, state of Minnesota amount.
18		
19		B. FAS 112 Long-Term Disability Benefits
20	Q.	Please describe FAS 112 long-term disability Benefits and explain
21		HOW THEY ARE ACCOUNTED FOR.
22	Α.	LTD benefits are provided by the Company to former or inactive employees

Q. Why does the FAS 106 expense increase significantly from 2022 to

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after employment but before retirement. The LTD plan provides the employee

income protection by paying a portion of the employee's income while he or

she is disabled by a covered physical or mental impairment.

1	The accounting treatment varies depending on whether the cost is self-insured
2	or fully-insured. In a fully-insured plan, the Company purchases an insurance
3	plan from an outside insurance provider that assumes the risk. In a self-insured
4	plan, the Company provides the benefits to the covered individuals and
5	therefore, effectively acts as the insurer. For the self-insured piece, the
6	Company is required to accrue for LTD costs under FAS 112, while the fully-
7	insured piece is simply the cost of the insurance premium incurred each year
8	along with any other miscellaneous costs. The FAS 112 accrual represents the
9	expected disability benefit payments for employees that are not expected to
10	return to work.

- Q. What groups of employees are covered under the self-insured benefit and which groups are covered under the fully insured
- 14 BENEFIT?
- 15 A. All non-bargaining employees disabled prior to January 1, 2008 and NSPM
- bargaining employees disabled prior to January 1, 2014 are covered under the
- self-insured plan; all employees disabled after these dates are covered under a
- fully insured plan.

- 20 Q. What were the amounts of FAS 112 long-term disability expense in
- 21 THE FOUR YEARS PRIOR TO THE TEST YEAR, AND WHAT DOES THE COMPANY
- 22 EXPECT THEM TO BE OVER THE NEXT FEW YEARS?
- A. Table 10 below compares the FAS 112 long-term disability benefit costs from
- 24 2018 through 2024.

Table 10
 FAS 112 Long-Term Disability Expense

NSPM Electric O&M State of MN			
Year	Amount (\$)		
2018	11,661		
2019	(73,237)		
2020	257,864		
2021 Forecast	284,366		
2022 Test Year	56,305		
2023 Plan Year	52,562		
2024 Plan Year	49,353		

Q. WHAT CAUSES THE FLUCTUATIONS IN THESE COSTS FROM YEAR TO YEAR?

The FAS 112 self-insured costs fluctuate from year to year because of changes to the discount rate or demographic adjustments, such as changes in the number of disabled employees or changes in the amount of the average monthly disability benefit. Discount rate changes and demographic adjustments are the differences between actual experience and assumed experience and are recorded in the current year, which can result in significant changes in costs from one year to the next. The reason for the larger LTD costs in 2020 and 2021 are due to fully recognizing the losses associated with the decrease in discount rates (4.25 percent to 3.41 percent for 2020 and 3.41 percent to 2.53 percent for 2021). Under the FAS 112 LTD accounting methodology, the full impact of the discount rate change is reflected in the year of the update. These changes were significant because, unlike pension expense calculations, there is no amortization for gains and losses since there are no active employees to accrue the gain or loss over. Instead, the entire amount is recorded when it is determined. The cost then decreased significantly from 2021-2022 due to the

1		fact that we have assumed no further gains and losses arising from changes to
2		the discount rate. It is reasonable to assume no further changes to the FAS 112
3		discount rate (level discount rate of 2.53 percent) because our assumptions are
4		the most reasonable estimate to determine 2022 to 2024 costs at this point in
5		time.
6		
7	Q.	WILL THE COMPANY PROVIDE AN UPDATED FAS 112 DISCOUNT RATE TO
8		INCORPORATE THE MOST RECENT MEASUREMENT DATE?
9	Α.	Yes. As we have done in prior rate cases, the Company will provide updated
10		FAS 112 costs in Rebuttal Testimony to incorporate the most recent
11		measurement date of December 31, 2021, which will be available in late January
12		or early February of 2022.
13		
14	Q.	HAS THE COMPANY INVESTIGATED WHETHER IT SHOULD USE ONLY FULLY
15		INSURED PLANS?
16	Α.	Yes. The Company has evaluated fully insuring the plans that are currently self-
17		insured, but we determined that it was more costly to fully insure them than to
18		self-insure them due to the small number of individuals covered and the degree
19		of uncertainty around anticipated claims.
20		
21	Q.	HAS THE COMPANY PROVIDED THE ACTUARIAL STUDY AND DERIVATION OF
22		THE JURISDICTIONAL AMOUNT?
23	Α.	Yes. Exhibit(RRS-1), Schedule 9, which is an actuarial study that supports
24		the FAS 112 LTD costs for 2022-2024. Exhibit(RRS-1), Schedule 10 shows
25		the conversion of the 2022 total cost amounts to the NSPM electric O&M, state
26		of Minnesota amount

1 2		C. Retiree Medical and FAS 112 Long-Term Disability Benefits Summary
3	Q.	PLEASE SUMMARIZE THE COMPANY'S REQUEST REGARDING THE MULTI-YEAR
4		RATE PLAN AMOUNTS FOR THESE TWO BENEFITS.
5	Α.	The Company requests that the Commission approve retiree medical expense
6		in the amounts of \$0.2 million, \$1.2. million, and \$1.4 million. The Company
7		requests that the Commission approve FAS 112 long-term disability benefit
8		expense in the amounts of \$56,305, \$52,562 and \$49,352 for 2022, 2023, and
9		2024 respectively.
10		
11	Q.	Is it reasonable to ask customers to pay for retiree medical and FAS
12		112 LONG-TERM DISABILITY BENEFIT COSTS?
13	Α.	Yes. It is appropriate that customers pay for these benefits because they reflect
14		a reasonable and necessary level of expense, and because these are
15		commitments that the Company made to employees who provided quality
16		service to NSPM customers for many years. Stated differently, the FAS 106
17		and 112 expenses represent benefits that our former employees have already
18		earned, and the Company is required to comply with its obligations to disabled
19		and retired employees. These expenses are akin to accounts payable, which are
20		amounts the Company must pay to satisfy its legal obligations.
21		
22		VII. BENEFIT RATE BASE ASSETS AND LIABILITIES
23		
24	Q.	WHAT TOPIC DO YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?
25	Α.	I discuss the proposed ratemaking treatment of the Company's prepaid pension

asset and its unfunded benefit-related liabilities.

A. Overview of the Prepaid Pension Asset

- Q. Please describe the Company's prepaid pension asset and its
 Unfunded retiree medical and post-employment benefit liability.
- A. The prepaid pension asset arises in connection with the Company's qualified pension plan. Over the life of that plan, the Company has contributed more dollars to the plan than it has recognized in actuarially calculated pension expense. This results in a prepaid pension asset. Conversely, the Company has recognized more retiree medical, non-qualified pension and post-employment benefits expense than it has contributed to those plans, which results in unfunded liabilities.

11

- 12 Q. What do you mean when you refer to the actuarially calculated
- 13 EXPENSE THAT IS COMPARED TO THE CUMULATIVE CONTRIBUTIONS BY THE
- 14 COMPANY?
- 15 A. As I discussed earlier in my testimony, the annual qualified pension expense is
- 16 calculated in accordance with FAS 87 and the ACM. Similarly, the retiree
- medical costs are calculated under FAS 106, and post-employment benefits are
- calculated under FAS 112. Based on its accounting records, the Company can
- 19 quantify the total amount of actuarially calculated expense for each of those
- benefits over the entire period that the Company has offered that benefit. If
- 21 that cumulative expense amount is less than the cumulative contributions made
- by the Company since it began offering that benefit, the Company has a prepaid
- pension asset. If the cumulative recognized expense exceeds the cumulative
- contributions to the plan, there is an unfunded liability.

Q. CAN YOU PROVIDE A CONCRETE EXAMPLE OF HOW A PREPAID PENSION ASSET ARISES?

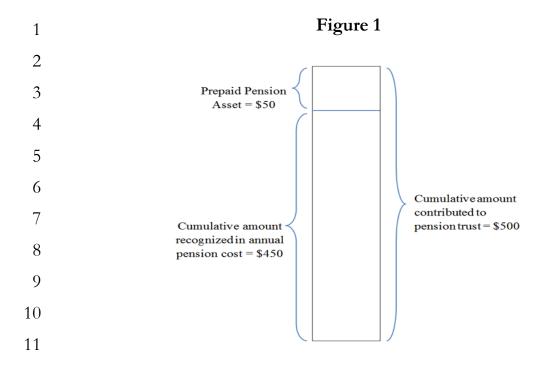
Yes. Suppose that the Company contributes \$100 per year to the qualified pension trust for each of the first five years of its existence. Further suppose that the actuarially determined qualified pension expense in each of those five years is \$90. Table 11 below shows how the excess contributions each year create a cumulative prepaid pension asset.

Table 11 Prepaid Pension Asset Example

Year	Pension Contribution	Pension Expense	Cumulative Prepaid Pension Asset
1	\$100	\$90	\$10
2	\$100	\$90	\$20
3	\$100	\$90	\$30
4	\$100	\$90	\$40
5	\$100	\$90	\$50

At the end of the five-year period, the utility has a prepaid pension asset of \$50. Of course, the opposite can also occur. If pension expense exceeds the pension contributions in a given year, the prepaid pension asset will decline, or if there is no prepaid pension asset, the utility may have a pension liability. Over the long run, pension contributions and pension expense will even out, but over the short and intermediate run there will almost certainly be differences, which are recorded as prepaid pension assets or pension liabilities. Figure 1⁵ below visually depicts the prepaid pension asset as the excess contributions over the recognized pension expense.

⁵ The amounts in this figure are merely illustrative, as are the amounts in Table 10.



As I discussed earlier, the qualified pension expense calculation is governed by the ACM and FAS 87, which sets forth the rules that companies must follow in determining their pension costs in order to have their accounting be acceptable under GAAP. In contrast, the contributions are driven by federal law requirements under ERISA and the IRC. Although the expense and contribution calculations both use accrual methodologies, the assumptions, attribution methods, and periods of time over which the costs are required to be recognized are different and thus can often result in different annual amounts.

1	Q.	CAN THE UTILITY WITHDRAW THE PREPAID PENSION ASSET AND USE IT TO FUND
2		CAPITAL REQUIREMENTS OR TO PAY FOR OPERATION AND MAINTENANCE
3		EXPENSE?
4	Α.	No. As I noted earlier in my discussion of the calculation of qualified pension
5		expense, federal law prohibits the withdrawal of any amounts from the pension
6		trust fund except for the payment of benefits and plan expenses. Once the
7		contributions are made, they are essentially locked away.
8		
9		B. Ratemaking Treatment of Prepaid Pension Asset
10	Q.	How are prepayments and unfunded liabilities generally treated
11		FOR PURPOSES OF SETTING RATES?
12	Α.	Prepayments by the utility are generally treated as an addition to rate base,
13		whereas prepayments by customers are generally treated as a reduction to rate
14		base.
15		
16	Q.	Is the Company proposing to apply the standard ratemaking
17		TREATMENT OF PREPAYMENTS AND UNFUNDED LIABILITIES IN THIS CASE?
18	Α.	Yes. In this case, the Company is proposing to include the Company's
19		prepayments of pension expense as an addition to rate base, and to treat the
20		customers' prepayments of FAS 106 and FAS 112 as a reduction to rate base.
21		Because the prepaid pension asset is larger than the unfunded liability, the
22		Company has a net asset and therefore has an increase to rate base. The
23		Company proposes to earn a return on the asset at the Company's weighted

average cost of capital (WACC).

2		NET PREPAID PENSION ASSET?
3	Α.	No. The net amount of the asset will be further offset by the ADIT associated
4		with it. Thus, instead of earning a return on the full amount of the net asset
5		(i.e., the prepaid pension asset less the unfunded accrued liabilities of retiree
6		medical and post-employment benefits) the Company earns a return only on
7		the portion that remains after the ADIT is subtracted from it.
8		
9	Q.	How does ADIT arise in connection with the prepaid pension asset
10		OR ACCRUED UNFUNDED LIABILITY?
11	Α.	When the Company makes a contribution, it is allowed to deduct the
12		contribution amount (up to IRS-imposed limits). That deduction shields
13		income from taxes, which gives rise to deferred taxes. Thus, the amount by
14		which the contributions in a particular year exceed the annual recognized cost
15		for that year gives rise to a deferred tax liability. The opposite situation occurs
16		when the annual cost recognized for a particular benefit exceeds the
17		contribution, which give rise to a deferred tax asset. Mr. Halama discusses
18		ADIT and how it impacts our filing.
19		
20	Q.	WHAT AMOUNT OF BENEFIT ASSETS AND LIABILITIES IS INCLUDED IN THE TEST
21		YEAR RATE BASE?
22	Α.	Table 12 below shows the amount included in rate base for all benefit types
23		included in 2021. This table also shows the amounts that must be offset by the
24		ADIT associated with the benefit asset or liability balance. This same
25		information can also be found in the Non-Plant Rate Base (Assets/Liabilities)
26		Schedule. The net balance is approximately \$95.4 million on a Minnesota
27		electric jurisdictional basis. This amount should be added to the Company's

Q. IS THE COMPANY PROPOSING TO EARN A RETURN ON THE FULL AMOUNT OF THE

rate base because it represents shareholder capital held for future use and because it will reduce ratepayer costs in those years, providing ratepayer benefit.

Table 12			
Pension and Benefits Assets and Liabilities (\$)			
Rate Base Benefit (Short and Long-Term)	Non-Plant Rate Base Asset/(Liability)	Associated Accumulated Deferred Tax Asset/(Liability)	Net Rate Base Impact Asset/(Liability)
Prepaid Pension Asset	167,257,722	(46,834,002)	120,423,720
Retiree Medical - FAS 106	(25,472,046)	7,132,453	(18,339,593)
Post-Employment Benefits FAS 112	(9,283,712	2,599,542	(6,684,171)
Total	132,501,964	(37,102,007))	95,399,957

- Q. What is the Company's request with respect to the net pension asset
 Balance of \$95.4 million?
- A. The Company seeks Commission approval to add that amount to its rate base and earn its WACC on that balance, consistent with the treatment of other prepayments.

- Q. Has the Company created a schedule to reflect the underlying calculation of the prepaid pension asset that is included in the multi-year rate plan period, 2022-2024?
- A. Yes. Exhibit___(RRS-1), Schedule 13 shows the annual calculation of the total NSPM prepaid pension asset or liability from 2015 through 2024. Schedule 13 also shows a detailed calculation by month that supports the 2022-2024 NSPM electric state of Minnesota prepaid pension asset balances that are being requested in rate base for this case.

1 (Э.	WHAT HAS CAUSED	THE RECENT GROWTI	1 OF THE PREPAID	PENSION ASSET?
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The growth of the prepaid pension asset was driven by two factors, both of which were outside the Company's control. The first factor was the enactment by Congress of the Pension Protection Act of 2006. Prompted by the defaults by several large defined benefit pension plans in the early part of that decade, Congress passed legislation that gave defined benefit pension plans seven years to become 100 percent funded. The Pension Protection Act also created penalties for plans that are underfunded, including an increase in Pension Benefit Guaranty Corporation (PBGC) premiums. As I will explain in more detail later in my testimony, the PBGC was established by Congress to ensure pension benefits under private-sector defined benefit pension plans. The PBGC is funded by premiums paid by plan sponsors and by investment returns on the assets held in the PBGC trust fund.

The second factor was the reduction in interest rates, which was caused by the Federal Reserve's efforts to stimulate the national economy in the wake of the 2008 recession. The resulting drop in discount rates caused the Company's pension liabilities to become larger, which increased the amount of underfunding. This is because future pension liabilities are discounted to present value, and a higher discount rate reduces the liability balance, whereas a lower discount rate increases the liability balance. That liability balance is then compared to the value of the trust assets to determine its funded status and to determine whether the trust is overfunded or underfunded.

1	Q.	How did the Company respond to the combination of heightened
2		FUNDING REQUIREMENTS AND A LOWER FUNDING LEVEL IN ITS PLANS?

A. The Company responded by taking the only steps that were practically available to it, which was to provide additional funding to the pension plans. To help ensure that the pension plans complied with the Pension Protection Act by becoming fully funded within seven years, the Company made the contributions listed in Exhibit___(RRS-1), Schedule 13. As I mentioned previously, these contributions will be recognized as expense over future periods. This timing difference gives rise to the prepaid pension asset.

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- Q. How can the pension plan be underfunded and yet the Company has
 A prepaid pension asset?
- 13 A. The Company can have an underfunded pension plan at the same time it has a
 14 prepaid pension asset because they measure different things. The underfunded
 15 pension plan occurs when the projected benefit obligation exceeds the fair value
 16 of the pension plan assets. A prepaid pension asset occurs when the cumulative
 17 cash contributions to the trust exceed the cumulative pension expense
 18 recognized under FAS 87 since the inception of the pension plan.

19

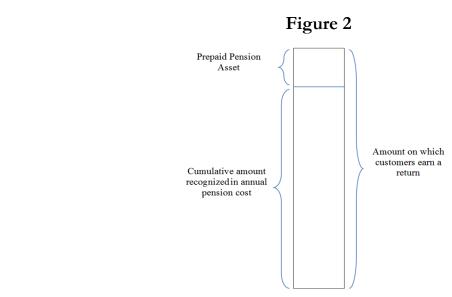
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C. Justification for Including the Net Asset in Rate Base

- Q. WHY IS IT APPROPRIATE TO INCLUDE THE NET ASSET IN RATE BASE?
- 22 A. The net asset should be included in rate base for three separate and independent 23 reasons. First, as I explained earlier, it is a well-established regulatory principle 24 for prepayments to be included in rate base, regardless of whether they are 25 prepayments by the utility or by its customers. In other words, prepayments 26 are included regardless of whether they are additions or reductions to rate base. 27 There is no reason to treat the net pension prepayment in this case differently.

1		Second, having an adequately funded pension plan helps attract and retain the
2		employees who provide safe and reliable electric service to our customers.
3		Therefore, the prepaid pension asset is just that – an asset for the Company –
4		and the Company should earn a return on that asset, just as it earns a return on
5		other assets.
6		
7		Third, customers are receiving the benefit of a return on the prepaid pension
8		asset, and therefore it is appropriate that the Company earn a return on its
9		prepayment as well.
10		
11	Q.	PLEASE EXPLAIN WHAT YOU MEAN WHEN YOU STATE THAT CUSTOMERS ARE
12		RECEIVING THE BENEFIT OF A RETURN ON THE PREPAID PENSION ASSET.
13	Α.	As I explained earlier in my testimony, the annual pension cost determined
14		under both accounting methods, the ACM (NSPM Plan) and FAS 87 (XES
15		Plan), includes an EROA. The EROA percentage is multiplied by the value of
16		the assets in the pension trust, and the product of that calculation is subtracted
17		from the annual pension cost. Thus, the return on the prepaid pension asset
18		reduces the annual qualified pension cost passed on to ratepayers on a dollar-
19		for-dollar basis.
20		
21	Q.	WHAT IS THE EROA FOR THE NSPM PLAN AND THE XES PLAN?
22	Α.	The EROA for both the NSPM Plan and the XES Plan is 6.60 percent for
23		2022, 2023, and 2024. That percentage is applied to the balance in the pension
24		trust.

- Q. Does the pension trust fund balance that is multiplied by the EROA
 include the prepaid pension asset?
 - A. Yes. As shown in Figure 2 below, customers receive the benefit of the earnings on the *entire* amount of assets in the pension trust, not just the amount that has been recognized in annual pension cost.



As the figure shows, customers are receiving a return on amounts that they have not yet paid through recognized pension cost. In effect, the Company has made a prepayment of pension contributions, and customers are earning a return on that prepayment at the EROA. The return is reflected as a decrease in annual pension cost. It would be inequitable and unreasonable to deny the Company a return on the prepaid pension asset at the WACC because customers are, in fact, receiving the benefit of a return on that prepayment at the EROA.

- 1 Q. HAS THE COMPANY QUANTIFIED THE REDUCTION IN ANNUAL PENSION
 2 EXPENSE THAT CUSTOMERS EXPERIENCED AS A RESULT OF THE PREPAID
 3 ASSETS?
- 4 A. Yes. As shown in Table 13, the Company's qualified pension expense will be reduced by \$13.2 million in 2022 on an electric basis because of earnings on prepaid pension assets:

Table 13				
Amounts are	NSPM Electric State	of MN (2022	13-month Average)	
Pension Plan	Prepaid Pension Asset Balance	EROA	Rate Reduction from Prepaid Pension Asset	
NSPM	167,257,722	6.60%	11,039,010	
XES	32,364,435	6.60%	2,136,053	
Total			\$13,175,062	

Thus, the earnings on the prepaid pension asset will reduce the Company's revenue requirement by nearly \$13.2 million in 2022 and are expected to reduce the revenue requirement by a similar amount through 2024. Because that reduction is passed through to customers on a dollar-for-dollar basis, NSPM's Minnesota retail customers realize a substantial benefit as a result of the prepaid pension asset.

Q. YOU TESTIFIED EARLIER THAT THE EROA FOR THE PENSION PLAN IS 6.60
PERCENT, WHEREAS THE COMPANY IS SEEKING A WACC OF 7.31 PERCENT.

DOES THE DISPARITY BETWEEN THE WACC AND THE EROA DEMONSTRATE
THAT CUSTOMERS ARE DISADVANTAGED BY THE USE OF THE WACC AS THE
RETURN ON THE PREPAID PENSION ASSET?

1	Α.	No, for three separate reasons. First, the NSPM pension plan balance on which
2		customers earn a return is much larger than the balance on which they pay a
3		return. Second, customers earn a return on the XES prepaid pension asset, but
4		do not pay a return on that asset because it is not included in rate base for
5		ratemaking purposes. ⁶ Third, the prepaid pension asset allows the Company to
6		avoid paying incremental PBGC premiums that would be added to the pension
7		expense paid by customers in the absence of the prepaid pension asset.

9 Q. PLEASE EXPLAIN THE FIRST REASON, WHICH IS THAT THE BALANCE OF THE
10 NSPM PREPAID PENSION ASSET ON WHICH CUSTOMERS EARN A RETURN IS
11 MUCH LARGER THAN THE BALANCE ON WHICH THEY PAY A RETURN.

12 A. The 6.60 percent EROA is applied to the full amount of the NSPM prepaid 13 pension asset, which totals approximately \$167.3 million. As shown in Table 14 13, that reduces the pension expense included in rates by more than \$11 million 15 per year. In contrast, customers pay a 7.31 percent return on only \$95.4 million 16 because the amount included in rate base reflects reductions for ADIT and the 17 unfunded FAS 106 and FAS 112 liabilities. Thus, the balance on which 18 customers earn a return is far larger than the balance on which they pay a return.

19

Q. THE SECOND REASON YOU LISTED EARLIER IS THAT CUSTOMERS EARN A
RETURN ON THE XES PREPAID PENSION ASSET BUT DO NOT PAY A RETURN ON
IT. WHAT IS THE BALANCE OF THE XES PLAN PREPAID PENSION ASSET?

A. The thirteen-month average balance of the XES Plan net prepaid pension asset associated with NSPM's electric retail jurisdiction will be approximately \$32.3 million in 2021. With an EROA of 6.60 percent for the XES Plan,

.

⁶ NSPM does not include the XES prepaid pension asset in rate base because the asset belongs to XES, not to NSPM.

1	NSPM's electric retail customers will receive the benefit of approximately \$2.1
2	million (electric retail) of return on an asset on which they pay no return. That
3	reduces annual pension expense by an equal amount.

- Q. CAN YOU DEMONSTRATE MATHEMATICALLY THAT THE COMPANY'S ELECTRIC
 RETAIL CUSTOMERS ARE BETTER OFF AS A RESULT OF THE PREPAID PENSION
 ASSET?
- 8 Yes. Table 14 (on the next page) shows that customers receive approximately Α. 9 \$11.0 million of benefit on an electric O&M basis as a result of EROA that is applied to the NSPM prepaid pension asset. In addition, they receive an 10 additional \$2.1 million of return on the XES prepaid pension asset, even 11 12 though they pay no return on that asset. That results in a total savings to 13 customers of approximately \$13.2 million. In contrast, multiplying the NSPM 14 prepaid pension asset of \$95.4 million by the 7.31 percent WACC requested by the Company results in a return of approximately \$7.0 million on an electric 15 16 O&M basis. Even when that amount is grossed up for taxes, the total amount 17 paid by customers is \$9.8 million Thus, as shown in Table 14, even when 18 customers pay a WACC return on the net prepaid pension asset, they realize 19 a net benefit of approximately \$3.4 million on an electric basis as compared 20 to a situation in which there was no prepaid pension asset.

1	
2	Amounts
3	Prepaid pension asset
4	balance (excluding the XES prepaid pension
5	asset)
6	EROA for NSPM plans
7	Initial return benefit to customers
8	Balance of XES prepaid pension asset
9 10	EROA for XES prepaid pension asset
	Return on XES prepaid
11	pension asset
12 13	Total annual reduction in rates attributable to
14	prepaid pension asset
15	Prepaid pension asset net of ADIT and after FAS 106 and FAS 112 offsets
16	100 mm 1110 112 011000
17	WACC
18	Return on prepaid pension asset
19	
20	Tax gross-up factor
21	Total return paid by customers
22	Net benefit to
23	customers from
24	prepaid pension asset

27

28

29

Table 14				
Amour	nts ar	e NSPM Electric State	of MN	
Prepaid pension asset balance (excluding the XES prepaid pension asset)		\$167,257,722		
EROA for NSPM plans Initial return benefit to	X	6.60%		
customers	=	\$11,039,010		
Balance of XES prepaid pension asset		\$ 32,364,435		
EROA for XES prepaid pension asset	X	6.60%		
Return on XES prepaid pension asset	Ш	\$2,136,053		
Total annual reduction in rates attributable to prepaid pension asset			\$13,175,0623	
Prepaid pension asset net of ADIT and after FAS 106 and FAS 112 offsets		\$95,399,957		
WACC	X	7.31%		
Return on prepaid pension asset	Ш	\$6,973,737		
Tax gross-up factor	X	1.403351		
Total return paid by customers	=		\$9,786,601	
Net benefit to customers from prepaid pension asset	II		\$3,388,462	

26 Q. DOES THE PREPAID PENSION ASSET BENEFIT CUSTOMERS IN ANY OTHER WAY?

Yes. As I noted earlier, the third reason that customers realize a benefit from A. the prepaid pension asset is that the contributions that helped create the prepaid pension asset allow the Company to avoid incurring PBGC premiums

2		customers.
3		
4	Q.	PLEASE DESCRIBE THE PBGC.
5	Α.	The PBGC is a federal agency established by Congress as part of ERISA to
6		insure pension benefits under private sector defined benefit pension plans. If a
7		pension plan is terminated without sufficient money to pay all benefits, PBGC's
8		insurance program will pay employees the benefits promised under the pension
9		plan, up to the limits set by law. The funding for the PBGC comes partly from
10		premiums charged to pension sponsors and partly from returns on assets held
11		by the PBGC.
12		
13	Q.	WHAT TYPES OF PREMIUMS DOES THE PBGC CHARGE?
14	Α.	The PBGC charges two types of premiums: (1) a per capita premium that is
15		charged to all single-employer defined benefit plans; and (2) a variable premium
16		charged to underfunded plans. The amounts of the premiums are set by
17		Congress and must be paid by sponsors of the defined benefit plans, such as
18		NSPM.
19		
20	Q.	ARE THE VARIABLE PREMIUMS APPLICABLE TO UNDERFUNDED PLANS
21		INCREASING?
22	Α.	Yes. For 2021, the variable-rate premium for a single-employer plan such as
23		that of NSPM is \$46 per \$1,000 of unfunded vested benefits.

that would otherwise be included within the annual pension cost charged to

1	Q.	ARE THE COMPANY'S PENSION PLANS CURRENTLY UNDERFUNDED?
2	Α.	Yes. And absent the prepaid pension asset, the plan would be further
3		underfunded. ⁷
4		
5	Q.	BY HOW MUCH WOULD THE PENSION PLANS BE UNDERFUNDED IN THE ABSENCE
6		OF THE PREPAID PENSION ASSET?
7	Α.	In the absence of the gross prepaid pension asset, the NSPM Plan would be
8		further underfunded by \$167 million using a 13-month average for 2022.
9		
10	Q.	By how much would the PBGC premiums increase in 2020 in the
11		ABSENCE OF THE PREPAID PENSION ASSET?
12	Α.	The PBGC premiums would be approximately \$3.3 million higher in 2021 on a
13		NSPM Electric, state of Minnesota basis, without the prepaid pension asset.
14		
15	Q.	ARE PBGC PREMIUMS INCLUDED IN THE ANNUAL PENSION COST?
16	Α.	Yes. PBGC premiums are included in the annual pension cost calculation.
17		Therefore, the existence of the prepaid asset will avoid the need for NSPM's
18		electric retail customers to pay an additional \$3.3 million in 2021.
19		
20	Q.	Does the avoidance of incremental PBGC premiums provide an
21		ADDITIONAL OFFSET TO THE PERCENTAGE DIFFERENCE BETWEEN THE EROA
22		AND THE WACC?
23	Α.	Yes. In addition to the \$3.4 million net benefit that I described earlier;

⁷ As I explained earlier, a plan can be underfunded at the same time it has a prepaid pension asset because they measure different things. As I testified earlier, the prepaid pension asset is the amount by which cumulative contributions exceed cumulative recognized pension expense. A pension plan is underfunded when its pension benefit obligations exceed the value of its assets.

24

customers avoid an additional \$3.3 million of PBGC premiums as a result of

1		the prepaid pension asset. Because customers realize nearly \$7.6 million in net
2		benefit as a result of the prepaid pension asset, it is reasonable to include the
3		net asset in rate base and for the Company to earn a WACC return on the asset.
4		
5	Q.	PLEASE SUMMARIZE THE COMPANY'S REQUEST WITH RESPECT TO THE PREPAID
6		PENSION ASSET.
7	Α.	The Company requests that the prepaid pension asset be included in rate base.
8		That is how other prepayments are treated, including prepayments by
9		customers, and there is no reason to treat the prepaid pension asset differently.
10		Moreover, customers realize a significantly greater rate reduction from the
11		prepaid pension asset than the return they are asked to pay, so it is reasonable
12		and equitable for the prepaid pension asset to be included in rate base and to
13		earn a WACC return.
14		
15		D. Commission Precedent on Prepaid Pension Asset
16	Q.	WHAT TOPIC DO YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?
17	Α.	I describe the way the Commission has treated the prepaid pension asset in
18		recent cases, and I explain why I respectfully disagree with the Commission's
19		reasoning in those cases.
20		
21	Q.	HOW HAS THE COMMISSION TREATED THE PREPAID PENSION ASSET IN RECENT
22		RATE CASES?
23	Α.	In several recent cases, the Commission has excluded the utilities' prepaid
24		pension assets from rate base and disallowed any return on those assets. ⁸ I

⁸ In the Matter of the Application of Minnesota Power for Authority to Increase Rates for Electric Service in Minnesota, Docket No. E-015/GR-16-664, Findings of Fact, Conclusions and Order at 16 (Mar. 12, 2018) (Minnesota Power Order); In the Matter of the Application of Minnesota Energy Resources

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REQUESTS TO INCLUDE THEIR PREPAID PENSION ASSETS IN RATE BASE AND TO EARN A RETURN ON THOSE ASSETS? A. As I understand the Commission's orders in recent cases involving Minnesota Power, Minnesota Energy Resources Corp. (MERC), and Otter Tail Power Company (Otter Tail), the Commission has rejected requests to include the utilities' pension and benefit-related assets and liabilities in rate base because: The utility "recovers its allowable pension expense from ratepayers, and is not being denied recovery of this operating cost"; The pension-plan assets and benefit obligations "go up and down	2		cases is either mistaken or does not apply to NSPM.
EARN A RETURN ON THOSE ASSETS? A. As I understand the Commission's orders in recent cases involving Minnesota Power, Minnesota Energy Resources Corp. (MERC), and Otter Tail Power Company (Otter Tail), the Commission has rejected requests to include the utilities' pension and benefit-related assets and liabilities in rate base because: The utility "recovers its allowable pension expense from ratepayers, and is not being denied recovery of this operating cost"; The pension-plan assets and benefit obligations "go up and down depending on funding, market conditions, or amendments to the plan"; The balances in the prepaid pension asset are "temporary, and fundamentally different than typical rate-based assets on which the Company earns a return on investment"; The asset already earns a return in the form of investment returns 2; and It would be "impractical, if not impossible, to equitably separate the	3		
6 EARN A RETURN ON THOSE ASSETS? 7 A. As I understand the Commission's orders in recent cases involving Minnesota Power, Minnesota Energy Resources Corp. (MERC), and Otter Tail Power Company (Otter Tail), the Commission has rejected requests to include the utilities' pension and benefit-related assets and liabilities in rate base because: 1	4	Q.	What reasons has the Commission asserted to deny utilities
 A. As I understand the Commission's orders in recent cases involving Minnesota Power, Minnesota Energy Resources Corp. (MERC), and Otter Tail Power Company (Otter Tail), the Commission has rejected requests to include the utilities' pension and benefit-related assets and liabilities in rate base because: The utility "recovers its allowable pension expense from ratepayers, and is not being denied recovery of this operating cost"; The pension-plan assets and benefit obligations "go up and down depending on funding, market conditions, or amendments to the plan"¹⁰; The balances in the prepaid pension asset are "temporary, and fundamentally different than typical rate-based assets on which the Company earns a return on investment"¹¹; The asset already earns a return in the form of investment returns ¹²; and It would be "impractical, if not impossible, to equitably separate the 	5		REQUESTS TO INCLUDE THEIR PREPAID PENSION ASSETS IN RATE BASE AND TO
Power, Minnesota Energy Resources Corp. (MERC), and Otter Tail Power Company (Otter Tail), the Commission has rejected requests to include the utilities' pension and benefit-related assets and liabilities in rate base because: The utility "recovers its allowable pension expense from ratepayers, and is not being denied recovery of this operating cost"; The pension-plan assets and benefit obligations "go up and down depending on funding, market conditions, or amendments to the plan"; The balances in the prepaid pension asset are "temporary, and fundamentally different than typical rate-based assets on which the Company earns a return on investment"; The asset already earns a return in the form of investment returns 12; and It would be "impractical, if not impossible, to equitably separate the	6		EARN A RETURN ON THOSE ASSETS?
Company (Otter Tail), the Commission has rejected requests to include the utilities' pension and benefit-related assets and liabilities in rate base because: The utility "recovers its allowable pension expense from ratepayers, and is not being denied recovery of this operating cost"; The pension-plan assets and benefit obligations "go up and down depending on funding, market conditions, or amendments to the plan"; The balances in the prepaid pension asset are "temporary, and fundamentally different than typical rate-based assets on which the Company earns a return on investment"; The asset already earns a return in the form of investment returns 12; and It would be "impractical, if not impossible, to equitably separate the	7	Α.	As I understand the Commission's orders in recent cases involving Minnesota
 utilities' pension and benefit-related assets and liabilities in rate base because: The utility "recovers its allowable pension expense from ratepayers, and is not being denied recovery of this operating cost"; The pension-plan assets and benefit obligations "go up and down depending on funding, market conditions, or amendments to the plan"¹⁰; The balances in the prepaid pension asset are "temporary, and fundamentally different than typical rate-based assets on which the Company earns a return on investment"¹¹; The asset already earns a return in the form of investment returns ¹²; and It would be "impractical, if not impossible, to equitably separate the 	8		Power, Minnesota Energy Resources Corp. (MERC), and Otter Tail Power
 The utility "recovers its allowable pension expense from ratepayers, and is not being denied recovery of this operating cost"; The pension-plan assets and benefit obligations "go up and down depending on funding, market conditions, or amendments to the plan"; The balances in the prepaid pension asset are "temporary, and fundamentally different than typical rate-based assets on which the Company earns a return on investment"; The asset already earns a return in the form of investment returns; and It would be "impractical, if not impossible, to equitably separate the 	9		Company (Otter Tail), the Commission has rejected requests to include the
 is not being denied recovery of this operating cost"⁹; The pension-plan assets and benefit obligations "go up and down depending on funding, market conditions, or amendments to the plan"¹⁰; The balances in the prepaid pension asset are "temporary, and fundamentally different than typical rate-based assets on which the Company earns a return on investment"¹¹; The asset already earns a return in the form of investment returns¹²; and It would be "impractical, if not impossible, to equitably separate the 	10		utilities' pension and benefit-related assets and liabilities in rate base because:
that attributable to ratepayer contributions and market returns." ¹³	12 13 14 15 16 17 18 19 20 21		 is not being denied recovery of this operating cost"; The pension-plan assets and benefit obligations "go up and down depending on funding, market conditions, or amendments to the plan"¹⁰; The balances in the prepaid pension asset are "temporary, and fundamentally different than typical rate-based assets on which the Company earns a return on investment"¹¹; The asset already earns a return in the form of investment returns ¹²; and It would be "impractical, if not impossible, to equitably separate the prepaid amount attributable solely to [the utility's] contributions from

respectfully submit that the reasoning employed by the Commission in those

Corporation for Authority to Increase Rates for Natural Gas Service in Minnesota, Docket No. G-011/GR-15-736, Findings of Fact, Conclusions, and Order at 11 (Oct. 31, 2016) (MERC Order); In the Matter of Otter Tail Power Company for Authority to Increase Rates for Electric Service in Minnesota, Docket No. E-017/GR-15-1033, Findings of Fact, Conclusions, and Order at 25 (May 1, 2017) (Otter Tail Order).

⁹ Minnesota Power Order at 16; MERC Order at 11; Otter Tail Order at 25.

¹⁰ Minnesota Power Order at 16; MERC Order at 11; Otter Tail Order at 25.

¹¹ Minnesota Power Order at 16; MERC Order at 11; Otter Tail Order at 25.

¹² Minnesota Power Order at 16.

¹³ Minnesota Power Order at 17.

1		None of those reasons justifies excluding NSPM's prepaid pension asset from
2		rate base.
3		
4	Q.	PLEASE EXPLAIN YOUR DISAGREEMENT WITH THE FIRST REASON — THAT THE
5		UTILITY RECOVERS ITS ALLOWABLE PENSION EXPENSE FROM RATEPAYERS AND
6		IS NOT BEING DENIED RECOVERY OF THIS OPERATING COST.
7	Α.	That rationale confuses income statement items, such as O&M expense, with
8		balance sheet items, such as capital assets. The annual pension expense included
9		in rates is an O&M expense, whereas the contributions to the pension trust
10		represent a capital cost on which the utility is entitled to a return. The inclusion
11		of pension expense in rates does not compensate investors with a return on the
12		capital they have advanced to fund the pension trust. ¹⁴
13		
14		The Commission's rationale for denying rate base treatment of the
15		contributions to the pension trust costs is akin to saying that utility investors do
16		not need a return on the capital they have invested in a transmission line because
17		the O&M costs necessary to operate and maintain the transmission line are
18		included in rates. The utility and its investors are entitled to recover both the
19		O&M expenses associated with the transmission line and a return on their
20		capital investment in the transmission line. Similarly, NSPM and its investors
21		are entitled to recover both the annual pension expense and a return on the

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prepayments to the pension trust.

¹⁴ As I have explained, a prepayment such as a prepaid pension asset reflects capital provided by the Company for the benefit of ratepayers.

1	Q.	PLEASE ADDRESS THE SECOND RATIONALE, WHICH IS THAT PENSION-PLAN
2		ASSETS AND BENEFIT OBLIGATIONS GO UP AND DOWN DEPENDING ON
3		FUNDING, MARKET CONDITIONS, OR AMENDMENTS TO THE PLAN.

A. This rationale erroneously conflates two separate things – the funded status of the pension trust and the prepaid pension asset. Changes in the market value of the pension-plan assets and changes in the benefit obligations affect the funded status of the pension plan, but they have no effect on the amount of the prepaid pension asset. As I have explained, the prepaid pension asset measures the difference between the cumulative pension contributions and the cumulative recognized pension expense. The fact that the plan's funded status changes periodically has no logical connection to amount of the prepaid pension asset or the issue of whether the prepaid pension asset should be included in rate base.

Q. WHY DO YOU DISAGREE WITH THE COMMISSION'S THIRD REASON, WHICH IS
THAT THE BALANCES IN THE PREPAID PENSION ASSET ARE "TEMPORARY, AND
FUNDAMENTALLY DIFFERENT THAN TYPICAL RATE-BASED ASSETS ON WHICH
THE COMPANY EARNS A RETURN ON INVESTMENT?

19 A. All asset balances are "temporary" in the sense that they rise and fall as new
20 investments are made and depreciation expense is recognized. Moreover, the
21 Company accounts for the changes in the prepaid pension asset balance by
22 using a 13-month average, as it does for other balances that vary over the year,
23 such as materials and supplies.

I also disagree with the assertion that the prepaid pension asset is somehow "different than" other utility assets. The Company is required by ERISA and the Pension Protection Act to make contributions to the pension trust, just as

1		the Company is required to make investments in physical assets such as
2		transmission and distribution lines to provide service; the dollars contributed to
3		the pension trust are real, out-of-pocket dollars provided by investors, just like
4		dollars spent on physical assets; and investors are entitled to a return on those
5		dollars comparable to the return available on other types of investments.
6		
7		Moreover, there is no valid basis to assert that the prepaid pension asset is
8		different because it is a balance sheet asset, rather than a physical asset. ADIT
9		balances are also non-physical, balance sheet assets, but they are included in rate
10		base as reductions to the balance on which the utility earns a return.
11		
12	Q.	DO YOU ALSO DISAGREE WITH THE RATIONALE THAT THE PREPAID PENSION
13		ASSET ALREADY EARNS AN INVESTMENT RETURN?
14	Α.	I agree that the prepaid pension asset earns an investment return, but as I have
15		explained, every dollar of that investment return is used to reduce the pension
16		expense charged to customers. Investors receive no benefit whatsoever from
17		the investment return. The mirror fact that customers benefit from the
18		investment return on the prepaid pension assets does not justify to denying
19		investors an investment return on the prepaid pension asset.
20		
21	Q.	PLEASE TURN NOW TO THE FINAL REASON LISTED EARLIER, WHICH IS THAT IT
22		WOULD BE "IMPRACTICAL, IF NOT IMPOSSIBLE, TO EQUITABLY SEPARATE THE
23		PREPAID AMOUNT ATTRIBUTABLE SOLELY TO [THE UTILITY'S] CONTRIBUTIONS
24		FROM THAT ATTRIBUTABLE TO RATEPAYER CONTRIBUTIONS AND MARKET
25		RETURNS."
26	Α.	Whatever validity that reason may have with respect to other Minnesota utilities,
27		it has none insofar as NSPM is concerned because the entire prepaid pension

1		asset that the Company seeks to include in rate base resulted from investor
2		contributions. As I have explained several times in my testimony, the prepaid
3		pension asset represents the difference between the cumulative contributions
4		by investors and the cumulative recognized pension expense. Market returns
5		are not included in the calculation, and neither are "ratepayer contributions." 15
6		
7	Q.	IN PRIOR CASES, PARTIES HAVE ARGUED THAT SOME OF THE PREPAID PENSION
8		ASSET MUST BE ATTRIBUTABLE TO MARKET RETURNS OR RATEPAYER
9		CONTRIBUTIONS BECAUSE THE PREPAID PENSION ASSET HAS INCREASED IN
10		YEARS IN WHICH THERE WAS NO COMPANY CONTRIBUTION TO THE PENSION
11		TRUST. IS THAT A VALID ARGUMENT?
12	Α.	No. That argument misunderstands the role played by negative pension
13		expense and fails to recognize that negative pension expense does, in fact,
14		represent an investor contribution.
15		
16	Q.	PLEASE EXPLAIN WHAT YOU MEAN WHEN YOU REFER TO "NEGATIVE PENSION
17		EXPENSE."
18	Α.	As I explained earlier, annual pension cost is calculated using the following
19		formula:
20		Current service cost
21		+ Interest cost
22		- EROA
23		+/- Loss (gain) due to difference between expected and actual experience
24		of plan assets or liabilities from prior periods
25		+ Amortization of unfunded prior service cost
26		= Annual pension cost

¹⁵ I have placed quotes around the term "ratepayer contributions" because ratepayers do not make contributions to the pension trust. Only the Company makes contributions, using investors' capital. The only thing NSPM's customers pay is annual pension expense, which is an O&M expense.

If the reductions to annual pension cost (i.e., the EROA and gains due to the
differences between prior-period assumptions and actual experience)16 are
larger than the other three elements of cost, the annual pension cost is
negative. That reduces the cumulative recognized pension cost and increases
the prepaid pension asset.

Q. Does the fact that the negative pension expense caused the prepaid pension asset to be larger than it would otherwise be mean that someone other than NSPM shareholders funded the increase to the prepaid pension asset?

No. NSPM's shareholders funded the entire prepaid pension asset. Consider an example in which the combination of the service cost, interest cost, and amortization of prior unfunded service cost totals \$20 million, but the combination of the EROA and prior-period gains totals \$30 million. In this example, \$10 million of the gain is not needed to fund annual pension expense. In a non-ERISA scenario in which a utility's investments generated \$10 million more than needed to fund corresponding liabilities, the utility could take the \$10 million and use it for operating expenses or recognize it as earnings. But because ERISA forbids a utility from withdrawing amounts from a pension trust (other than for payment of employee benefits and plan expenses), the utility in this example has no access to the earnings that its prior contributions generated, even though those earnings reduce the utility's revenue requirement. In effect, the utility is forced to forgo collection of \$10 million that it would otherwise place in its bank account, and there is no

¹⁶ As I explained earlier, prior-period gains may result from higher-than-expected market returns, but they can also result from liability gains. Liability gains occur when the pension benefit obligation declines for reasons such an increase in the discount rate or mortality changes.

material difference between writing a check for \$10 million and being forced to forgo collection of \$10 million that investors' contributions earned. Either way, the utility has \$10 million less in its bank account. Therefore, to the extent the argument suggests that a utility is not "out of pocket" when negative pension expense reduces the cumulative recognized pension expense, that is wrong.

The suggestion that the utility is not "out of pocket" by any amount as a result of negative pension expense becomes even more obviously untenable when the development of the prepaid pension asset is viewed on a cumulative basis. Suppose that in each of the years in which there was negative pension expense, NSPM had been allowed to withdraw – and did withdraw – the negative pension expense. In those circumstances, the prepaid pension asset reflected on NSPM's books would largely disappear, but NSPM would have approximately \$95.4 million more in its bank account, and customers would be earning a return on \$95.4 million less of pension assets. But in reality, the \$95.4 million remains in the pension trusts, and customers are earning a return on that \$95.4 million. Thus, NSPM and its shareholders have indeed advanced the \$95.4 million on which customers are earning a return, and they are entitled to a return on that prepayment.

Those involuntary contributions could be added to the shareholder contribution side of the equation, rather than being reflected as negative pension expense, because that is exactly what they are – involuntary shareholder contributions resulting from the federal law that prohibits withdrawals from the pension trust. Increasing the amount of contributions and leaving the amount of cumulative pension expense the same would lead

1		to the exact same prepaid pension asset balance that NSPM has calculated in
2		this case.
3		
4	Q.	Please summarize your views regarding the Commission's reasons
5		FOR DENYING UTILITIES' REQUESTS TO INCLUDE THEIR PREPAID PENSION
6		ASSET IN RATE BASE IN RECENT CASES.
7	Α.	The Commission should approve the Company's request to include its prepaid
8		pension asset in rate base and to earn a WACC return on it since I respectfully
9		submit that the Commission's rationales in prior cases are either based on
10		mistaken premises or grounded on facts that do not apply to NSPM.
11		
12		E. Precedent from Other Xcel Energy Jurisdictions
13	Q.	DO XCEL ENERGY OPERATING COMPANIES IN OTHER JURISDICTIONS EARN A
14		RETURN ON THEIR PREPAID PENSION ASSETS?
15	Α.	Yes. Regulatory commissions in Colorado, New Mexico, and Texas all allow
16		the Xcel Energy operating companies in those jurisdictions to include their
17		prepaid pension assets in rate base and to earn a return on them.
18		
19	Q.	HAS THE ISSUE OF WHETHER TO ALLOW A PREPAID PENSION ASSET TO BE
20		INCLUDED IN RATE BASE AND TO EARN A RETURN BEEN A CONTESTED ISSUE
21		IN THOSE JURISDICTIONS?
		IN THOSE JORISDICTIONS:
22	Α.	Yes. It has been a contested issue in all three jurisdictions. I am familiar with
22 23	Α.	

2	A.	In a 2017 gas rate case, the Public Utilities Commission of Colorado denied
3		Public Service's request to include its prepaid pension asset in rate base.11
4		Public Service appealed the Colorado commission's decision to state district
5		court. In a decision that was issued in March 2020, the state district court
6		found that Public Service had a constitutional right to earn a return on its
7		prepaid pension asset because the prepaid pension asset was no different from

other assets used by the utility to provide service:

PLEASE DESCRIBE HOW THE ISSUE HAS BEEN ADDRESSED IN COLORADO.

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[T]he evidence was undisputed that this defined-benefits pension plan contributed to the service-producing activities of PSC. Any prepayments therefore likewise contributed to the service-producing activities of PSC. Because PSC is constitutionally entitled to a reasonable return on its service-producing assets, it is constitutionally entitled to a reasonable return on its prepayments.¹⁸

In the wake of that decision, the Colorado commission allowed Public Service's electric department to include its prepaid pension asset in rate base.¹⁹

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¹⁷ In the Matter of Advice Letter No. 912-Gas Filed by Public Service Company of Colorado to Roll the Pipeline System Integrity Adjustment ("PSIA") Costs Into Base Rates Beginning in 2019 and Increase Rates for All Natural Gas Sales and Transportation Services by Implementing a General Rate Schedule Adjustment ("GRSA") in the Company's Colorado P.U.C. No. 6-Gas Tariff, to Become Effective July 3, 2017, Decision No. C1800736-I at ¶ 104 (Mailed Aug. 29, 2018).

¹⁸ Public Service Company of Colorado v. The Public Utilities Commission of the State of Colorado, Case No. 19CV31427, Order at 18 (Denver County District Court, Mar. 12, 2020). The Colorado commission did not appeal the district court decision to the Colorado Supreme Court.

¹⁹ In the Matter of Advice Letter No. 1797 Filed by Public Service Company of Colorado to Reset the Currently Effective General Rate Schedule Adjustment ("GRSA") As Applied to Base Rates for All Electric Rate Schedules as Well as Implement a Base Rate KWH Charge, General Rate Schedule Adjustment-Energy ("GRSA-E") to Become Effective June 20, 2019, Decision No. C20-0505 at ¶ 79 (Decision Mailed July 14, 2020).

1	Q.	IS THE PREPAID PENSION ASSET OF NSPM ALSO A "SERVICE-PRODUCING
2		ASSET," AS THAT TERM WAS USED BY THE COLORADO COURT?

A. Yes. The Colorado court found that Public Service's prepaid pension asset was a service-producing asset because it helped reduce rates for customers and because it helped Public Service attract and retain employees. In addition, the court found it significant that Public Service was required by federal law to maintain a certain funding level for the pension plan. All of those things are true of NSPM's prepaid pension asset as well.

10 Q PLEASE DESCRIBE HOW THE PREPAID PENSION ASSET HAS BEEN TREATED IN NEW MEXICO.

12 A. In a 2014 order, the New Mexico Public Regulation Commission allowed SPS
13 to include its prepaid pension asset in rate base and to earn a return on it. The
14 New Mexico Attorney General appealed that issue to the New Mexico
15 Supreme Court, which upheld the New Mexico commission's decision to
16 include the prepaid pension asset in rate base:

It is uncontested that SPS investors made contributions to the pension fund that are required by law. These contributions exceeded expenses and generating earnings that effectively reduced SPS's – and consequently the ratepayers' – pension expense. Had the ratepayers advanced the contributions to the pension fund, their contributions would not have been included in rate base. [Citation omitted]. However, because the ratepayers did not make the contributions, the investors, not the ratepayers, absorbed the cost of funding the pension program, and therefore the net prepaid pension asset was property included in the rate base. ²⁰

²⁰ New Mexico Attorney General v. New Mexico Public Regulation Comm'n, 2015-NMSC-032 at ¶ 21.

1	Q.	IS THERE ANY MATERIAL DIFFERENCE BETWEEN THE PREPAID PENSION
2		ASSET AT ISSUE IN THE NEW MEXICO CASE AND NSPM'S PREPAID
3		PENSION ASSET?
4	Α.	No. Both the SPS and NSPM prepaid pension assets represent investor
5		contributions that reduce the pension expense included in rates and
6		that help attract and retain employees. Therefore, both should be
7		included in rate base.
8		
9	Q.	PLEASE DESCRIBE HOW THE PUBLIC UTILITY COMMISSION OF TEXAS
10		HAS TREATED SPS'S PREPAID PENSION ASSET.
11	Α.	In a 2015 base rate case, parties challenged SPS's request to include its
12		prepaid pension asset in rate base and to earn a WACC return on that
13		asset. The Texas commission rejected those challenges:
14		Accounting in accordance with GAAP requires that the
15		amount by which the cash contributions made to the
16		pension trust exceed the accumulated pension cost to be
17		recorded as a prepaid pension asset.
18		Investment income on the prepaid pension asset reduces
19		qualified pension costs calculated under FAS 87, which
20		benefits customers by reducing the amount of pension
21		costs included in base rates.
22 23		The prepaid pension asset is appropriately included in rate base because it represents a prepayment by SPS. ²¹
		zace z compare to represente a propagazione z y or o.

²¹ Application of Southwestern Public Service Company for Authority to Change Rates, Docket No. 43695, Order on Rehearing at 23 (Feb. 23, 2016).

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1	Q.	IS THERE ANY MATERIAL DIFFERENCE BETWEEN THE PREPAID PENSION
2		ASSET AT ISSUE IN THE TEXAS CASE AND NSPM'S PREPAID PENSION
3		ASSET?
4	Α.	No. Just like the New Mexico prepaid pension asset, the Texas prepaid
5		pension asset was created by investor contributions that reduced the
6		pension expense included in rates. The Texas prepaid pension asset
7		also helped SPS attract and retain employees. All of those things are
8		true of the NSPM prepaid pension asset as well. Therefore, it should
9		be included in rate base.
10		
11		VIII. ACTIVE HEALTH AND WELFARE COSTS
12		
13	Q.	What are the active health and welfare amounts for 2022, 2023, and
14		2024?
15	Α.	The 2022, 2023, and 2024 health and welfare expense amounts are
16		approximately \$33.5 million, \$34.0 million, and \$35.8 million, respectively.
17		
18	Q.	WHAT TYPES OF BENEFIT COSTS ARE INCLUDED IN ACTIVE HEALTH AND
19		WELFARE?
20	Α.	Active health and welfare costs can be broken down into three categories. The
21		first and largest category is for active healthcare costs; the second category is for
22		miscellaneous benefit programs and costs; and the third category contains life,
23		LTD, and business travel insurance premiums.

1	Q.	SINCE ACTIVE HEALTH AND WELFARE CONSISTS OF THREE CATEGORIES OF
2		COSTS, CAN YOU PROVIDE A FURTHER BREAKDOWN OF COSTS IN THE TEST
3		YEAR?
4	Α.	Yes. Exhibit(RRS-1), Schedule 14, shows the components that are included
5		in each category and the amount for each component in the test year. The
6		active healthcare category makes up 90 percent of the total health and welfare
7		costs, so the remainder of this section of testimony will focus on active
8		healthcare.
9		
10	Q.	WHAT TYPES OF COSTS ARE INCLUDED IN ACTIVE HEALTHCARE?
11	Α.	Active healthcare costs are all costs associated with providing healthcare
12		coverage to our employees. As explained in more detail by Ms. Lowenthal,
13		active healthcare benefits include medical, pharmacy, dental and vision claims,
14		administrative fees, employee withholdings, pharmacy rebates, Health Savings
15		Account (HSA) contributions, transitional reinsurance fees, trustee fees, interest
16		income and opt-out finding.
17		
18	Q.	DID THE COMPANY MAKE ANY ADJUSTMENTS TO THE PER BOOK AMOUNTS FOR
19		ACTIVE HEALTHCARE CLAIMS?
20	Α.	Yes. Table 15 below shows both the per book and actual incurred amounts of
21		active health and welfare claims for the five years prior to the test year and for
22		the 2022 test year and 2023 and 2024 planned years.

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Table 15 Active Health Care Per Book and Actual Incurred Claims NSPM Electric O&M State of MN (\$)

Year	Per Book Amount	IBNR Adjustment	Actual Incurred Claims
2018	34,120,041	-263,278	33,856,764
2019	29,721,385	1,655,221	31,376,607
2020	30,636,541	(653,237)	29,983,304
2021 Forecast	n/a	n/a	32,457,123
2022 Test Year	n/a	n/a	33,464,827
2023 Plan Year	n/a	n/a	33,998,879
2024 Plan Year	n/a	n/a	35,785,344

Α.

Q. WHY WAS IT NECESSARY TO MAKE AN ADJUSTMENT TO THE PER BOOK CLAIMS AMOUNT?

This adjustment is necessary to reflect actual costs incurred in each year. The per book amounts for active healthcare include estimates because there is generally an average lag of approximately 30 days between when healthcare is provided and when the Company receives a bill for that care. Therefore, the actual amount of active healthcare expense was not available at the time the Company recorded its per book amount at the end of each month. Because the Company needs to close its books at the end of each reporting period before it receives all of those healthcare claims, it takes the actual amounts recorded through a certain point in the year and estimates the additional amount that will be incurred but not reported (IBNR) by the end of the reporting period. This accrual estimate is called the IBNR reserve. During the following period, the Company receives the actual amounts attributable to care provided in the last

2		actual incurred amount. Therefore, the per book amounts need to be adjusted
3		so that they reflect the actual incurred claim amounts during that period. After
4		the adjustment, the periods include only the actual amounts incurred for the
5		twelve months.
6		
7	Q.	How were the 2022-2024 active healthcare costs determined?
8	Α.	The Company's actuary, Willis Towers Watson, calculated the 2022 test year
9		medical and pharmacy amounts by using the actual experience from the
10		following periods and weighting them.
11		An 80 percent weighting was applied to:
12		• Medical claims incurred January 1, 2019 through December 31, 2019,
13		paid through February 29, 2021.
14		• Pharmacy claims incurred January 1, 2019 through December 31, 2019,
15		paid through February 29, 2021.
16		A 20 percent weighting was applied to:
17		• Medical claims incurred January 1, 2020 through December 31, 2020,
18		paid through February 29, 2021.
19		• Pharmacy claims incurred January 1, 2020 through December 31, 2020,
20		paid through February 29, 2021.
21		Willis Towers Watson then adjusted for changes in plan design, regulations,
22		administrative fees, etc., and it trended the data forward to 2022 using inflation
23		factors. These costs are calculated at a plan level, meaning all companies with
24		employees in that plan are calculated together. Willis Towers Watson then
25		adjusts this estimate to account for actual claims experience by
26		company. Medical and pharmacy trends were then applied to derive the 2023
27		and 2024 amounts.

part of the prior period, and at that time it trues up the IBNR estimate to the

- 1 Q. WHAT PERCENTAGE DOES TOTAL HEALTH AND WELFARE COSTS INCREASE 2 FROM 2022-2024 AFTER USING THE METHODOLOGY DESCRIBED ABOVE?
- A. As shown in Table 16 below, the amounts reflect an average increase of 3.55 percent, which is right in line with the expected healthcare trend.

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	Table 16 Active Health Care Expense								
		etric O&M S							
	2021	2022	2023	2024					
	Forecast	Test Year	Plan Year	Plan Year					
Active Healthcare (\$)	32,457,123	33,464,827	33,998,879	35,785,344					
Year-Over- Year Change		3.04%	2.62%	4.99%					

- Q. IS THE COMPANY'S HEALTHCARE COST INCREASE REASONABLE?
- Yes. Exhibit (RRS-1), Schedule 15 shows Willis Towers Watson's overall 16 17 expectation of healthcare cost increases based on survey averages, carrier 18 information, and an analysis of the broad healthcare market. This study is from 19 June 2021 and is focused on 2022 expected cost increases. The information is 20 intended to support the trend assumptions used in Xcel Energy's 2022 active 21 healthcare budgeting done by Willis Towers Watson. Overall, the Willis Towers 22 Watson survey data indicates each pricing group has a different split of the total 23 cost between medical and pharmacy cost, but they expect the total trend to be 24 between 4.00 percent and 7.00 percent as documented in the trend surveys. 25 PricewaterhouseCoopers (PwC) estimates that medical and pharmacy costs will 26 rise 6.00 percent in 2021. This information, which was gathered by PwC's 27 Health Research Institute, was based on PwC's own internal research and input

1		from health plan actuaries, industry leaders, analyst reports, and employer
2		surveys. Finally, the Aon Carrier Trend Report expects 2020 medical costs to
3		increase by 7.00 percent.
4		
5	Q.	DO YOU BELIEVE THE COMPANY'S ESTIMATE OF HEALTHCARE COSTS IS
6		REPRESENTATIVE OF COSTS THE COMPANY EXPECTS TO INCUR IN FUTURE
7		YEARS?
8	A.	Yes. As shown in Table 16 above, the Company's active healthcare costs are
9		currently forecasted to grow approximately 3.6 percent per year for 2022, 2023,
10		and 2024. This growth rate is typical as compared to other organizations, as
11		demonstrated by the attachment referred to above. The Company has
12		implemented several plan design changes to help control the pace of growth, as
13		discussed by Ms. Lowenthal. However, active healthcare costs have continued
14		to increase, and the Company's forecasts through 2024 are reasonable.
15		
16	Q.	HOW HAS THE PANDEMIC OF 2020 IMPACTED HEALTH CARE COSTS?
17	A.	Due to the nationwide shutdown and ongoing COVID-19 concerns, the
18		Company has seen lower-than-anticipated health care costs in 2020 and for the
19		first half of 2021. Based on discussions Willis Towers Watson has had with
20		health care systems, the expectation is that the systems will see a portion of this

22

23

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delayed care (e.g., elective surgeries) eventually made up. This potential for

deferred care carrying over into late 2021, 2022 or even thereafter could make

our existing 2022 test year health care amount too low, and therefore our

assumptions regarding health care costs may be conservative.

1	Q.	WHY IS IT REASONABLE FOR CUSTOMERS TO PAY ACTIVE HEALTH AND WELFARE
2		COSTS INCURRED BY THE COMPANY?
3	Α.	It is appropriate that customers pay for these benefits because they reflect a
4		reasonable and necessary level of expense. Employees expect their employer to
5		provide a reasonable level of health and welfare benefits, and any employer that
6		does not do so is at a significant disadvantage in the labor market. Thus, our
7		compensation plans and benefits are required to attract, retain, and motivate
8		employees needed to perform the work necessary to provide quality services for
9		NSPM customers.
10		
11		IX. WORKERS' COMPENSATION FERC 925 COSTS
12		
13	Q.	WHAT TYPES OF COSTS ARE INCLUDED IN FERC ACCOUNT 925, INJURIES AND
14		Damages?
15	Α.	FERC Account 925 is composed of workers' compensation coverage and other
16		liability insurance costs. The workers' compensation benefit covers work-
17		related injury costs for medical claims, permanent or partial disability, lost time,
18		rehabilitation costs, prescription drugs, etc. The other liability insurance
19		includes coverage for general liability, excess liability, fiduciary insurance, and
20		directors' and officers' insurance. Because my area of responsibility is in
21		benefits accounting, my testimony is limited to the workers' compensation
22		costs.
23		
24	Q.	PLEASE EXPLAIN HOW WORKERS' COMPENSATION COSTS ARE DETERMINED.
25	Α.	Similar to LTD costs, the accounting treatment for workers' compensation
26		differs for the self-insured and fully-insured portions of the plan. The workers'

compensation benefit is self-insured for any active bargaining or non-bargaining

employee who was injured before August 1, 2001, and it is fully insured for any employee who was injured on or after that date. The Company is required to accrue for self-insured workers' compensation costs under FAS 112. The fully-insured portion is the cost of the insurance premiums that the Company must pay each year.

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Q. What has been the trend for the workers' compensation costs over the last several years and for the multi-year rate plan period?

9 A. Table 17 below compares the workers' compensation benefit costs from 2018 10 through 2024.

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Table 17
Workers' Compensation Expense

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NSPM Electric O&M State of MN (\$)									
Year	FAS 112	Insurance Premiums & Other	Total Workers' Compensation						
2018	157,468	1,880,119	2,037,587						
2019	-705,352	1,909,207	1,203,855						
2020	310,753	1,622,743	2,135,565						
2021 Forecast	164,826	1,687,693	1,852,519						
2022 Test Year	65,168	1,529,189	1,594,357						
2023 Plan Year	59,769	1,517,692	1,577,461						
2024 Plan Year	54,989	1,509,851	1,564,840						

21

19

20

Q. How did you calculate the workers' compensation amounts for 2022 through 2024?

A. The FAS 112 amounts are based on the 2022 through 2024 projected cost amounts from the Willis Towers Watson actuarial calculation provided in May 2021. The insurance premium amounts were based on the actual premiums paid through October 2020 and held flat through 2024.

1	Q.	WHAT CAUSES THE FLUCTUATIONS IN THESE COSTS FROM YEAR TO YEAR?
2	Α.	The FAS 112 workers compensation self-insured costs fluctuate from year to
3		year because of changes to the discount rate or demographic adjustments,
4		similar to FAS 112 LTD costs, which were discussed above. The workers
5		compensation premium portion remained relatively stable from 2018 to 2024,
6		with the big swing in costs being driven by the captive distribution. Captive
7		distributions are distributions (refunds) from the captive insurance account that
8		are received from time to time. Company witness Mr. Robert Miller discusses
9		captive distributions in more detail.
10		
11	Q.	HAS THE COMPANY PROVIDED THE ACTUARIAL STUDY AND DERIVATION OF
12		THE JURISDICTIONAL AMOUNT?
13	Α.	Yes. The Company has included Exhibit(RRS-1), Schedule 9, which is an
14		actuarial study that supports the FAS 112 workers compensation costs in 2021-
15		2024. Exhibit(RRS-1), Schedule 10 shows the conversion of the 2022 total
16		cost amounts to the NSPM electric O&M, state of Minnesota amount.
17		
18	Q.	Is the Company seeking to recover the forecasted workers'
19		COMPENSATION EXPENSE AS SHOWN IN TABLE 17 AS PART OF ITS MULTI-YEAR
20		RATE PLAN?
21	Α.	Yes. Mr. Halama has incorporated the budgeted amounts into the 2022 test
22		year and 2023 and 2024 plan year revenue requirements. These costs are
23		calculated in accordance with accounting rules and standards and are based on
24		actuarial assumptions specific to the Company.

1		X. CONCLUSION
2		
3	Q.	PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATIONS.
4	Α.	The assumptions that the Company has used to determine the test year pension
5		expense are reasonable, as shown by comparison with other utilities' pension
6		assumptions. In addition, we are proposing to use a five-year average discount
7		rate – as the Commission approved in a prior Company case – to reduce the
8		potential number of disputed issues in this current case. Our annual qualified
9		pension expense decreases each year through the multi-year rate plan period, in
10		part due to the benefit plan design changes that have reduced employee benefit
11		levels.
12		
13		The Company should be allowed to recover the costs of its FAS 106 post-
14		retirement medical benefit and its FAS 112 benefit. Those are reasonable costs
15		that are part of the total compensation package the Company needs to attract
16		and retain good employees.
17		
18		The Company should also be allowed to include its prepaid pension asset in rate
19		base and to earn a return on that asset at the Company's WACC. The gains
20		from that asset help reduce pension expense in the test year, but shareholders
21		have no access to those gains. The Company requests that the prepaid pension
22		asset be included in rate base and that it earn a return, similar to other
23		prepayments.
24		
25		Regarding healthcare costs, we have implemented measures to help control the
26		pace of growth in our healthcare costs, and the result is reflected in a lower

1		inflation factor during the multi-year rate plan period than that recommended
2		by our actuaries and PwC.
3		
4		Finally, our workers' compensation costs are necessary, and the forecasted
5		amounts presented in my testimony should be approved for recovery in rates.
6		
7		In summary, and as discussed in more detail by Ms. Lowenthal, the non-cash
8		employee benefits discussed in my testimony are part of the Company's overall
9		compensation and benefits package and are necessary to attract and retain the
10		employees required to provide high-quality service to our customers. The
11		forecasted amounts of pension and benefits costs I present are reasonable and
12		accurately reflect our expected pensions and benefits expense in the multi-year
13		rate plan period. As such, I recommend that the Commission approve these
14		levels of expense to be included in rates.
15		
16	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
17	Α.	Yes, it does.

Statement of Qualifications Richard R. Schrubbe

Current Responsibilities

As Area Vice President, Financial Planning and Analysis, I am responsible for overseeing the business area finances of Energy Supply, Nuclear, Transmission, Distribution, Gas Engineering & Operations and Corporate Services with respect to budget planning, reporting, and analysis. I oversee the accounting for all employee benefits programs, playing a liaison role with the Human Resources department, external actuaries, and senior management with benefit fiduciary roles. I am also responsible for coordinating the benefits operations and maintenance ("O&M") and capital budgeting and forecasting processes, as well as the monthly analysis of actual results against these budgets and forecasts.

Experience

2007 – Present Xcel Energy Inc. Area Vice President,

Financial Planning & Analysis

Education

1996 Bachelor of Science – Business Admin, Finance Marquette University

Benefit Costs

NSPM Total Company Electric O&M

	2017 Actuals	2018 Actuals	2019 Actuals	2020 Actuals	2021 Forecast	2022 Test Year	2023 Plan Year	2024 Plan Year
Retirement								
401K Match	10,353,515	10,484,554	10,488,184	10,665,024	10,334,826	10,475,608	10,730,920	11,043,624
Qualified Pension (A)	25,093,293	25,119,979	24,775,021	22,767,723	22,442,227	16,998,197	13,873,992	9,482,190
Deferred Pension Amortization	-	-	-	-	-	5,301,736	5,301,736	5,301,736
Deferred Compensation Plan	52,054	51,305	54,424	43,995	42,486	43,679	47,938	52,515
NMC Employer Retirement Contribution	1,105,886	1,007,100	965,146	970,132	926,543	904,925	927,098	954,943
Retirement & Compensation Consulting	518,623	582,968	444,504	251,885	315,868	418,311	418,808	420,955
FAS 88 nonqualified settlement	-	-	-	-	-	-	-	-
Other		-	-	-	-	-	-	-
Total Retirement	37,123,371	37,245,906	36,727,280	34,698,759	34,061,951	34,142,455	31,300,492	27,255,962
Health & Welfare								
Active Health Care	39,034,455	39,589,763	34,138,968	35,190,146	37,299,929	38,394,971	39,007,702	41,057,354
Adjust to Incurred Claims	863,302	(305,483)	1,901,242	(750,330)	(61,119)			
Life & LTD insurance, Misc Ben Programs	4,711,786	4,421,603	3,924,546	3,485,291	3,825,206	3,880,766	3,888,581	3,959,493
FAS 106 Retiree Medical	2,216,506	2,284,365	1,505,850	1,184,293	289,302	257,486	1,364,187	1,587,113
FAS 112 LTD (long-term disability)	72,586	13,530	(84,123)	296,191	326,260	64,600	60,305	56,624
Other	-							
Total Health & Welfare	46,898,635	46,003,778	41,386,483	39,405,592	41,679,579	42,597,824	44,320,775	46,660,583
Total Benefits	84,022,006	83,249,684	78,113,763	74,104,351	75,741,530	76,740,279	75,621,267	73,916,545

⁽A) Amounts are consistent with the data in the annual pension compliance filing

NSPM Electric O&M for Minnesota Jurisdiction

	2017 Actuals	2018 Actuals	2019 Actuals	2020 Actuals	2021 Forecast	2022 Test Year	2023 Plan Year	2024 Plan Year
Retirement	2017 Actualo	2010 Motuuio	2010 /1010010	2020 Aotaalo	202110100000	2022 1001 1001	2020 1 1011 1 001	2024110111001
401K Match	8,886,008	9,036,008	9,131,013	9,284,970	9,007,773	9,130,477	9,353,005	9,625,556
Qualified Pension (A)	20,626,921	20,549,083	21,427,184	19,782,032	19,488,214	14,791,342	12,149,016	8,402,815
Deferred Pension Amortization	, , , , , , , , , , , , , , , , , , ,	· · · · -	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,	5,301,736	5,301,736	5,301,736
Deferred Compensation Plan	44,676	44,217	47,382	38,302	37,031	38,071	41,782	45,772
NMC Employer Retirement Contribution	949,138	867,959	840,256	844,597	807,569	788,727	808,053	832,322
Retirement & Compensation Consulting	445,113	502,425	386,985	219,291	275,309	364,597	365,031	366,902
FAS 88 nonqualified settlement	-	-	-					
Other		-	-					
Total Retirement	30,951,856	30,999,692	31,832,820	30,169,192	29,615,896	30,414,949	28,018,624	24,575,103
Health & Welfare								
Active Health Care	33,501,711	34,120,041	29,721,386	30,636,541	32,510,394	33,464,827	33,998,879	35,785,344
Adjust to Incurred Claims	740,938	(263,278)	1,655,221	(653,237)	(53,271)	-	-	-
Life & LTD insurance, Misc Ben Programs	4,043,937	3,810,714	3,416,709	3,034,295	3,334,027	3,382,453	3,389,264	3,451,070
FAS 106 Retiree Medical	1,902,338	1,968,757	1,310,993	1,031,046	252,154	224,423	1,189,017	1,383,318
FAS 112 LTD (long-term disability)	62,298	11,661	(73,237)	257,864	284,366	56,305	52,562	49,353
Other		-						
Total Health & Welfare	40,251,222	39,647,896	36,031,072	34,306,508	36,327,671	37,128,008	38,629,722	40,669,084
Total Benefits	71,203,078	70,647,588	67,863,892	64,475,700	65,943,567	67,542,956	66,648,346	65,244,188

⁽A) Amounts are consistent with the data in the annual pension compliance filing

Benefit Costs

NSPM TOTAL COSTS (O&M, Capital, COGS, Clearing, Deferred)

	2022 Test Year	2023 Plan Year	2024 Plan Year	2020 Actuals	2021 Forecast	2022 Test Year	2023 Plan Year	2024 Plan Year
Retirement								
401K Match	10,597,175	10,656,570	10,726,655	11,111,927	11,374,707	11,721,897	12,037,861	12,362,411
Qualified Pension	34,862,000	34,465,000	34,707,000	31,384,000	31,811,000	24,672,000	19,919,000	13,796,000
Deferred Compensation Plan	20,738	20,910	25,032	11,643	7,170	22,986	25,431	27,949
NMC Employer Retirement Contribution	1,159,245	1,076,993	1,012,685	1,032,468	1,033,097	1,074,719	1,106,060	1,138,342
Retirement & Compensation Consulting	422,881	110,104	(153,529)	(207,000)	182,734	230,470	231,173	231,890
FAS 88 nonqualified settlement	-	-	-	-	-	-	-	-
Other		-	-	-	-	-	-	
Total Retirement	47,062,039	46,329,577	46,317,843	43,333,037	44,408,708	37,722,072	33,319,525	27,556,592
Health & Welfare								
Active Health Care	41,660,769	43,770,034	38,055,414	38,729,561	44,770,836	45,234,716	46,663,348	49,091,249
Life & LTD insurance, Misc Ben Programs	5,109,622	4,410,233	3,757,858	3,404,574	4,143,614	4,153,212	4,175,238	4,245,370
FAS 106 Retiree Medical	2,335,000	2,207,000	1,614,000	894,000	634,000	403,000	2,560,000	2,987,000
FAS 112 LTD (long-term disability)	120,000	(22,000)	(153,000)	516,000	579,000	129,000	122,000	114,000
Other	-	=	(362)	=	-	-	=	-
Total Health & Welfare	49,225,391	50,365,267	43,273,910	43,544,134	50,127,450	49,919,928	53,520,586	56,437,619
Total Benefits	96,287,430	96,694,844	89,591,753	86,877,172	94,536,158	87,642,000	86,840,111	83,994,211

XES TOTAL COSTS (O&M, Capital, COGS, Clearing, Deferred)

	2017 Actuals	2018 Actuals	2019 Actuals	2020 Actuals	2021 Forecast	2022 Test Year	2023 Plan Year	2024 Plan Year
Retirement								
401K Match	10,441,898	10,899,361	12,033,361	13,284,082	13,676,921	14,095,235	14,518,092	14,953,635
Qualified Pension	28,256,000	23,352,000	21,759,000	20,625,000	22,848,000	17,565,000	12,774,000	5,553,000
Deferred Compensation Plan	124,718	118,874	127,547	128,250	150,294	104,732	114,601	124,767
Retirement & Compensation Consulting	929,845	1,843,994	2,059,641	1,455,198	738,912	1,078,618	1,082,368	1,086,194
FAS 88 qualified settlement	21,181,000	22,259,000	(124,000)	=	=	-	-	-
FAS 88 nonqualified settlement	-	=	-	1,791,000	-	-	=	-
Other		=	(143)	=	-	-	=	<u> </u>
Total Retirement	60,933,461	58,473,229	35,855,406	37,283,530	37,414,126	32,843,585	28,489,061	21,717,596
Health & Welfare								
Active Health Care	41,215,822	39,265,443	36,914,180	42,220,236	46,133,238	49,846,920	51,329,551	53,970,764
Life & LTD insurance, Misc Ben Programs	5,462,713	6,029,821	6,270,684	5,653,178	5,818,525	6,515,964	6,562,836	6,682,805
FAS 106 Retiree Medical	1,491,000	1,527,000	1,253,000	1,197,000	1,150,000	1,181,000	1,373,000	1,359,000
FAS 112 LTD (long-term disability)	17,000	91,000	3,000	93,000	122,000	5,000	3,000	4,000
Other			-	=	-	-	=	<u> </u>
Total Health & Welfare	48,186,535	46,913,264	44,440,864	49,163,413	53,223,763	57,548,884	59,268,387	62,016,569
Total Benefits	109,119,996	105,386,492	80,296,270	86,446,943	90,637,889	90,392,469	87,757,448	83,734,165

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Explanation of Schedule 3

Gains and losses arising from any individual event such as the 2008 market loss are not tracked separately under the ACM or SFAS 87. Instead, all gains and losses are combined and a portion of the unfunded liability (under ACM) or net unrecognized gain or loss (under SFAS 87) is recognized in annual pension cost. Further, the portion of unfunded liability (ACM) or net unrecognized gain or loss (SFAS 87) recognized in pension cost can change from year to year as future gains and losses occur. Therefore, specific amortization schedules for individual events do not exist under either the ACM or SFAS 87 as the exact recognition amount is dependent on future gain and loss experience.

However, to comply with Order Point 40, the Company had its actuary, Willis Towers Watson, create Schedule 3 which approximates the asset and liability gain/loss amortization amounts by Plan and by year from 2008 to 2018. A point-by-point walkthrough explaining this schedule is provided below.

I. The General Layout of the Schedule

- The schedule is first broken into two sections. Section I shows the NSPM plan activity and is on pages 1-4. Section II shows the XES plan activity and is on pages 5-8.
- Within each section the information is broken down further by year from 2008-2020. These seven subsections are labeled by year 2008 Experience, 2009 Experience, etc. The activity within these seven subsections is then split between two categories Asset and Liability. The liability category is shaded in gray to help distinguish it from the asset category. The asset and liability experience within these subsections from 2008-2020 represents actual results. The estimated amortization of these actual results are then shown through 2031.
- To better identify points of conversation, each page within the schedule has numbers down the left side identifying each row and letters along the top identifying each column. This enables the reader to identify a specific number within the schedule by a page and line number. For example, a reference to Page-1 Line-A1 would point to the 2008 market Loss for the NSPM Plan of \$200.3 million.

II. The Eleven Subsections 2008 Experience to 2020 Experience

• As mentioned above, these sections represent the actual asset and liability gains and losses for the specific year. Asset gains/losses are

phased-in at 20% per year while liability gains/losses are moved into the amortization pool at 100% in the first year.

- o For example, on page 1 the total 2008 asset loss is \$200,340 (A1) and the total liability loss is \$20,518 (A6). To illustrate the phase-in of assets the \$200,340 is built up in row 1 at 20% increments each year: \$40,068 (B1), \$80,136 (C1), \$120,204 (D1), \$160,272 (E1) and \$200,340 (F1). The \$200,340 is then shown out until 2029 to represent that the loss has been fully phased into the calculation. This methodology is the same for both the NSPM Plan (Section I) and the XES Plan (Section II).
- The NSPM Plan had a \$120,608 surplus prior to 2008.
 - O This surplus application is illustrated as offsetting losses from 2008 asset experience and 2008-2009 liability experience on page 1.
 - To see the application of the surplus in Schedule 3, please refer to the following points
 - 2008 Experience Section: In 2009, the surplus offset the entire first 20% of the 2008 Market loss of \$40,068 (B2) and the entire 2008 liability loss of \$20,518 (B7). In 2010, the surplus offset another 20% of the 2008 Market Loss of \$40,068 or \$80,136 (C2) in total
 - 2009 Experience Section: In 2009 \$19,954 (C16) of the \$50,560 (A15) 2009 liability loss was offset by the surplus.
 - The application of the surplus related to 2008 and 2009 Experience extinguished the entire \$120,608 surplus.
 - Surplus is not applicable for the XES Plan as SFAS87 requires amortization of surplus through recognition of pension income.
- In both the NSPM (ACM) and XES (SFAS 87) sections, the "Asset gain/loss amortization" or "Liability gain/loss amortization" previously amortized is then subtracted to arrive at the "Asset or Liability loss remaining to amortize". On Page 1, in the 2008 Experience section, these amounts are referenced by line 4 for Assets and 9 for Liabilities. This amount is then divided by the amortization period to arrive at the Asset or Liability gain/loss amortization; this can be seen on Page 1 line 5 for Assets and 10 for Liabilities.
- These amortization amounts are then added up for the eleven years to arrive at the "Total 2008-2018 asset experience amortization" and the "Total 2008-2018 liability experience amortization" at the bottom of

each section. This is represented on lines 60 and 61 for the NSPM Plan (Section I) and 57 and 58 for the XES Plan (Section II).

III. Other Impacts

- For the NSPM Plan (Section I) there are other factors within the ACM that are added to the asset and liability experience amortizations to arrive at the total ACM amount that is recognized. These factors include the 20% limit on the difference between the market value of assets and valuation assets (AVA limit) which applied for 2009 and 2010, contributions and changes in the allocation of cost to the MN electric jurisdiction.
- For the XES Plan (Section II) there are other factors within SFAS 87 that are added to the asset and liability experience amortizations to arrive at the net gain/loss amount that is recognized. These factors include the SFAS 87 corridor and the gain/loss position prior to 2008. If the net gains/losses are inside the corridor, they remain unrecognized until which time they are determined to be outside of the corridor. In the XES Section, pages 3-4, Line 61 indicates whether it is a year inside the corridor ("Yes") or outside ("No").
 - The net gain/loss amortization is then added to the other four components of SFAS 87 to arrive at the total net periodic pension expense that is recognized for the year.

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				(\$ in 0	00s)								
Section 1	A (Gain)/Loss	B 2009	C 2010	D 2011	E 2012	F 2013	G 2014	H 2015	। 2016	<mark>J</mark> 2017	<mark>К</mark> 2018	L 2019	M 2020
2008 Experience	(Guill)/E033	2009	2010	2011	2012	2013	2014	2013	2010	2017	2010	2019	2020
 1 Asset loss (A) & Phase-in amount (B-X) 2 Asset loss offset by surplus² 	200,340	40,068 (40,068)	80,136 (80,136)	120,204 (80,136)	160,272 (80,136)	200,340 (80,136)	200,340 (80,136)	200,340 (80,136)	200,340 (80,136)	200,340 (80,136)	200,340 (80,136)	200,340 (80,136)	200,340 (80,136)
3 Asset loss previously amortized4 Asset loss remaining to amortize5 Asset loss amortization		-	-	40,068 5,415	(5,415) 74,721 9,851	(15,266) 104,938 9,416	(24,682) 95,522 8,571	(33,253) 86,951 7,723	(40,976) 79,228 7,037	(48,013) 72,191 6,412	(54,425) 65,779 5,843	(60,268) 59,936 5,324	(65,592) 54,612 4,851
 6 Liability loss³ 7 Liability loss offset by surplus² 	20,518	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)	20,518 (20,518)
Liability loss previously amortized Liability loss remaining to amortize Liability loss amortization		-	-	-	-	-	- - -	-	<u>-</u> - -	-	<u>-</u> - -	- - -	-
2009 Experience													
11 Asset gain (A) & Phase-in amount (C-X) 12 Asset gain previously amortized 13 Asset gain remaining to amortize 14 Asset gain amortization	(13,435)		(2,687) (2,687) (363)	(5,374) 363 (5,011) (677)	(8,061) 1,040 (7,021) (926)	(10,748) 1,966 (8,782) (788)	(13,435) 2,754 (10,681) (958)	(13,435) 3,712 (9,723) (864)	(13,435) 4,576 (8,859) (787)	(13,435) 5,363 (8,072) (717)	(13,435) 6,080 (7,355) (653)	(13,435) 6,733 (6,702) (595)	(13,435) 7,328 (6,107) (542)
15 Liability loss ³ 16 Liability loss offset by surplus ²	50,560		50,560 (19,954)	50,560 (19,954)	50,560 (19,954)	50,560 (19,954)	50,560 (19,954)	50,560 (19,954)	50,560 (19,954)	50,560 (19,954)	50,560 (19,954)	50,560 (19,954)	50,560 (19,954)
17 Liability loss previously amortized 18 Liability loss to amortize 19 Liability loss amortization			30,606 4,136	(4,136) 26,470 3,577	(7,713) 22,893 3,018	(10,731) 19,875 1,783	(12,514) 18,092 1,623	(14,137) 16,469 1,463	(15,600) 15,006 1,333	(16,933) 13,673 1,214	(18,147) 12,459 1,107	(19,254) 11,352 1,008	(20,262) 10,344 919
2010 Experience			4,130	3,377	3,010	1,703	1,023	1,403	1,555	1,214	1,107	1,000	313
20 Asset gain (A) & Phase-in amount (D-X) 21 Asset gain previously amortized	(18,960)			(3,792)	(7,584) 512	(11,376) 1,444	(15,168) 2,335	(18,960) 3,486	(18,960) 4,860	(18,960) 6,112	(18,960) 7,253	(18,960) 8,293	(18,960) 9,240
22 Asset gain remaining to amortize 23 Asset gain amortization				(3,792) (512)	(7,072) (932)	(9,932) (891)	(12,833) (1,151)	(15,474) (1,374)	(14,100) (1,252)	(12,848) (1,141)	(11,707) (1,040)	(10,667) (947)	(9,720) (863)
 24 Liability loss³ 25 Liability loss previously amortized 26 Liability loss to amortize 	12,224			12,224	12,224 (1,652) 10,572	12,224 (3,046) 9,178	12,224 (3,870) 8,354	12,224 (4,620) 7,604	12,224 (5,295) 6,929	12,224 (5,910) 6,314	12,224 (6,471) 5,753	12,224 (6,982) 5,242	12,224 (7,448) 4,776
27 Liability loss amortization				1,652	1,394	824	750	675	615	561	511	466	424
2011 Experience													
28 Asset loss (A) & Phase-in amount (E-X) 29 Asset loss previously amortized	7,909				1,582	3,164 (209)	4,746 (474)	6,328 (857)	7,909 (1,343)	7,909 (1,926)	7,909 (2,457)	7,909 (2,941)	7,909 (3,382)
30 Asset loss remaining to amortize 31 Asset loss amortization					1,582 209	2,955 265	4,272 383	5,471 486	6,566 583	5,983 531	5,452 484	4,968 441	4,527 402
32 Liability loss³33 Liability loss previously amortized	28,302				28,302	28,302 (3,731)	28,302 (5,936)	28,302 (7,943)	28,302 (9,751)	28,302 (11,399)	28,302 (12,900)	28,302 (14,268)	28,302 (15,515)
34 Liability loss to amortize 35 Liability loss amortization					28,302 3,731	24,571 2,205	22,366 2,007	20,359 1,808	18,551 1,648	16,903 1,501	15,402 1,368	14,034 1,247	12,787 1,136
2012 Experience													
36 Asset gain (A) & Phase-in amount (F-X) 37 Asset gain previously amortized 38 Asset gain remaining to amortize	(18,826)					(3,765)	(7,530) 338 (7,192)	(11,295) 983 (10,312)	(15,060) 1,899 (13,161)	(18,826) 3,068 (15,758)	(18,826) 4,468 (14,358)	(18,826) 5,743 (13,083)	(18,826) 6,905 (11,921)
39 Asset gain amortization						(338)	(645)	(916)	(1,169)	(1,400)	(1,275)	(1,162)	(1,059)
40 Liability loss ³ 41 Liability loss previously amortized	21,129					21,129	21,129 (1,896)	21,129 (3,622)	21,129 (5,177)	21,129 (6,594)	21,129 (7,885)	21,129 (9,061)	21,129 (10,133)
42 Liability loss to amortize 43 Liability loss amortization						21,129 1,896	19,233 1,726	17,507 1,555	15,952 1,417	14,535 1,291	13,244 1,176	12,068 1,072	10,996 977
2013 Experience													
44 Asset loss (A) & Phase-in amount (G-X) 45 Asset loss previously amortized	1,138						228	456 (20)	683 (59)	911 (114)	1,138 (185)	1,138 (270)	1,138 (347)
46 Asset loss remaining to amortize 47 Asset loss amortization							228 20	436 39	624 55	797 71	953 85	868 77	791 70
48 Liability loss ³ 49 Liability loss previously amortized	14,141						14,141	14,141 (1,269)	14,141 (2,412)	14,141 (3,454)	14,141 (4,403)	14,141 (5,268)	14,141 (6,056)
50 Liability loss to amortize 51 Liability loss amortization							14,141 1,269	12,872 1,143	11,729 1,042	10,687 949	9,738 865	8,873 788	8,085 718
2014 Experience													
52 Asset gain (A) & Phase-in amount (H-X)53 Asset gain previously amortized	(252)							(50)	(100) 4	(151) 13	(202) 25	(252) 41	(252) 60
54 Asset gain remaining to amortize 55 Asset gain amortization								(50) (4)	(96) (9)	(138) (12)	(177) (16)	(211) (19)	(192) (17)
56 Liability gain³57 Liability gain previously amortized	(8,004)							(8,004)	(8,004) 711	(8,004) 1,359	(8,004) 1,949	(8,004) 2,487	(8,004) 2,977
58 Liability gain to amortize59 Liability gain amortization								(8,004) (711)	(7,293) (648)	(6,645) (590)	(6,055) (538)	(5,517) (490)	(5,027) (447)

^{1,2,3} See page 9 for footnotes.

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				(\$ in 0	00s)								
Section 1	A (Gain)/Loss	B 2009	C 2010	D 2011	E 2012	F 2013	G 2014	H 2015	। 2016	J 2017	K 2018	L 2019	M 2020
2015 Experience													
60 Asset loss (A) & Phase-in amount (I-X) 61 Asset loss previously amortized	38,169								7,634	15,268 (678)	22,901 (1,974)	30,535 (3,833)	38,169 (6,205)
62 Asset loss remaining to amortize 63 Asset loss amortization									7,634 678	14,590 1,296	20,927 1,859	26,702 2,372	31,964 2,839
64 Liability loss ³	5,350								5,350	5,350	5,350	5,350	5,350
65 Liability loss previously amortized 66 Liability loss to amortize 67 Liability loss amortization									5,350 475	(475) 4,875 433	(908) 4,442 395	(1,303) 4,047 359	(1,662) 3,688 328
2016 Experience													
68 Asset loss (A) & Phase-in amount (J-X) 69 Asset loss previously amortized	1,171									234	468 (21)	703 (61)	937 (118)
70 Asset loss remaining to amortize 71 Asset loss amortization										234 21	447 40	642 57	819 73
72 Liability gain ³	(4,312)									(4,312)	(4,312)	(4,312)	(4,312)
 73 Liability gain previously amortized 74 Liability gain to amortize 75 Liability gain amortization 										(4,312) (383)	(3,929) (349)	732 (3,580) (318)	1,050 (3,262) (290)
2017 Experience													
76 Asset gain (A) & Phase-in amount (K-X) 77 Asset gain previously amortized	(33,765)										(6,753)	(13,506) 600	(20,259) 1,746
78 Asset gain remaining to amortize 79 Asset gain amortization											(6,753) (600)	(12,906) (1,146)	(18,513) (1,644)
80 Liability loss ³	1,098										1,098	1,098	1,098
81 Liability loss previously amortized 82 Liability loss to amortize 83 Liability loss amortization											1,098 98	(98) 1,000 89	911 81
2018 Experience													
84 Asset loss (A) & Phase-in amount (L-X) 85 Asset loss previously amortized	47,471											9,494	18,988 (843)
86 Asset loss previously amortize 87 Asset loss amortization												9,494 843	18,145 1,612
88 Liability loss ³	1,990											1,990	1,990
89 Liability loss previously amortized 90 Liability loss to amortize 91 Liability loss amortization												1,990 177	1,813 161
2019 Experience													
92 Asset gain (A) & Phase-in amount (M-X) 93 Asset gain previously amortized	(51,654)												(10,331)
94 Asset gain remaining to amortize 95 Asset gain amortization													(10,331) (918)
96 Liability gain ³	(5,395)												(5,395)
97 Liability gain previously amortized 98 Liability gain to amortize													(5,395)
99 Liability gain amortization													(479)
2020 Experience 100 Asset gain (A) & Phase-in amount (N-X)	(39,655)												
101 Asset gain previously amortized 102 Asset gain remaining to amortize	(33,033)												
 103 Asset gain amortization 104 Liability loss³ 	31,009												
105 Liability loss previously amortized 106 Liability loss to amortize 107 Liability loss amortization	31,009												
Total 2008-2020 Experience													
108 Total 2008-2020 asset experience amortization			(363)	4,226	8,202	7,664	6,220	5,090	5,136	5,061	4,727	5,245	4,804
Total 2008-2020 liability experience amortization of their impacts including AVA limits, interest,		-	4,136 (242)	5,229 (2,488)	8,143 349	6,708 1,079	7,375 1,950	5,933 3,444	5,882 2,420	4,976 5,211	4,633 5,811	4,398 6,197	3,528 6,040
110 contributions and allocation percents ⁴ 111 Total aggregate normal cost			3,531	6,967	16,694	15,451	15,545	14,467	13,438	15,248	15,171	15,840	14,372
1234 Occupant Office footback			-,50.	-,	,	,	,	,	,	,	,	,	,

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				(\$ in 0	00s)								
Section 1	A	N	0	Р	Q	R	S	Т	U	V	W	X	Υ
2008 Experience	(Gain)/Loss	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
1 Asset loss (A) & Phase-in amount (B-X)	200,340	200,340	200,340	200,340	200,340	200,340	200,340	200,340	200,340	200,340	200,340	200,340	
2 Asset loss offset by surplus ²	200,340	(80,136)	(80,136)	(80,136)	(80,136)	(80,136)	(80,136)	(80,136)	(80,136)	(80,136)	(80,136)	(80,136)	
3 Asset loss previously amortized		(70,443)	(74,713)	(78,617)	(82,186)	(85,449)	(88,431)	(91,158)	(93,651)	(95,930)	(98,013)	(99,917)	
4 Asset loss remaining to amortize 5 Asset loss amortization		49,761 4,270	45,491 3,904	41,587 3,569	38,018 3,263	34,755 2,982	31,773 2,727	29,046 2,493	26,553 2,279	24,274 2,083	22,191 1,904	20,287 1,741	101,658
6 Liability loss ³	20,518	20,518	20,518	20,518	20,518	20,518	20,518	20,518	20,518	20,518	20,518	20,518	
7 Liability loss offset by surplus ²		(20,518)	(20,518)	(20,518)	(20,518)	(20,518)	(20,518)	(20,518)	(20,518)	(20,518)	(20,518)	(20,518)	
8 Liability loss previously amortized 9 Liability loss remaining to amortize		-	-	-								-	
10 Liability loss amortization		-	-	-	-	-	-	-	-	-	-	-	-
2009 Experience													
11 Asset gain (A) & Phase-in amount (C-X)	(13,435)	(13,435)	(13,435)	(13,435)	(13,435)	(13,435)	(13,435)	(13,435)	(13,435)	(13,435)	(13,435)	(13,435)	
12 Asset gain previously amortized 13 Asset gain remaining to amortize		7,870 (5,565)	8,348 (5,087)	8,785 (4,650)	9,184 (4,251)	9,549 (3,886)	9,882	(3,248)	10,466 (2,969)	(2,714)	10,954 (2,481)	(2,268)	
14 Asset gain amortization		(478)	(437)	(399)	(365)	(333)	(305)	(279)	(255)	(233)	(213)	(195)	(11,362)
15 Liability loss ³	50,560	50,560	50,560	50,560	50,560	50,560	50,560	50,560	50,560	50,560	50,560	50,560	
16 Liability loss offset by surplus ² 17 Liability loss previously amortized		(19,954) (21,181)	(19,954) (21,990)	(19,954) (22,729)	(19,954) (23,405)	(19,954) (24,023)	(19,954) (24,588)	(19,954) (25,104)	(19,954) (25,576)	(19,954) (26,008)	(19,954) (26,403)	(19,954) (26,764)	
18 Liability loss to amortize		9,425	8,616	7,877	7,201	6,583	6,018	5,502	5,030	4,598	4,204	3,843	07.004
19 Liability loss amortization		809	739	676	618	565	516	472	432	395	361	330	27,094
2010 Experience 20 Asset gain (A) & Phase-in amount (D-X)	(40.000)	(40.000)	(40.000)	(40.000)	(40,000)	(40.000)	(40,000)	(40.000)	(40,000)	(40.000)	(40,000)	(10.000)	
21 Asset gain previously amortized	(18,960)	(18,960) 10,103	(18,960) 10,863	(18,960) 11,558	(18,960) 12,193	(18,960) 12,774	(18,960) 13,305	(18,960) 13,790	(18,960) 14,234	(18,960) 14,640	(18,960) 15,011	(18,960) 15,350	
22 Asset gain remaining to amortize23 Asset gain amortization		(8,857) (760)	(8,097) (695)	(7,402) (635)	(6,767) (581)	(6,186) (531)	(5,655) (485)	(5,170) (444)	(4,726) (406)	(4,320) (371)	(3,949) (339)	(3,610) (310)	(15,660)
24 Liability loss ³	12,224	12,224	12,224	12,224	12,224	12,224	12,224	12,224	12,224	12,224	12,224	12,224	(13,000)
25 Liability loss previously amortized	12,224	(7,872)	(8,245)	(8,586)	(8,898)	(9,183)	(9,444)	(9,683)	(9,901)	(10,100)	(10,282)	(10,449)	
26 Liability loss to amortize 27 Liability loss amortization		4,352 373	3,979 341	3,638 312	3,326 285	3,041 261	2,780 239	2,541 218	2,323 199	2,124 182	1,942 167	1,775 152	10,601
		070	041	012	200	201	203	210	100	102	101	102	10,001
2011 Experience 28 Asset loss (A) & Phase-in amount (E-X)	7,909	7,909	7,909	7,909	7,909	7,909	7,909	7,909	7,909	7,909	7,909	7,909	
29 Asset loss previously amortized	7,303	(3,784)	(4,138)	(4,462)	(4,758)	(5,028)	(5,275)	(5,501)	(5,708)	(5,897)	(6,070)	(6,228)	
30 Asset loss remaining to amortize 31 Asset loss amortization		4,125 354	3,771 324	3,447 296	3,151 270	2,881 247	2,634 226	2,408 207	2,201 189	2,012 173	1,839 158	1,681 144	6,372
32 Liability loss ³	28,302	28,302	28,302	28,302	28,302	28,302	28,302	28,302	28,302	28,302	28,302	28,302	*,***
33 Liability loss previously amortized	.,	(16,651)	(17,651)	(18,565)	(19,401)	(20,165)	(20,863)	(21,501)	(22,085)	(22,619)	(23,107)	(23,553)	
34 Liability loss to amortize 35 Liability loss amortization		11,651 1,000	10,651 914	9,737 836	8,901 764	8,137 698	7,439 638	6,801 584	6,217 534	5,683 488	5,195 446	4,749 408	23,961
2012 Experience													
36 Asset gain (A) & Phase-in amount (F-X)	(18,826)	(18,826)	(18,826)	(18,826)	(18,826)	(18,826)	(18,826)	(18,826)	(18,826)	(18,826)	(18,826)	(18,826)	
37 Asset gain previously amortized		7,964 (10,862)	8,896 (9,930)	9,748 (9,078)	10,527 (8,299)	11,239	11,890 (6,936)	12,485 (6,341)	13,029 (5,797)	13,526	13,981	14,397 (4,429)	
38 Asset gain remaining to amortize39 Asset gain amortization		(10,862) (932)	(9,930) (852)	(9,078) (779)	(0,299) (712)	(7,587) (651)	(6,936) (595)	(544)	(5,797) (497)	(5,300) (455)	(4,845) (416)	(4,429) (380)	(14,777)
40 Liability loss ³	21,129	21,129	21,129	21,129	21,129	21,129	21,129	21,129	21,129	21,129	21,129	21,129	
41 Liability loss previously amortized 42 Liability loss to amortize		(11,110) 10,019	(11,970) 9,159	(12,756) 8,373	(13,475) 7,654	(14,132) 6,997	(14,732) 6,397	(15,281) 5,848	(15,783) 5,346	(16,242) 4,887	(16,661) 4,468	(17,044) 4,085	
43 Liability loss amortization		860	786	719	657	600	549	502	459	419	383	351	17,395
2013 Experience													
44 Asset loss (A) & Phase-in amount (G-X)	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	1,138	
45 Asset loss previously amortized 46 Asset loss remaining to amortize		(417) 721	(479) 659	(536) 602	(588) 550	(635) 503	(678) 460	(717) 421	(753) 385	(786) 352	(816) 322	(844) 294	
47 Asset loss amortization		62	57	52	47	43	39	36	33	30	28	25	869
48 Liability loss ³ 49 Liability loss previously amortized	14,141	14,141 (6,774)	14,141 (7,406)	14,141 (7,984)	14,141 (8,512)	14,141 (8,995)	14,141 (9,437)	14,141 (9,841)	14,141 (10,210)	14,141 (10,547)	14,141 (10,855)	14,141 (11,137)	
50 Liability loss to amortize		7,367	6,735	6,157	5,629	5,146	4,704	4,300	3,931	3,594	3,286	3,004	
51 Liability loss amortization		632	578	528	483	442	404	369	337	308	282	258	11,395
2014 Experience 52 Asset gain (A) & Phase-in amount (H-X)	(252)	(252)	(252)	(252)	(252)	(252)	(252)	(252)	(252)	(252)	(252)	(252)	
53 Asset gain previously amortized	(202)	77	92	106	119	130	140	150	159	167	174	181	
54 Asset gain remaining to amortize55 Asset gain amortization		(175) (15)	(160) (14)	(146) (13)	(133) (11)	(122) (10)	(112) (10)	(102) (9)	(93) (8)	(85) (7)	(78) (7)	(71) (6)	(187)
56 Liability gain ³	(8,004)	(8,004)	(8,004)	(8,004)	(8,004)	(8,004)	(8,004)	(8,004)	(8,004)	(8,004)	(8,004)	(8,004)	1077
57 Liability gain previously amortized	(0,004)	3,424	3,817	4,176	4,504	4,804	5,079	5,330	5,559	5,769	5,961	6,136	
58 Liability gain to amortize 59 Liability gain amortization		(4,580) (393)	(4,187) (359)	(3,828) (328)	(3,500) (300)	(3,200) (275)	(2,925) (251)	(2,674) (229)	(2,445) (210)	(2,235) (192)	(2,043) (175)	(1,868) (160)	(6,296)
1,2,3 See page 9 for footnotes.			, ,		, /								,,,,,,,,
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Xcel Energy Inc. - MN Electric Rate Case - Order Point 40 Approximate Pension Cost Attributable to 2008-2020 Gains and Losses - Illustrative¹ NSPM Aggregate Cost Method (\$ in 000s)

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				(\$ 111 €	1005)								
Section 1	A (Gain)/Loss	N 2021	O 2022	P 2023	Q 2024	R 2025	S 2026	T 2027	U 2028	V 2029	W 2030	X 2031	Y Total
2015 Experience													
60 Asset loss (A) & Phase-in amount (I-X)	38,169	38,169	38,169	38,169	38,169	38,169	38,169	38,169	38,169	38,169	38,169	38,169	
61 Asset loss previously amortized	00,.00	(9,044)	(11,543)	(13,828)	(15,917)	(17,827)	(19,573)	(21,169)	(22,628)	(23,962)	(25,181)	(26,296)	
62 Asset loss remaining to amortize63 Asset loss amortization		29,125 2,499	26,626 2,285	24,341 2,089	22,252 1,910	20,342 1,746	18,596 1,596	17,000 1,459	15,541 1,334	14,207 1,219	12,988 1,115	11,873 1,019	27,315
64 Liability loss ³	5,350	5,350	5,350	5,350	5,350	5,350	5,350	5,350	5,350	5,350	5,350	5,350	27,010
65 Liability loss previously amortized	5,330	(1,990)	(2,278)	(2,542)	(2,783)	(3,003)	(3,204)	(3,388)	(3,556)	(3,710)	(3,851)	(3,980)	
66 Liability loss to amortize		3,360	3,072	2,808	2,567	2,347	2,146	1,962	1,794	1,640	1,499	1,370	4 000
67 Liability loss amortization		288	264	241	220	201	184	168	154	141	129	118	4,098
2016 Experience					=.	=.	=.	=.	=.				
68 Asset loss (A) & Phase-in amount (J-X) 69 Asset loss previously amortized	1,171	1,171 (191)	1,171 (275)	1,171 (352)	1,171 (422)	1,171 (486)	1,171 (545)	1,171 (599)	1,171 (648)	1,171 (693)	1,171 (734)	1,171 (772)	
70 Asset loss remaining to amortize		980	896	819	749	685	626	572	523	478	437	399	
71 Asset loss amortization		84	77	70	64	59	54	49	45	41	38	34	806
72 Liability gain ³ 73 Liability gain previously amortized	(4,312)	(4,312) 1,340	(4,312) 1,595	(4,312) 1,828	(4,312) 2,041	(4,312) 2,236	(4,312) 2,414	(4,312) 2,577	(4,312) 2,726	(4,312) 2,862	(4,312) 2,986	(4,312) 3,100	
74 Liability gain to amortize		(2,972)	(2,717)	(2,484)	(2,271)	(2,076)	(1,898)	(1,735)	(1,586)	(1,450)	(1,326)	(1,212)	
75 Liability gain amortization		(255)	(233)	(213)	(195)	(178)	(163)	(149)	(136)	(124)	(114)	(104)	(3,204)
2017 Experience													
76 Asset gain (A) & Phase-in amount (K-X) 77 Asset gain previously amortized	(33,765)	(27,012) 3,390	(33,765) 5,417	(33,765) 7,850	(33,765) 10,074	(33,765) 12,107	(33,765) 13,966	(33,765) 15,665	(33,765) 17,218	(33,765) 18,638	(33,765) 19,936	(33,765) 21,123	
78 Asset gain remaining to amortize		(23,622)	(28,348)	(25,915)	(23,691)	(21,658)	(19,799)	(18,100)	(16,547)	(15,127)	(13,829)	(12,642)	
79 Asset gain amortization		(2,027)	(2,433)	(2,224)	(2,033)	(1,859)	(1,699)	(1,553)	(1,420)	(1,298)	(1,187)	(1,085)	(22,208)
80 Liability loss ³ 81 Liability loss previously amortized	1,098	1,098 (268)	1,098 (339)	1,098 (404)	1,098 (464)	1,098 (518)	1,098 (568)	1,098 (613)	1,098 (655)	1,098 (693)	1,098 (728)	1,098 (760)	
82 Liability loss to amortize		830	759	694	634	580	530	485	443	405	370	338	
83 Liability loss amortization		71	65	60	54	50	45	42	38	35	32	29	789
2018 Experience													
84 Asset loss (A) & Phase-in amount (L-X)	47,471	28,483	37,977	47,471	47,471	47,471	47,471	47,471	47,471	47,471	47,471	47,471	
85 Asset loss previously amortized 86 Asset loss remaining to amortize		(2,455) 26,028	(4,689) 33,288	(7,546) 39,925	(10,972) 36,499	(14,104) 33,367	(16,967) 30,504	(19,585) 27,886	(21,978) 25,493	(24,166) 23,305	(26,166) 21,305	(27,994) 19,477	
87 Asset loss amortization		2,234	2,857	3,426	3,132	2,863	2,618	2,393	2,188	2,000	1,828	1,671	29,665
88 Liability loss ³	1,990	1,990	1,990	1,990	1,990	1,990	1,990	1,990	1,990	1,990	1,990	1,990	
89 Liability loss previously amortized 90 Liability loss to amortize		(338) 1,652	(480) 1,510	(610) 1,380	(728) 1,262	(836) 1,154	(935) 1,055	(1,026) 964	(1,109) 881	(1,185) 805	(1,254) 736	(1,317) 673	
91 Liability loss amortization		142	130	118	108	99	91	83	76	69	63	58	1,375
2019 Experience													
92 Asset gain (A) & Phase-in amount (M-X)	(51,654)	(20,662)	(30,993)	(41,324)	(51,655)	(51,655)	(51,655)	(51,655)	(51,655)	(51,655)	(51,655)	(51,655)	
93 Asset gain previously amortized 94 Asset gain remaining to amortize		918 (19,744)	2,612 (28,381)	5,048 (36,276)	8,161 (43,494)	11,893 (39,762)	15,305 (36,350)	18,424 (33,231)	21,276 (30,379)	23,883	26,266 (25.389)	28,445	
95 Asset gain amortization		(1,694)	(2,436)	(3,113)	(3,732)	(3,412)	(3,119)	(2,852)	(2,607)	(2,383)	(2,179)	(1,992)	(30,437)
96 Liability gain ³	(5,395)	(5,395)	(5,395)	(5,395)	(5,395)	(5,395)	(5,395)	(5,395)	(5,395)	(5,395)	(5,395)	(5,395)	
97 Liability gain previously amortized 98 Liability gain to amortize		479 (4,916)	901 (4,494)	1,287 (4,108)	1,640	1,962	2,257 (3,138)	2,526 (2,869)	(2,623)	2,997	3,203	3,391 (2,004)	
99 Liability gain amortization		(422)	(386)	(353)	(322)	(295)	(269)	(246)	(225)	(206)	(188)	(172)	(3,563)
2020 Experience													
100 Asset gain (A) & Phase-in amount (N-X)	(39,655)	(7,931)	(15,862)	(23,793)	(31,724)	(39,655)	(39,655)	(39,655)	(39,655)	(39,655)	(39,655)	(39,655)	
101 Asset gain previously amortized		(7,931)	681	1,984	3,856	6,247	9,114	11,735	14,131	16,321	18,323	20,154	
102 Asset gain remaining to amortize103 Asset gain amortization		(7,931) (681)	(15,181) (1,303)	(21,809) (1,872)	(27,868) (2,391)	(33,408) (2,867)	(30,541) (2,621)	(27,920) (2,396)	(25,524) (2,190)	(23,334) (2,002)	(21,332) (1,831)	(19,501) (1,673)	(21,827)
104 Liability loss ³	31,009	31,009	31,009	31,009	31,009	31,009	31,009	31,009	31,009	31,009	31,009	31,009	
105 Liability loss previously amortized 106 Liability loss to amortize		31,009	(2,661) 28,348	(5,094) 25,915	(7,318) 23,691	(9,351) 21,658	(11,210) 19,799	(12,909) 18,100	(14,462) 16,547	(15,882) 15,127	(17,180) 13,829	(18,367) 12.642	
106 Liability loss to amortize 107 Liability loss amortization		2,661	28,348 2,433	25,915 2,224	23,691 2,033	21,658 1,859	19,799 1,699	18,100 1,553	1,420	15,127 1,298	13,829	12,642	19,452
Total 2009 2020 F													
Total 2008-2020 Experience 108 Total 2008-2020 asset experience amortization		2,916	1,334	467	(1,139)	(4.700)	(4 574)	(1,440)	(4.245)	(4.202)	(1,101)	(1,007)	50.227
108 Total 2008-2020 asset experience amortization 109 Total 2008-2020 liability experience amortization		5,766	1,334 5,272	467	4,405	(1,723) 4,027	(1,574) 3,682	3,367	(1,315) 3,078	(1,203) 2,813	(1,101) 2,573	(1,007) 2,353	103,097
Other impacts including AVA limits, interest,		5,428	4,672	4,388	4,224	3,945	3,452	N/A	N/A	N/A	N/A	N/A	N/A
110 contributions and allocation percents ⁴ 111 Total aggregate normal cost		14,110	11,278	9,675	7,490	6,249	5,560	N/A	N/A	N/A	N/A	N/A	N/A
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Section 2	Α	В	С	D	E	F	G	н	1	J	K_	L	М
	(Gain)/Loss	2009	2010	2011	2012	2013	2014	2015	2016	2017 ⁹	2018 ⁹	2019	2020
2008 Experience		0.745	40.400	00.445		40.533	40.533		40.533	40.533	40.533	40.533	
Asset loss (A) & Phase-in amount (B-X) Asset loss previously amortized	48,577	9,715 -	19,430 (933)	29,145 (2,725)	38,861 (5,295)	48,577 (8,595)	48,577 (12,462)	48,577 (15,979)	48,577 (19,051)	48,577 (21,641)	48,577 (27,243)	48,577 (31,507)	48,577 (33,006)
3 Asset loss remaining to amortize		9,715	18,497	26,420	33,566	39,982	36,115	32,598	29,526	26,936	21,334	17,070	15,571
4 Asset loss amortization ⁶	(6.144)	933	1,792	2,570	3,300	3,867	3,517	3,072	2,590	5,602	4,264	1,499	1,355
5 Liability gain⁷6 Liability gain previously amortized	(6,144)	(6,144)	(6,144) 590	(6,144) 1,128	(6,144) 1,616	(6,144) 2,061	(6,144) 2,456	(6,144) 2,815	(6,144) 3,129	(6,144) 3,393	(6,144) 3,966	(6,144) 4,401	(6,144) 4,554
7 Liability gain remaining to amortize 8 Liability gain amortization ⁶		(6,144) (590)	(5,554) (538)	(5,016) (488)	(4,528)	(4,083)	(3,688)	(3,329)	(3,015)	(2,751)	(2,178)	(1,743)	(1,590)
		(590)	(530)	(400)	(445)	(395)	(359)	(314)	(264)	(573)	(435)	(153)	(138)
2009 Experience	249		50	100	150	200	249	249	249	249	249	249	249
9 Asset loss (A) & Phase-in amount (C-X) 10 Asset loss previously amortized	249		-	(5)	(14)	(27)	(44)	(64)	(81)	(96)	(127)	(152)	(161)
11 Asset loss remaining to amortize 12 Asset loss amortization ⁵			50 5	95 9	136 13	173 17	205 20	185 17	168 15	153 31	122 25	97 9	88 8
13 Liability loss ⁷	4,950		4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950
14 Liability loss previously amortized	4,300		-	(480)	(915)	(1,312)	(1,664)	(1,984)	(2,264)	(2,500)	(3,009)	(3,398)	(3,534)
15 Liability loss to amortize 16 Liability loss amortization ⁶			4,950 480	4,470 435	4,035 397	3,638 352	3,286 320	2,966 280	2,686 236	2,450 509	1,941 389	1,552 136	1,416 123
			400	400	001	302	320	200	200	003	303	100	120
2010 Experience 17 Asset gain (A) & Phase-in amount (D-X)	(1,791)			(358)	(716)	(1,074)	(1,432)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)
18 Asset gain previously amortized	(.,.31)			-	35	102	196	316	455	572	825	1,017	1,085
 19 Asset gain remaining to amortize 20 Asset gain amortization⁶ 				(358) (35)	(681) (67)	(972) (94)	(1,236) (120)	(1,475) (139)	(1,336) (117)	(1,219) (253)	(966) (192)	(774) (68)	(706) (61)
21 Liability loss ⁷	3,342			3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342
22 Liability loss previously amortized	5,5 .2				(325)	(622)	(885)	(1,124)	(1,333)	(1,509)	(1,890)	(2,181)	(2,283)
23 Liability loss to amortize 24 Liability loss amortization ⁶				3,342 325	3,017 297	2,720 263	2,457 239	2,218 209	2,009 176	1,833 381	1,452 291	1,161 102	1,059 92
2011 Experience				020	201			200				102	
25 Asset loss (A) & Phase-in amount (E-X)	3,628				726	1,452	2,178	2,903	3,628	3,628	3,628	3,628	3,628
26 Asset loss previously amortized	-,				-	(71)	(205)	(397)	(633)	(896)	(1,464)	(1,897)	(2,049)
27 Asset loss remaining to amortize 28 Asset loss amortization ⁶					726 71	1,381 134	1,973 192	2,506 236	2,995 263	2,732 568	2,164 433	1,731 152	1,579 137
29 Liability loss ⁷	8,038				8,038	8,038	8,038	8,038	8,038	8,038	8,038	8,038	8,038
30 Liability loss previously amortized	,,,,,				-	(790)	(1,491)	(2,128)	(2,685)	(3,155)	(4,170)	(4,944)	(5,216)
31 Liability loss to amortize 32 Liability loss amortization ⁶					8,038 790	7,248 701	6,547 637	5,910 557	5,353 470	4,883 1,015	3,868 774	3,094 272	2,822 246
2012 Experience													
33 Asset gain (A) & Phase-in amount (F-X)	(3,403)					(681)	(1,362)	(2,043)	(2,723)	(3,403)	(3,403)	(3,403)	(3,403)
34 Asset gain previously amortized 35 Asset gain remaining to amortize		-				(681)	66 (1,296)	192 (1,851)	366 (2,357)	573 (2,830)	1,162 (2,241)	1,611 (1,792)	1,768 (1,635)
36 Asset gain amortization ⁶						(66)	(1,296) (126)	(1,651) (174)	(2,337) (207)	(2,830) (589)	(2,241) (449)	(1,792)	(1,033) (142)
37 Liability loss ⁷	17,295					17,295	17,295	17,295	17,295	17,295	17,295	17,295	17,295
38 Liability loss previously amortized 39 Liability loss to amortize						17,295	(1,673) 15,622	(3,194) 14,101	(4,523) 12,772	(5,643) 11,652	(8,067) 9,228	(9,912) 7,383	(10,560) 6,735
40 Liability loss amortization ⁶						1,673	1,521	1,329	1,120	2,424	1,845	648	586
2013 Experience			-		-	-				-	-		
41 Asset loss (A) & Phase-in amount (G-X)	356						71	142	213	284	349	349	349
42 Asset loss previously amortized 43 Asset loss remaining to amortize							- 71	(7) 135	(20) 193	(37) 247	(89) 260	(142) 207	(160) 189
44 Asset loss amortization ⁶							7	13	17	52	53	18	16
45 Liability gain ⁷	(4,553)						(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)
46 Liability gain previously amortized 47 Liability gain to amortize							(4,553)	(4,110)	(3,723)	(3,396)	1,862 (2,691)	(2,153)	2,589 (1,964)
48 Liability gain amortization ⁶							(443)	(387)	(327)	(705)	(538)	(189)	(171)
2014 Experience													
49 Asset loss (A) & Phase-in amount (H-X)	126							25	50	75	98	119	119
50 Asset loss previously amortized 51 Asset loss remaining to amortize								- 25	(2) 48	(6) 69	(20) 78	(36)	(43) 76
52 Asset loss amortization ⁶								2	4	14	16	7	7
53 Liability loss ⁷	12,985							12,985	12,985	12,985	12,985	12,985	12,985
54 Liability loss previously amortized 55 Liability loss to amortize								12,985	(1,224) 11,761	(2,256) 10,729	(4,488) 8,497	(6,186) 6,799	(6,783) 6,202
56 Liability loss amortization ⁶								1,224	1,032	2,232	1,698	597	540

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					(\$ in 00	00s)								
Sec	tion 2	A (Gain)/Loss	B 2009	C 2010	D 2011	E 2012	F 2013	G 2014	H 2015	ا 2016	<mark>J</mark> 2017 ⁹	K 2018 ⁹	L 2019	M 2020
	2015 Experience													
	Asset loss (A) & Phase-in amount (I-X) Asset loss previously amortized	10,622								2,124 -	4,248 (186)	6,199 (1,031)	7,971 (2,063)	9,743 (2,582)
	Asset loss remaining to amortize Asset loss amortization ⁶									2,124 186	4,062 845	5,168 1,032	5,908 519	7,161 623
	Liability gain ⁷ Liability gain previously amortized	(674)								(674)	(674) 59	(674) 187	(674) 285	(674) 319
63	Liability gain to amortize Liability gain amortization ⁶									(674) (59)	(615) (128)	(487) (98)	(389) (34)	(355) (31)
	2016 Experience									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,	,,,,,,	<u> </u>	, , ,
	Asset loss (A) & Phase-in amount (J-X)	1,649									330	633	908	1,183
67	Asset loss previously amortized Asset loss remaining to amortize										330	(69) 564	(181) 727	938
	Asset loss amortization ⁶ Liability loss ⁷	14,150									14,150	112 14,150	14,150	14,150
70	Liability loss previously amortized	14,100									<u> </u>	(2,942)	(5,183)	(5,970)
	Liability loss to amortize Liability loss amortization ⁶										14,150 2,942	11,208 2,241	8,967 787	8,180 712
	2017 Experience													
	Asset gain (A) & Phase-in amount (K-X) Asset gain previously amortized	(8,969)										(1,648)	(3,144) 330	(4,640) 577
	Asset gain remaining to amortize Asset gain amortization ^o											(1,648) (330)	(2,814) (247)	(4,063) (354)
	Liability loss ⁷	15,442										15,442	15,442	15,442
79	Liability loss previously amortized Liability loss to amortize											15,442	(3,087) 12,355	(4,172) 11,270
80	Liability loss amortization ⁶											3,087	1,085	981
	2018 Experience													
82	Asset loss (A) & Phase-in amount (L-X) Asset loss previously amortized	16,220											2,946	5,892 (259)
	Asset loss remaining to amortize Asset loss amortization°												2,946 259	5,633 490
	Liability gain ⁷ Liability gain previously amortized	(6,738)											(6,738)	(6,738) 592
87	Liability gain to amortize Liability gain amortization ⁶												(6,738) (592)	(6,146) (535)
	2019 Experience												(002)	(000)
	Asset gain (A) & Phase-in amount (M-X)	(14,796)												(2,959)
91	Asset gain remaining to amortize													(2,959)
	Asset gain amortization ^b Liability loss ⁷	9,599												(258) 9,599
94	Liability loss previously amortized Liability loss to amortize	-,												9,599
	Liability loss amortization ⁶													9,599 835
	2020 Experience													
	Asset gain (A) & Phase-in amount (N-X) Asset gain previously amortized	(13,277)												
99	Asset gain remaining to amortize Asset gain amortization°													
	Liability loss ⁷	14,750												
	Liability loss previously amortized Liability loss to amortize													
	Liability loss amortization ⁶													
	Total 2008-2020 Experience								-					
	Total 2008-2020 asset experience amortization Total 2008-2020 liability experience amortization		933 (590)	1,797 (58)	2,544 272	3,317 1,039	3,858 2,594	3,490 1,915	3,027 2,898	2,751 2,384	6,339 8,097	4,964 9,254	2,055 2,659	1,903 3,240
	Other impacts including corridor and net gain/loss		(343)	(1,217)	(1,191)	(1,546)	(1,913)	(1,894)	(1,874)	(1,668)	(5,662)	(4,400)	(1,771)	(1,788)
	position prior to 2008 ⁸ Total gain/loss amortization			522	1,625	2,810	4,539	3,511	4,051	3,467	8,774	9,818	2,943	3,355
	Inside gain/loss recognition corridor (Yes/No)		Yes	No	No	No	No	No	No	No	No	No	No	No

5,6,7,8,9 See page 9 for footnotes.

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					(\$ in 0)00s)								
Sec	ction 2	Α	N	0	Р	Q	R	S	Т	U	٧	W	X	Υ
		(Gain)/Loss	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
	2008 Experience													
1	Asset loss (A) & Phase-in amount (B-X)	48,577	48,577	48,577	48,577	48,577	48,577	48,577	48,577	48,577	48,577	48,577	48,577	
	2 Asset loss previously amortized	40,011	(34,361)	(35,581)	(36,678)	(37,670)	(38,567)	(39,381)	(40,123)	(40,805)	(41,432)	(42,009)	(42,539)	
3	Asset loss remaining to amortize		14,216	12,996	11,899	10,907	10,010	9,196	8,454	7,772	7,145	6,568	6,038	
4	Asset loss amortization ⁶		1,220	1,097	992	897	814	742	682	627	577	530	487	43,026
5	Liability gain ⁷	(6,144)	(6,144)	(6,144)	(6,144)	(6,144)	(6,144)	(6,144)	(6,144)	(6,144)	(6,144)	(6,144)	(6,144)	
	Liability gain previously amortized		4,692	4,817	4,929	5,030	5,122	5,205	5,281	5,351	5,415	5,474	5,528	
	Liability gain remaining to amortize		(1,452)	(1,327)	(1,215)	(1,114)	(1,022)	(939)	(863)	(793)	(729)	(669)	(614)	·- ===>
8	Liability gain amortization ^b		(125)	(112)	(101)	(92)	(83)	(76)	(70)	(64)	(59)	(54)	(50)	(5,578)
	2009 Experience													
9	Asset loss (A) & Phase-in amount (C-X)	249	249	249	249	249	249	249	249	249	249	249	249	
	Asset loss previously amortized		(169)	(176)	(182)	(188)	(193)	(198)	(202)	(206)	(209)	(212)	(215)	
	Asset loss remaining to amortize		80	73	67	61	56	51	47	43	40	37	34	
	2 Asset loss amortization ⁶		7	6	6	5	5	4	4	3	3	3	3	218
	3 Liability loss ⁷	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	4,950	
	Liability loss previously amortized Liability loss to amortize		(3,657) 1,293	(3,768) 1,182	(3,868)	(3,958)	(4,040) 910	(4,114) 836	(4,181) 769	(4,243) 707	(4,300) 650	(4,352) 599	(4,400) 551	
	Liability loss amortization ⁶		111	100	90	82	74	67	62	57	52	48	44	4,444
					-	-		•	-	**		•		.,
	2010 Experience													
	Asset gain (A) & Phase-in amount (D-X)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)	(1,791)	
	Asset gain previously amortized Asset gain remaining to amortize		1,146	1,201 (590)	1,251 (540)	1,296 (495)	1,337 (454)	1,374 (417)	1,408	1,439	1,467	1,493	1,517 (274)	
	Asset gain remaining to amortize Asset gain amortization 6		(55)	(590)	(340) (45)	(493) (41)	(37)	(34)	(303)	(332)	(26)	(24)	(274)	(1,539)
	Liability loss ⁷	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	3,342	, ,===,
	Liability loss previously amortized	3,342	(2,375)	(2,458)	(2,533)	(2,600)	(2,661)	(2,716)	(2,767)	(2,813)	(2,856)	(2,895)	(2,931)	
23	Liability loss to amortize		967	884	809	742	681	626	575	529	486	447	411	
24	Liability loss amortization ⁶		83	75	67	61	55	51	46	43	39	36	33	2,964
	2011 Experience													
25	5 Asset loss (A) & Phase-in amount (E-X)	3,628	3,628	3,628	3,628	3,628	3,628	3,628	3,628	3,628	3,628	3,628	3,628	
	Asset loss previously amortized	3,020	(2,186)	(2,310)	(2,421)	(2,522)	(2,613)	(2,696)	(2,771)	(2,840)	(2,904)	(2,962)	(3,016)	
	Asset loss remaining to amortize		1,442	1,318	1,207	1,106	1,015	932	857	788	724	666	612	
28	Asset loss amortization ⁶		124	111	101	91	83	75	69	64	58	54	49	3,065
29	Liability loss ⁷	8,038	8,038	8,038	8,038	8,038	8,038	8,038	8,038	8,038	8,038	8,038	8,038	
	Liability loss previously amortized		(5,462)	(5,683)	(5,882)	(6,062)	(6,225)	(6,373)	(6,507)	(6,631)	(6,745)	(6,849)	(6,945)	
	Liability loss to amortize		2,576	2,355	2,156	1,976	1,813	1,665	1,531	1,407	1,293	1,189	1,093	
32	Liability loss amortization ^b		221	199	180	163	148	134	124	114	104	96	88	7,033
	2012 Experience													
33	Asset gain (A) & Phase-in amount (F-X)	(3,403)	(3,403)	(3,403)	(3,403)	(3,403)	(3,403)	(3,403)	(3,403)	(3,403)	(3,403)	(3,403)	(3,403)	
	Asset gain previously amortized		1,910	2,038	2,153	2,257	2,351	2,437	2,515	2,587	2,653	2,714	2,770	
	5 Asset gain remaining to amortize 6 Asset gain amortization ⁶		(1,493)	(1,365)	(1,250)	(1,146)	(1,052)	(966)	(888)	(816)	(750)	(689)	(633)	(0.004)
			(128)	(115)	(104)	(94)	(86)	(78)	(72)	(66)	(61)	(56)	(51)	(2,821)
	Liability loss 7	17,295	17,295	17,295	17,295	17,295	17,295	17,295	17,295	17,295	17,295	17,295	17,295	
	B Liability loss previously amortized C Liability loss to amortize		(11,146) 6,149	(11,674) 5,621	(12,148) 5,147	(12,577) 4,718	(12,965) 4,330	(13,317) 3,978	(13,638) 3,657	(13,933)	(14,204) 3,091	(14,453) 2,842	2,613	
	Liability loss amortization ⁶		528	474	429	388	352	321	295	271	249	229	2,013 211	14,893
	2013 Experience													
	Asset loss (A) & Phase-in amount (G-X) Asset loss previously amortized	356	349 (176)	349 (191)	349 (204)	349 (216)	349 (227)	349 (237)	349 (246)	349 (254)	349 (262)	349 (269)	349 (275)	
	Asset loss previously amortized Asset loss remaining to amortize		173	158	145	133	122	112	103	95	87	(269)	74	
	Asset loss amortization ⁶		15	13	12	11	10	9	8	8	7	6	6	281
45	Liability gain ⁷	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	(4,553)	
	Liability gain previously amortized	(1,000)	2,760	2,914	3,052	3,177	3,290	3,393	3,487	3,573	3,652	3,725	3,792	
47	Liability gain to amortize		(1,793)	(1,639)	(1,501)	(1,376)	(1,263)	(1,160)	(1,066)	(980)	(901)	(828)	(761)	
48	Liability gain amortization ⁶		(154)	(138)	(125)	(113)	(103)	(94)	(86)	(79)	(73)	(67)	(61)	(3,853)
	2014 Experience	•												
40	Asset loss (A) & Phase-in amount (H-X)	126	119	119	119	119	119	119	119	119	119	119	119	
	Asset loss previously amortized	123	(50)	(56)	(61)	(66)	(70)	(74)	(78)	(81)	(84)	(87)	(90)	
51	Asset loss remaining to amortize		69	63	58	53	49	45	41	38	35	32	29	
52	Asset loss amortization ⁶		6	5	5	4	4	4	3	3	3	3	2	92
	Liability loss ⁷	12,985	12,985	12,985	12,985	12,985	12,985	12,985	12,985	12,985	12,985	12,985	12,985	
	Liability loss previously amortized		(7,323)	(7,809)	(8,246)	(8,641)	(8,998)	(9,322)	(9,618)	(9,890)	(10,140)	(10,370)	(10,581)	
	Liability loss to amortize Liability loss amortization ⁶		5,662	5,176	4,739	4,344	3,987	3,663	3,367	3,095	2,845	2,615	2,404	10.775
56	LIADING 1055 ATTOTIZATION		486	437	395	357	324	296	272	250	230	211	194	10,775

5,6,7,9 See page 9 for footnotes.

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				(\$ 111 €	ioos)								
Section 2	A (Gain)/Loss	N 2021	O 2022	P 2023	Q 2024	R 2025	S 2026	T 2027	U 2028	V 2029	W 2030	X 2031	Υ Total
2015 Experience													
57 Asset loss (A) & Phase-in amount (I-X)	10,622	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743	9,743	
58 Asset loss previously amortized	10,022	(3,205)	(3,766)	(4,270)	(4,726)	(5,139)	(5,514)	(5,855)	(6,169)	(6,457)	(6,722)	(6,966)	
59 Asset loss remaining to amortize		6,538	5,977	5,473	5,017	4,604	4,229	3,888	3,574	3,286	3,021	2,777	
60 Asset loss amortization ^b		561	504	456	413	375	341	314	288	265	244	224	7,190
61 Liability gain ⁷	(674)	(674)	(674)	(674)	(674)	(674)	(674)	(674)	(674)	(674)	(674)	(674)	
62 Liability gain previously amortized		350	378	403	426	446	465	482	497	511	524	536	
 63 Liability gain to amortize 64 Liability gain amortization⁶ 		(324) (28)	(296) (25)	(271) (23)	(248) (20)	(228) (19)	(209) (17)	(192) (15)	(177) (14)	(163) (13)	(150) (12)	(138) (11)	(547)
		(20)	(25)	(20)	(20)	(13)	(17)	(10)	(14)	(10)	(12)	(1.17	(041)
2016 Experience													
65 Asset loss (A) & Phase-in amount (J-X)	1,649	1,458	1,458	1,458	1,458	1,458	1,458	1,458	1,458	1,458	1,458	1,458	
66 Asset loss previously amortized 67 Asset loss remaining to amortize		(327) 1,131	(424) 1,034	(511) 947	(590) 868	(661) 797	(726) 732	(785) 673	(839) 619	(889) 569	(935) 523	(977) 481	
68 Asset loss amortization ⁶		97	87	79	71	65	59	54	50	46	42	39	1,016
69 Liability loss ⁷	14,150	14,150	14,150	14,150	14,150	14,150	14,150	14,150	14,150	14,150	14,150	14,150	,
70 Liability loss previously amortized	14,100	(6,682)	(7,323)	(7,899)	(8,420)	(8,891)	(9,319)	(9,709)	(10,067)	(10,397)	(10,700)	(10,978)	
71 Liability loss to amortize		7,468	6,827	6,251	5,730	5,259	4,831	4,441	4,083	3,753	3,450	3,172	
Ciability loss amortization ⁶		641	576	521	471	428	390	358	330	303	278	256	11,234
2017 Experience													
73 Asset gain (A) & Phase-in amount (K-X)	(8,969)	(6,136)	(7,632)	(7,632)	(7,632)	(7,632)	(7,632)	(7,632)	(7,632)	(7,632)	(7,632)	(7,632)	
74 Asset gain previously amortized	(0,000)	931	1,378	1,906	2,383	2,815	3,207	3,564	3,892	4,194	4,471	4,726	
75 Asset gain remaining to amortize		(5,205)	(6,254)	(5,726)	(5,249)	(4,817)	(4,425)	(4,068)	(3,740)	(3,438)	(3,161)	(2,906)	(, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
76 Asset gain amortization ^o		(447)	(528)	(477)	(432)	(392)	(357)	(328)	(302)	(277)	(255)	(235)	(4,961)
77 Liability loss ⁷	15,442	15,442	15,442	15,442	15,442	15,442	15,442	15,442	15,442	15,442	15,442	15,442	
78 Liability loss previously amortized 79 Liability loss to amortize		(5,153) 10,289	(6,036) 9,406	(6,830) 8,612	(7,548) 7,894	(8,197) 7,245	(8,787) 6,655	(9,324) 6,118	(9,818) 5,624	(10,272) 5,170	(10,689) 4,753	(11,073) 4,369	
80 Liability loss amortization ⁶		883	794	718	649	590	537	494	454	417	384	353	11,426
			701	7.10	0.0			101	101				11,120
2018 Experience													
81 Asset loss (A) & Phase-in amount (L-X) 82 Asset loss previously amortized	16,220	8,838 (749)	11,784 (1,443)	14,730	14,730	14,730	14,730	14,730	14,730	14,730	14,730	14,730	
83 Asset loss remaining to amortize		8,089	10,341	(2,316) 12,414	(3,351)	(4,287) 10,443	(5,137) 9,593	(5,911) 8,819	(6,623) 8,107	(7,277) 7,453	(7,879) 6,851	(8,432) 6,298	
84 Asset loss amortization°		694	873	1,035	936	850	774	712	654	602	553	508	8,940
85 Liability gain ⁷	(6,738)	(6,738)	(6,738)	(6,738)	(6,738)	(6,738)	(6,738)	(6,738)	(6,738)	(6,738)	(6,738)	(6,738)	
86 Liability gain previously amortized	(,	1,127	1,609	2,042	2,433	2,787	3,108	3,401	3,670	3,918	4,146	4,355	
87 Liability gain to amortize		(5,611)	(5,129)	(4,696)	(4,305)	(3,951)	(3,630)	(3,337)	(3,068)	(2,820)	(2,592)	(2,383)	
Liability gain amortization ⁶		(482)	(433)	(391)	(354)	(321)	(293)	(269)	(248)	(228)	(209)	(192)	(4,547)
2019 Experience													
89 Asset gain (A) & Phase-in amount (M-X)	(14,796)	(5,918)	(8,877)	(11,836)	(14,795)	(14,795)	(14,795)	(14,795)	(14,795)	(14,795)	(14,795)	(14,795)	
90 Asset gain previously amortized		258	744	1,430	2,297	3,325	4,258	5,108	5,890	6,609	7,270	7,877	
91 Asset gain remaining to amortize 92 Asset gain amortization ^b		(5,660) (486)	(8,133) (686)	(10,406) (867)	(12,498) (1,028)	(11,470) (933)	(10,537) (850)	(9,687) (782)	(8,905) (719)	(8,186) (661)	(7,525) (607)	(6,918) (558)	(8,435)
													(0,433)
93 Liability loss' 94 Liability loss previously amortized	9,599	9,599 (835)	9,599 (1,587)	9,599 (2,263)	9,599 (2,874)	9,599 (3,427)	9,599 (3,929)	9,599 (4,387)	9,599 (4,808)	9,599 (5,195)	9,599 (5,550)	9,599 (5,877)	
95 Liability loss to amortize		8,764	8,012	7,336	6,725	6,172	5,670	5,212	4,791	4,404	4,049	3,722	
96 Liability loss amortization ⁶		752	676	611	553	502	458	421	387	355	327	300	6,177
2020 Experience													
97 Asset gain (A) & Phase-in amount (N-X)	(13,277)	(2,655)	(5,310)	(7,965)	(10,620)	(13,275)	(13,275)	(13,275)	(13,275)	(13,275)	(13,275)	(13,275)	
98 Asset gain (A) & Phase-in amount (N-A)	(13,211)	(2,000)	(5,310)	(7,965) 657	1,266	2,035	2,950	3,783	4,549	5,253	5,900	6,495	
99 Asset gain remaining to amortize		(2,655)	(5,082)	(7,308)	(9,354)	(11,240)	(10,325)	(9,492)	(8,726)	(8,022)	(7,375)	(6,780)	
100 Asset gain amortization ⁶		(228)	(429)	(609)	(769)	(915)	(833)	(766)	(704)	(647)	(595)	(547)	(7,042)
101 Liability loss ⁷	14,750	14,750	-	-	-	-	-	-	-	-	-	-	
102 Liability loss previously amortized		44.750	(1,266)	(2,404)	(3,433)	(4,364)	(5,209)	(5,979)	(6,687)	(7,338)	(7,936)	(8,486)	
103 Liability loss to amortize 104 Liability loss amortization ⁶		14,750 1,266	13,484 1,138	12,346 1,029	11,317 931	10,386 845	9,541 770	8,771 708	8,063 651	7,412 598	6,814 550	6,264 506	8,992
		1,200	1,130	1,023	331	040	770	700	031	330	330	300	3,332
Total 2008-2020 Experience													
105 Total 2008-2020 asset experience amortization		1,380	888	584	64 2.076	(157)	(144)	(133)	(122)	(111)	(102)	(95)	39,030
106 Total 2008-2020 liability experience amortization Other impacts including corridor and net gain/loss		4,182 (1,840)	3,761 (1,645)	3,400 (1,477)	3,076 (1,314)	2,792 (1,243)	2,544 (1,209)	2,340 N/A	2,152 N/A	1,974 N/A	1,817 N/A	1,671 N/A	63,413 N/A
107 position prior to 2008 ⁸		(.,5.5)	(1,010)	(.,)	(.,0)	(.,2.0)	(.,200)						
108 Total gain/loss amortization		3,722	3,004	2,507	1,826	1,392	1,191	N/A	N/A	N/A	N/A	N/A	N/A
Inside gain/loss recognition corridor (Yes/No)		No	No	No	No	No	No	N/A	N/A	N/A	N/A	N/A	N/A
		1											

Xcel Energy Inc. - MN Electric Rate Case - Order Point 40 Approximate Pension Cost Attributable to 2008-2019 Gains and Losses - Illustrative Schedule 3 Page 9 of 9

Footnotes

Applicable to Section 1 - NSPM Aggregate Cost Method

- ¹ The aggregate cost method does not explicitly track gains/(losses) and amortization schedules are not created for any individual gain/(loss).
- The amortizations included in this exhibit are intended to illustrate the pension costs attributable to the asset and liability experience.
 ² Surplus is used to offset losses in the order in which they occur, assuming liability losses are offset first.
- 3 Liability loss amounts are estimated based on total losses for the Xcel Energy Pension Plan allocated to NSPM using the percentage of PBO attributable to NSPM for each year. Includes discount rate changes, other assumption changes and demographic experience.
- ⁴ Subsequent experience is combined to determine the net funded status for the year. Contributions since 2008 have also reduced the unfunded position and annual cost.

Amortization factor for 2009-2012 is equal to the present value of all future pensionable compensation divided by current year pensionable compensation Amortization factor for 2013 and beyond is a 20-year principal and interest factor using the discount rate for the current year.

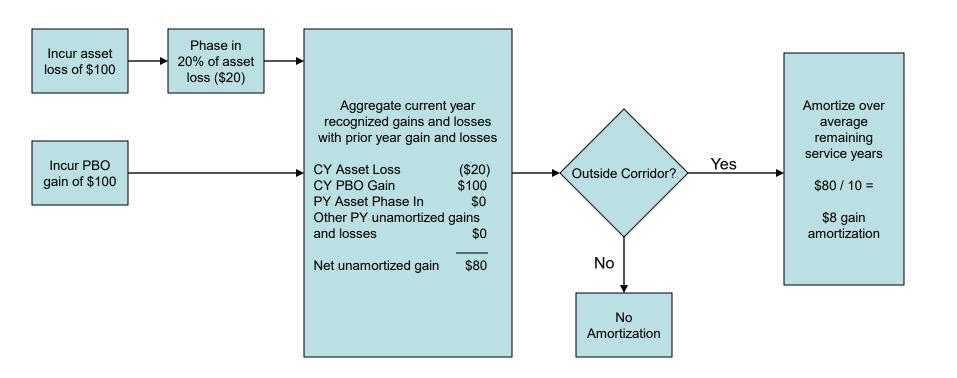
Applicable to Section 2 - XES ASC 715 (FAS 87)

- ⁵ ASC 715 does not explicitly track gains/(losses) and amortization schedules are not created for any individual gain/(loss).
- The amortizations included in this exhibit are intended to illustrate the pension costs attributable to the asset and liability experience.
- ⁶ Amortization amounts do not reflect the gain/loss amortization corridor.
- Liability experience amounts are equal to the actuarial gain/loss component from the projected benefit obligation reconciliation included in the annual disclosures and include discount rate changes, other assumption changes and demographic experience.
- ⁸ Prior to 2008, the plan was in a net gain position and subsequent experience is combined to determine the net outstanding position and amortization for the year.
- ⁹ Amortizations include immediate recognition of a portion of (gain)/loss due to settlement accounting.

1 of 2

SFAS 87 Amortization

Assumes no prior year gain or loss balance

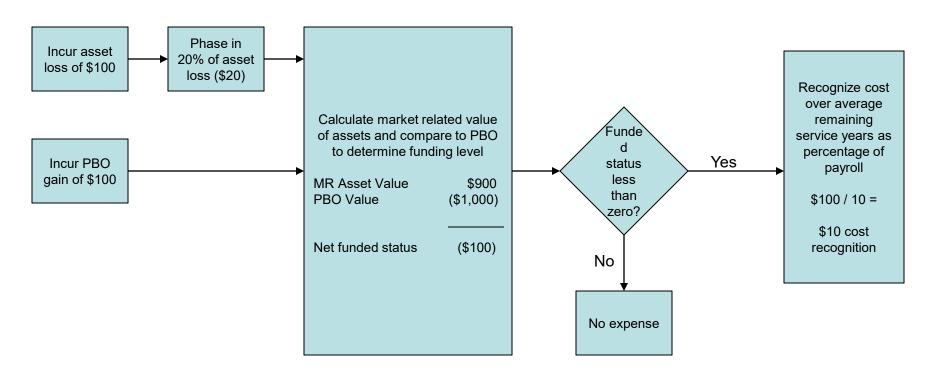


Exhibit___(RRS-1), Schedule 4 2 of 2

ACM Amortization

Beginning of year balances:

MR Asset Value \$920 PBO Value (\$1,100)



Description of Components and Calculations Under Aggregate Cost Method (ACM) and SFAS 87 (ASC 715)

A. Aggregate Cost Method

1. Components of the Aggregate Cost Method

The costs are determined using the following components:

- a) the value of pension benefits expected to be paid in all future years (the "Present Value Of Future Benefits");
- b) the value of plan assets (the "Valuation Assets");
- c) the value of expected future compensation to be paid to active employees (the "Present Value Of Future Compensation");
- d) the discount rate to be applied to all compensation expected to be paid to current employees (the "Aggregate Cost Discount Rate"); and
- e) the rate of return equal to the expected long-term rate of return on plan assets (the "Aggregate Cost Rate of Return").

Under the Aggregate Cost Method, the pension cost represents an amount that would need to be paid into the pension fund each year to pay all future benefits under the plan. The difference between the Present Value of Future Benefits and the Valuation Assets determines the unfunded benefits as of the valuation date. The unfunded benefits are divided by the Present Value of Future Compensation to determine the annual percentage of compensation that would need to be paid into the pension fund each year to fully fund all future benefits. The pension cost is equal to this percentage multiplied by the compensation expected to be paid to active employees in the upcoming year.

2. Present Value of Future Benefits

The Present Value of Future Benefits is determined by projecting into the future all benefits expected to be paid to plan participants. This projection requires future assumptions regarding mortality, when participants will leave the company and future salary increases. The benefits expected to be paid are discounted back to the valuation date by the Aggregate Cost Discount Rate.

3. Valuation Assets

Valuation Assets are based on adjusted market value of assets, which is a calculated value that recognizes changes in fair value in a systematic and rational manner over not more than five years. The adjusted market value is subject to restriction that it be not less than 80 percent and not more than 120 percent of the market value of assets. Contributions that have been included in prior costs but have not been contributed to the pension fund are added to the Valuation Assets. Contributions that have been contributed to the pension fund but have not been included in prior costs are subtracted from the Valuation Assets.

4. Present Value Of Future Compensation

The Present Value of Future Compensation is determined by projecting into the future all compensation expected to be paid to current employees. This projection requires future assumptions regarding mortality, termination and retirement rates and future salary increases. The compensation expected to be paid is then discounted back to the valuation date using the Aggregate Cost Discount Rate.

5. Aggregate Rate of Return

The Company develops the Aggregate Cost Rate of Return based on expectations provided by Pacific Global, the pension fund manager. These expectations are based on the composition of plan assets.

6. Aggregate Cost Discount Rate

The Aggregate Cost Discount Rate is equal to the expected long-term rate of return on plan assets.

7. Validation of Reasonableness of the Assumptions

The Company's independent actuary, Towers Watson, calculates the expense and obligations under the Aggregate Cost Method based on actual experience and company demographics, along with assumptions for the Aggregate Cost Discount Rate and Aggregate Cost Rate of Return. Towers Watson also provides results of surveys of discount rates and rates of return for review. In addition, all material assumptions are

reviewed by Deloitte and Touche, the Company's external auditor, for reasonableness.

B. FAS 87 (ASC 715)

1. Components of the ASC 715 Method

Under FAS 87, pension cost is made up of several components including:

- a) the value of pension benefits that employees will earn during the current year ("Service Cost");
- b) increases in the present value of the pension benefits that plan participants have earned in previous years ("Interest Cost");
- c) investment earnings on the pension plan assets that are expected to be earned during the year ("Expected Return On Assets");
- d) recognition of costs (or income) from experience that differs from the assumptions (e.g., investment earnings different than assumed) ("Amortization Of Unrecognized Gains And Losses"); and
- e) recognition of the cost of benefit changes the plan sponsor provides for service the employees have already performed ("Amortization Of Unrecognized Prior Service Cost").

2. Service Cost

The Service Cost is the actuarial present value of benefits attributed by the pension benefit formula to current employees' service during that period. Actuarial assumptions are used to reflect the time-value of money (the discount rate) and the probability of payment (assumptions as to mortality, turnover, early retirement, and others).

3. Interest Cost

The Interest Cost recognized in a fiscal year is determined as the increase in the projected benefit obligation due to the passage of time. Measuring the projected benefit obligation as a present value requires accrual of an Interest Cost at a rate equal to the assumed discount rate. The Interest Cost identifies the time value of money by recognizing that anticipated pension benefit payments are one year closer to being paid from the pension plan.

4. Expected Return On Assets

The Expected Return On Assets is determined based on the expected long-term rate of return on plan assets and the market-related value of plan assets. The marketrelated value of plan assets can be either fair market value or a calculated value that recognizes changes in fair value in a systematic and rational manner over not more than five years.

5. Amortization Of Unrecognized Gains And Losses

Gains and losses are changes in the amount of either the projected benefit obligation or plan assets resulting from experience different from that assumed or from changes in assumptions. ASC 715 does not distinguish between sources of gains and losses. Asset gains and losses are the differences between the actual return on assets during a period and the expected return on assets for that period. Liability gains and losses are the differences between the actual liability at the end of a measurement period and the expected liability at the end of a measurement period. FAS 87 does not require recognition of gains and losses as a component of net pension cost in the period in which they arise.

Amortization Of Unrecognized Net Gains Or Losses must be included as a

component of net periodic pension cost for a year if, as of the beginning of the year, the unrecognized net gain or loss exceeds a "corridor," which is 10 percent of the greater of the projected benefit obligation or the market-related value of plan assets. If Amortization Of Unrecognized Net Gains Or Losses is required, the amortization amount is equal to the amount of the Unrecognized Gain Or Loss in excess of the corridor divided by the average remaining future service of the active participants in the plan.

6. Amortization Of Unrecognized Prior Service Cost

Plan amendments can change benefits based on services rendered in prior periods. FAS 87 does not generally require the cost of providing such retroactive benefits (prior service cost) to be included in net periodic pension cost entirely in the year of the amendment but provides for recognition over the future years. Unrecognized prior service cost is amortized in the same manner as unrecognized gains and losses with the exception of the 10 percent corridor.

7. FAS 87 Rate of Return

The Company develops the FAS 87 Rate of Return based on expectations provided by JP Morgan, the pension fund manager. These expectations are based on the composition of plan assets.

8. FAS 87 Discount Rate

The FAS 87 Discount Rate is based on a bond matching approach which is recalculated on an annual basis to most accurately value the liability at a point in time.

9. Validation of Reasonableness Of The Assumptions Used

The Company's independent actuary, Towers Watson, calculates the expense and obligations under ASC 715 based on actual experience and company demographics, along with assumptions for the FAS 87 Discount Rate and FAS 87 Rate of Return. Towers Watson also provides results of surveys of discount rates and rates of return for review. All material assumptions are also reviewed for reasonableness by Deloitte and Touche, the Company's external auditor.

C. Accounting Standards and Example of the Phase In of Pension Asset Losses Over Five Years

The company "phases in" losses over 5 years and then amortizes these losses over the average years to retirement. SFAS 87 allows the company to use a calculation referred to as the "market-related value of plan assets" to recognize changes in asset values over a period not to exceed 5 years. For example assume the company had plan assets with a fair value of \$3,000,000 and those assets then lost \$1,000,000 in value. The accounting standard allows the company to recognize the change in the value of these assets through the market related value of these assets. As a result, the company would recognize only \$200,000 (\$1,000,000 x 1/5) of market loss per year for a period of five years. In the year of the losses, the market related value of assets would be \$2,800,000 (\$3,000,000 - \$200,000) The \$200,000 represents 1/5 of the actual

losses. This loss would then be amortized over the average remaining years of service (10 years). As a result, in year 1 loss amortization would be \$200,000 divided by 10, or \$20,000. The table below shows how losses would be phased in and then amortized.

Event	Fair Value of Assets	Market Related Value of Assets	Total Recognized	Year 1 Amort	Year 2 Amort	Year 3 Amort	Year 4 Amort	Year 5 Amort	Year 6 Amort
Beg Year 0	3,000,000	3,000,000	0						
Yr 0 Asset loss	2,000,000	2,800,000	200,000	20,000	20,000	20,000	20,000	20,000	20,000
	2,000,000	2,600,000-	400,000		20,000	20,000	20,000	20,000	20,000
	2,000,000	2,400,000	600,000			20,000	20,000	20,000	20,000
	2,000,000	2,200,000	800,000				20,000	20,000	20,000
	2,000,000	2,000,000	1,000,000					20,000	20,000
	Total Amortization			20,000	40,000	60,000	80,000	100,000	100,000

The accounting standard that allows the Company to smooth in the pension asset gains or losses over a five-year period is the Statement of Financial Accounting Standard ("SFAS") 87, Employers' Accounting for Pensions. The specific guidance can be found on page 14, paragraph 30 and 31, which I have copied below for your reference. The relevant reference is bolded and underlined.

- 30. The expected return on plan assets shall be determined based on the expected long-term rate of return on plan assets and the market-related value of plan assets. The market-related value of plan assets shall be either fair value or a calculated value that recognizes changes in fair value in a systematic and rational manner over not more than five years. Different ways of calculating market-related value may be used for different classes of assets (for example, an employer might use fair value for bonds and a five-year-moving-average value for equities), but the manner of determining market-related value shall be applied consistently from year to year for each asset class.
- 31. Asset gains and losses are differences between the actual return on assets during a period and the expected return on assets

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for that period. Asset gains and losses include both (a) changes reflected in the market-related value of assets and (b) changes not yet reflected in the market-related value (that is, the difference between the fair value of assets and the market-related value). Asset gains and losses not yet reflected in market-related value are not required to be amortized under paragraphs 32 and 33.

Schedule 6 XEPP Fund Analysis (Amounts in Thousands)

Year	Beginning of YearYear Market Value	Contributions	Earnings on Fund Investments	Pension Payments	Acquisitions/Tra	Settlements	End of Year Market Value	Return on Assets
1950	-	1,023	(17)	(16)	-		989	-3.46%
1951	989	2,185	13	(145)	-		3,043	0.63%
1952	3,043	2,184	316	(200)	-		5,342	7.83%
1953	5,342	2,394	8	(263)	-		7,481	0.13%
1954	7,481	2,626	1,266	(346)	-		11,026	14.67%
1955	11,026	2,851	1,544	(444)	-		14,977	12.61%
1956	14,977	2,841	879	(534)	-		18,163	5.45%
1957	18,163	3,511	97	(772)	-		21,000	0.50%
1958	21,000	3,715	1,528	(958)	-		25,284	6.83%
1959	25,284	4,045	3,929	(1,135)	-		32,123	14.69% 7.65%
1960 1961	32,123 37,602	4,267 4,716	2,571 4,121	(1,359)	-		37,602 44,882	10.51%
1961	44,882	5,047	(4,158)	(1,557) (1,785)	-		43,987	-8.94%
1963	43,987	5,219	7,373	(2,094)			54,485	16.18%
1964	54,485	5,469	6,666	(2,442)	_		64,177	11.90%
1965	64,177	5,749	3,023	(2,763)	_		70,186	4.60%
1966	70,186	5,690	3,252	(3,269)	_		75,860	4.56%
1967	75,860	5,650	5,727	(3,631)	_		83,606	7.45%
1968	83,606	5,647	7,919	(4,017)	_		93,154	9.38%
1969	93,154	5,785	(2,745)	(4,590)	-		91,604	-2.93%
1970	91,604	5,857	(11,557)	(5,267)	-		80,637	-12.57%
1971	80,637	6,203	18,077	(5,743)	-		99,174	22.34%
1972	99,174	6,939	13,010	(5,967)	-		113,157	13.05%
1973	113,157	7,533	(3,960)	(6,767)	-		109,963	-3.49%
1974	109,963	7,138	(10,668)	(7,590)	-		98,842	-9.72%
1975	98,842	8,967	16,770	(8,079)	-		116,500	16.88%
1976	116,500	10,790	12,240	(8,823)	-		130,707	10.40%
1977	130,707	13,128	5,803	(10,136)	-		139,503	4.38%
1978	139,503	16,308	7,166	(10,037)	-		152,940	5.02%
1979	152,940	18,071	26,014	(10,609)	-		186,416	16.59% 21.59%
1980 1981	186,416	20,523	41,250	(11,590) (12,705)	-		236,599	-6.41%
1981	236,599 231,523	23,131 27,270	(15,502) 59,048		-		231,523 303,599	24.80%
1982	303,599	27,740	66,064	(14,242) (5,743)	-		391,659	21.37%
1984	391,659	28,520	24,017	(19,084)			425,113	6.06%
1985	425,113	27,633	115,267	(22,959)	_		545,054	26.97%
1986	545,054	26,360	89,279	(24,836)	_		635,857	16.36%
1987	635,857	23,621	48,170	(27,898)	_		679,750	7.60%
1988	679,750	22,583	83,165	(40,645)	-		744,853	12.40%
1989	744,853	22,154	192,138	(44,303)	-		914,842	26.18%
1990	914,842	20,224	(11,273)	(56,827)	-		866,966	-1.26%
1991	866,966	22,248	248,374	(57,966)	-		1,079,623	29.25%
1992	1,079,623	21,516	121,945	(66,077)	-		1,157,007	11.53%
1993	1,157,007	-	153,083	(65,818)	-		1,244,272	13.62%
1994	1,244,272	-	15,665	(94,120)	-		1,165,817	1.31%
1995	1,165,817	-	345,631	(54,811)	-		1,456,637	30.36%
1996	1,456,637	-	274,978	(96,827)	-		1,634,787	19.53%
1997	1,634,787	-	428,004	(84,201)	-		1,978,590	26.87%
1998	1,978,590	-	330,836	(87,526)	-		2,221,900	17.10%
1999	2,221,900	-	305,501	(108,764)	20.412		2,418,637	13.98%
2000	2,418,637	-	89,651	(135,462)	38,412		2,411,238	6.90%
2001	2,411,238	- 012	(204,933)	(115,459)	157 157	(004)	2,090,846	-8.31%
2002	2,090,846	912	(318,389)	(155,606)	157,157	(994)	1,773,926	-10.90% 22.61%
2003 2004	1,7/3,926	1,712	372,354 179,697	(169,645)		(9,546) (27,627)	1,968,801 1,959,817	9.34%
2004	1,959,817	-	160,630	(168,429)	-	(27,027)	1,952,018	8.73%
2006	1,952,018	-	189,246	(175,904)	-		1,965,360	10.24%
2007	1,965,360	_	121,057	(153,335)	_		1,933,082	6.60%
2008	1,933,082	_	(479,747)	(164,179)	_		1,289,156	-25.26%
2009	1,289,156	_	132,142	(113,427)	_		1,307,871	11.94%
2010	1,307,871	34,132	145,913	(147,452)	-		1,340,464	12.77%
2011	1,340,464	70,635	78,696	(153,274)	-		1,336,521	6.28%
2012	1,336,521	142,581	164,743	(146,248)	-		1,497,597	11.64%
2013	1,497,597	125,175	105,333	(178,392)	(14,931)		1,534,782	7.08%
2014	1,534,782	90,029	108,591	(184,049)	12,950		1,562,303	7.22%
2015	1,562,303	58,057	(17,038)	(154,384)	5,874		1,454,812	-1.25%
2016	1,454,812	90,050	92,086	(190,440)	12,415		1,458,923	6.66%
2017	1,458,923	120,308	216,751	(234,403)	1,378		1,562,957	15.29%
2018	1,562,957	120,000	(69,515)	(237,016)			1,373,982	-4.51%
2019	1,373,982	90,188	284,993	(162,284)	3,928		1,590,807	20.91%
2020	1,590,807	85,000	267,124	(174,129)	8,721		1,777,523	17.49%
Totals		1,523,848	4,651,234	(4,582,852)	223,460	(38,167)	55,725,158	

Northern States Power Company

EEI Pension and OPEB Survey 2020-21

mpany	Expected [Rat		Yield Curve / Model (Firm)	Yield Curve / Model (Specific)	Long- Expected		Expected CY (2		Expected CY+1 (2	
	Pension	ОРЕВ			Pension	OPEB	Pension	OPEB	Pension	ОРЕВ
-1	2.39%	2.51%	Aon Hewitt	AA Above Median	5.90%	5.80%	17.90%	15.00%	5.30%	5.66%
-2	2.57%	2.58%	Aon Hewitt	AA Above Median	7.10%	7.20%	17.60%	12.60%	7.00%	6.70%
-3	2.75%	3.05%	Willis Towers Watson	BOND:Link	6.75%		5.11%		6.75%	
-4	2.77%	2.62%	Aon Hewitt	AA Above Median	7.00%	6.50%			6.75%	6.25%
-5	3.44%	3.42%	Willis Towers Watson	BOND:Link	5.50%	4.75%	17.80%	12.50%	10.50%	6.40%
-6	2.78%	2.75%	Mercer	Bond Model	6.88%		11.37%		6.51%	
-7	2.66%	2.76%	Willis Towers Watson	Rate:Link	7.00%	7.85%	7.00%	7.85%	7.00%	7.85%
-8	2.74%	2.39%	Willis Towers Watson	BOND:Link	5.91%					
-9	3.25%		Willis Towers Watson	BOND:Link	5.50%		5.50%			
-10	2.77%	2.73%	Willis Towers Watson	Rate:Link	5.70%	5.07%	13.90%	12.25%	5.10%	4.57%
-11	2.50%	2.50%	Citigroup	Pension Discount	7.40%	7.40%	9.00%	9.00%	8.00%	8.00%
-12	2.25%	2.34%	Willis Towers Watson	BOND:Link	7.60%	5.40%	12.50%	9.00%	7.10%	4.50%
-13	2.38%	2.67%	Aon Hewitt	AA Only Bond Universe	6.00%	5.00%	16.60%	13.80%	5.50%	4.00%
-14	2.68%	2.60%	Willis Towers Watson	BOND:Link	6.87%	7.00%	12.09%	11.96%	6.87%	7.00%
-15	2.39%	2.58%			5.22%	5.90%	15.50%	16.00%	4.57%	5.24%
16	2.63%	2.56%	Aon Hewitt	AA-AAA Bond Universe	8.25%	8.25%	11.60%	14.50%	8.25%	8.25%
-16 -17	2.92%	2.84%	Aon Hewitt	AA Only Above Median	7.25%	6.00%	21.00%	17.30/0	7.25%	6.00%
	2.74%		Willis Towers Watson	BOND:Link				0.000/		
18		2.56%	Willis Towers Watson	BOND:Link	6.50%	3.70%	16.00%	9.00%	6.50%	3.70%
19	2.84%	2.56%	Aon Hewitt	AA Above Median	8.35%	4.50%	14.30%	2 2=	8.35%	4.10%
20	2.56%	2.41%	Aon Hewitt	AA Above Median	4.55%		5.25%	2.35%	4.50%	1.80%
21	2.57%	2.69%	Aon Hewitt	AA Above Median	6.75%	6.75%	15.00%	15.00%	6.75%	6.75%
22	2.32%	3.03%	Other	Actuarial	6.25%	5.75%			6.00%	5.50%
23	2.45%	2.50%	Aon Hewitt	AA Above Median	5.75%	3.95%	12.50%	9.50%	5.00%	3.20%
24	2.75%	2.77%	Mercer	Bond Model	6.75%	6.75%	11.60%	11.60%	6.50%	6.50%
25	3.33%	2.97%	Willis Towers Watson	Rate:Link	5.75%		12.50%		5.75%	
26	2.71%	2.65%	Willis Towers Watson	BOND:Link	6.87%	4.50%	15.15%	7.08%	6.49%	4.10%
27		2.38%	Citigroup	Pension Discount		7.10%		9.60%		10.00%
28	2.55%	2.25%	Other	Actuarial	7.00%	6.80%	12.00%	14.73%	7.00%	6.80%
29	3.34%	3.31%	Willis Towers Watson	Rate:Link	7.30%	6.80%	14.60%	9.30%	7.20%	6.90%
30	2.64%		Willis Towers Watson	BOND:Link	7.00%		16.40%	8.80%	6.88%	6.88%
31	2.75%	2.75%	Willis Towers Watson	BOND:Link	7.00%	7.00%	26.00%	17.00%	6.50%	6.50%
32	2.67%	2.45%	Aon Hewitt	AA Above Median	7.50%	7.50%	14.80%	13.20%	7.50%	7.50%
33	2.53%	2.63%	Willis Towers Watson	Rate:Link	5.75%	5.00%	19.83%	17.97%	5.30%	5.05%
34	2.70%	2.52%	Prudential	Above Mean	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
35	2.84%	2.75%	Willis Towers Watson	BOND:Link	8.60%	8.50%	7.0070	7.0070	7.0070	7.0070
36	2.50%	2.55%			4.75%	4.75%	16.70%	16.00%	4.75%	4.75%
37	2.53%	2.24%	Willis Towers Watson	BOND:Link	7.75%	6.55%		18.00%		
			Aon Hewitt	AA Only Bond Universe			16.40%		7.75%	6.30%
38	2.80%	2.70%	Other	Bond model	7.40%	6.50%	15.20%	14.00%	7.40%	6.00%
39	2.92%	2.83%	Willis Towers Watson	BOND:Link	7.25%	7.25%	17.40%	14.70%	7.00%	7.00%
40	2.90%	2.54%	Willis Towers Watson	BOND:Link	6.60%	4.10%	4 4 000:		6.48%	4.38%
41	2.20%	2.14%	Other	Actuarial			14.00%		7.00%	3.75%
42	2.60%	2.60%	Willis Towers Watson	BOND:Link	6.85%	6.85%	11.50%	11.50%	6.50%	6.50%
43	2.92%	2.57%	Willis Towers Watson	Rate:Link	6.75%	7.00%	7.22%	7.41%	6.75%	7.00%
0-21 Results										
Average	2.70%	2.64%			6.68%	6.19%	13.67%	11.88%	6.65%	5.90%
Quartile 0% (Min)	2.20%	2.14%			4.55%	3.70%	5.11%	2.35%	4.50%	1.80%
Quartile 25%	2.54%	2.51%			5.91%	5.03%	11.60%	9.00%	6.24%	4.57%
Quartile 50% (Medi	2.69%	2.60%			6.87%	6.55%	14.30%		6.75%	6.30%
Quartile 75%	2.80%	2.75%			7.25%	7.00%	16.40%		7.05%	6.90%
Quartile 100% (Max	3.44%	3.42%			8.60%	8.50%	26.00%	18.00%	10.50%	10.00%
# Responses	42	41	43	43	41	35	37	31	39	37
) Median	2.69%	2.60%			6.87%	6.55%	14.30%	12.25%	6.75%	6.30%
9 Median	3.36%				7.00%		20.00%		7.00%	
3 Median	4.35%				7.00%		-4.40%		7.00%	
7 Median	3.70%				7.25%		14.00%		7.10%	
6 Median 6 Median	4.20% 4.50%				7.33% 7.05%		7.50% 0.00%		7.00%	
A INICUIGII	4.50%				7.05%		7.50%		7.00%	
	-r. ± ± /0									
1 Median	4.94%				7.25%		9.88%			
4 Median 3 Median	4.94% 4.10%				7.25% 7.50%		9.88%			
4 Median 3 Median 2 Median 1 Median										

Docket No. E002/GR-21-630 Exhibit___(RRS-), Schedule 7 Page 1 of 1

Xcel Energy Discount Rate Benchmarks

	December 31, 2019 Bond Matching ¹	December 31, 2020 Bond Matching ¹	Change From December 31, 2019
Xcel Energy Pension Plan	3.48%	2.65%	(0.83%)
NCE Non-bargaining Plan	3.39%	2.50%	(0.89%)
SPS Bargaining Plan	3.58%	2.84%	(0.74%)
PSCo Bargaining Plan	3.58%	2.83%	(0.75%)
All Pension Plans Combined	3.49%	2.71%	(0.78%)
Nonqualified Pension	3.33%	2.47%	(0.86%)
Post-Retirement Medical Plan	3.47%	2.65%	(0.82%)
Workers Compensation and LTD ²	3.46%	2.53%	(0.93%)
Merrill Lynch Corporate (AA-AAA) 15+ Bond Index	3.16%	2.47%	(0.69%)
10-Year Treasuries	1.92%	0.93%	(0.99%)
30-Year Treasuries	2.39%	1.65%	(0.74%)

¹ Based on Willis Towers Watson BOND:Link model. The December 31, 2020 results are based on the bond model parameters summarized in our December 18, 2019 memo.

² Fiscal year 2021 budget estimates will use a discount rate of 2.53% until 2021 census data is available to determine actual discount rate for 2021 cost

Xcel Energy Inc. 2021 Expected Return on Assets (EROA) Analysis¹

Willis Towers Watson

	October 1, 2	2020 Capital Market A	ssumptions ²						
	10-Yr Arithmetic	20-Yr Arithmetic	30-Yr Arithmetic						VEBA (Includes
Modeled Asset Class ²	Returns	Returns	Returns	XEPP	PSCO	SPS	NCE	MPT	EIS Allocation) ³
Large Cap Stocks	8.39%	8.48%	8.41%	20.0%	18.0%	18.0%	20.0%	18.9%	2.2%
Small Cap Stocks	8.60%	8.75%	8.73%	2.0%	1.5%	1.5%	2.0%	1.9%	1.1%
All US Stocks	8.52%	8.57%	8.46%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5%
International Stocks	8.91%	8.91%	8.80%	9.0%	8.0%	8.0%	9.0%	8.6%	0.0%
Emerging Market Stocks	11.55%	11.61%	11.62%	5.5%	5.0%	5.0%	5.5%	5.2%	5.2%
High-Yield Bonds	3.50%	4.54%	5.10%	4.5%	4.0%	4.0%	4.5%	4.5%	6.1%
Emerging Market Debt	4.54%	5.60%	6.16%	8.0%	8.0%	8.0%	8.0%	8.2%	5.5%
Hedge Fund of Funds	4.97%	5.50%	5.80%	3.5%	3.0%	3.0%	3.5%	3.1%	8.5%
Private Equity	13.31%	13.35%	13.34%	5.0%	5.0%	5.0%	5.0%	5.0%	0.0%
Private Credit ⁴	3.50%	4.54%	5.10%	2.5%	2.5%	2.5%	2.5%	2.5%	0.0%
Real Estate	5.92%	5.94%	5.94%	5.0%	5.0%	5.0%	5.0%	5.0%	0.0%
Aggregate Bonds	1.17%	2.43%	3.16%	0.0%	0.0%	0.0%	0.0%	0.0%	60.8%
Long High Quality Bonds ⁵	1.78%	3.39%	4.36%	23.5%	27.0%	27.0%	23.5%	25.0%	0.0%
25-Year Zero Coupon Bonds ⁵	-0.90%	2.16%	3.99%	9.5%	11.0%	11.0%	9.5%	10.1%	0.0%
Cash Equivalents	1.37%	2.08%	2.52%	2.0%	2.0%	2.0%	2.0%	2.0%	4.1%
Total	_			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
				XEPP	PSCO	SPS	NCE	MPT	VEBA
Expected Geometric Portfolio Returns	s (before administrative ex	penses)							
WTW - 10-year - passive	•			4.86%	4.49%	4.49%	4.86%	4.70%	2.84%
WTW - 20-year - passive				5.67%	5.41%	5.41%	5.67%	5.56%	3.67%
WTW - 30-year - passive				6.08%	5.86%	5.86%	6.08%	6.00%	4.17%
Expected 2021 Administrative Expens	ses ⁶			-0.22%	-0.20%	-0.20%	-0.24%	-0.21%	-0.08%
2020 EROA Assumption				7.10%	6.50%	6.75%	6.90%	6.87%	4.50%
Increase/(Decrease) from Asset Alloca	ation change (20-year basi	s)		-0.31%	-0.27%	-0.27%	-0.31%	-0.30%	0.00%
Increase/(Decrease) in WTW Model Re	eturns from 2020 (20-year l	basis)		-0.27%	-0.32%	-0.32%	-0.27%	-0.27%	-0.52%
Decrease/(Increase) in Administrative	Expenses from 2020			0.04%	0.29%	0.03%	0.31%	0.14%	0.00%
Combined Changes from 2020				-0.54%	-0.30%	-0.56%	-0.27%	-0.43%	-0.52%
2021 EROA Assumption Selected by X	Ccel Energy ⁷			6.60%	6.35%	6.35%	6.60%	6.49%	4.10%
Change in EROA assumption				-0.50%	-0.15%	-0.40%	-0.30%	-0.38%	-0.40%

¹ All returns are net of investment expenses, and assume passive investments (i.e., do not include alpha)

² See Willis Towers Watson Expected Return Estimator U.S. Capita Market Assumptions as of October 1, 2020 for more details

³ EIS portfolio allocations baseed on information received from Xcel Energy on October 22, 2019

⁴ Private credit modeled as high-yield bonds

⁵ Immunizing portfolio allocated between long high quality bonds and 25-year zero coupon bonds based on information received from Xcel Energy on October 29, 2019

⁶ ASC 715 expected return assumption is net of administrative expenses as these are paid from plan assets. Expected administrative expenses equal annualized amounts paid through September 2019 plus expected changes in PBGC premiums. VEBA assumption is a high-level estimate. See estimated 2021 administrative fee details exhibit for more information.

⁷ See Xcel Energy assumption memo for more information on the assumption selection process and additional information considered.

XCEL ENERGY INC. - Qualified Pension Plans Cost by Legal Entity (\$ in Thousands)

EXHIBIT I Page 2 of 6

				Amortiz	zations							
2022	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	Settlement Charge ¹	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued)	Contribution	PBO
Xcel Energy Pension Plan (XEPP)												
Discontinued Operations ²	-	1,955	(4,293)	-	3,188	850	-	N/A	N/A	39,165	1,937	76,154
Xcel Energy Nuclear	5,768	2,875	(6,306)	(214)	672	2,795	-	2,962	2,913	(6,867)	2,875	113,047
NSP - MN	23,032	20,852	(45,682)	179	28,076	26,457	-	21,710	21,354	324,382	21,068	828,522
NSP - WI	5,113	3,822	(8,385)	(24)	4,225	4,751	-	N/A	N/A	44,828	3,827	150,478
Xcel Services ³	26,412	18,283	(40,111)	(985)	13,966	17,565	-	N/A	N/A	110,522	18,280	718,819
XEPC (former EMI)	-	13	(29)	-	7	(9)	-	N/A	N/A	35	13	515
Total XEPP	60,325	47,800	(104,806)	(1,044)	50,134	52,409	-	24,672	24,267	512,065	48,000	1,887,535

				Amorti	zations							
2023	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	Settlement Charge ¹	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued)	Contribution	PBO
Xcel Energy Pension Plan (XEPP)												
Discontinued Operations ²	_	1,880	(4,379)		2,924	425	_	N/A	N/A	40,252	2,801	73,341
Xcel Energy Nuclear	5,565	2,874	(6,691)	(214)	361	1,895	-	2,488	2,606	(6,787)	4,311	112,855
NSP - MN	22,028	19,928	(46,363)		24,381	20,153	-	17,431	18,263	318,993	30,205	790,767
NSP - WI	4,826	3,743	(8,714)	(24)	3,612	3,443	-	N/A	N/A	43,904	5,625	147,260
Xcel Services ³	26,094	18,004	(41,915)	(985)	11,576	12,774	_	N/A	N/A	111,237	27,039	707,906
XEPC (former EMI)	-	13	(30)	· - '	7	(10)	_	N/A	N/A	57	19	503
Total XEPP	58,513	46,442	(108,092)	(1,044)	42,861	38,680	-	19,919	20,869	507,656	70,000	1,832,632

				Amorti	zations							
2024	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	Settlement Charge ¹	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued)	Contribution	PBO
Xcel Energy Pension Plan (XEPP)												
Discontinued Operations ²	-	1,799	(4,602)	-	2,532	(271)	-	N/A	N/A	42,628	3,558	70,442
Xcel Energy Nuclear	5,386	2,873	(7,351)	(214)	(35)	659	-	1,789	2,089	(4,371)	5,696	112,787
NSP - MN	22,234	19,113	(48,911)	179	19,759	12,374	-	12,007	14,022	329,045	38,224	756,835
NSP - WI	4,840	3,664	(9,374)	(24)	2,833	1,939	-	N/A	N/A	46,086	7,281	144,174
Xcel Services ³	25,784	17,743	(45,394)	(985)	8,405	5,553	-	N/A	N/A	125,502	35,216	697,273
XEPC (former EMI)	-	13	(33)	-	6	(14)	-	N/A	N/A	86	25	493
Total XEPP	58,244	45,205	(115,665)	(1,044)	33,500	20,240	-	13,796	16,111	538,976	90,000	1,782,004

```
1 Settlement accounting may be required if lump sum benefit payments exceed the sum of service cost and interest on a plan by plan basis. No settlements have been estimated at this time.
<sup>2</sup> Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett, QPS and MEC
3 Includes Eloigne
Assumptions
 Discount Rate - U.S. GAAP
     XEPP
                                                              2.65%
     NCE
                                                             2.50%
     SPS
                                                             2.84%
     PSC<sub>0</sub>
                                                             2.83%
  Discount Rate - Aggregate Normal Cost
                                                              6.60%
  Salary Scale
                                                              3.75%
  Expected Return on Assets
     XEPP
                                                              6.60%
     NCE
                                                              6.60%
     SPS
                                                              6.35%
     PSC<sub>0</sub>
                                                              6.35%
  Assumed Mortality Table
     Bargaining Participants
                                                      Pri-2012 Blue Collar, as adjusted for 2019 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2020 methodology
     Non-bargaining Participants
                                                      Pri-2012 White Collar, as adjusted for 2019 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2020 methodology
  See June 4, 2021 letter for additional information on data, assumptions, methods, models and plan provisions.
  Contributions are allocated based on PBO for each legal entity.
```

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XCEL ENERGY INC Postretirement Benefits U.S. GAAP Cost Estimates by Legal Entity (\$ in Thousands)											
				Amortizatio	ons						
2022	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	January 1 Prepaid (Accrued)	Contribution			
Discontinued Operations ¹	-	160	(66)	(88)	47	53	(3,711)	570			
Xcel Energy Nuclear	9	26	-	95	(11)	119	(1,145)	24			
NSP - MN ²	160	1,692	(70)	(3,014)	1,516	284	(33,476)	5,913			
NSP - WI	40	305	(9)	(337)	283	282	(5,584)	935			
PSC ₀	682	10,137	(15,434)	(2,316)	3,339	(3,592)	69,196	-			
SPS ³	812	956	(1,728)	(425)	(730)	(1,115)	(11,392)	-			
Xcel Services ³	34	722	(7)	(278)	710	1,181	(11,656)	1,527			
XEPC (former EMI)		1	<u> </u>	<u> </u>	(4)	(3)	(108)	1			
Total Xcel Energy	1,737	13,999	(17,314)	(6,363)	5,150	(2,791)	2,124	8,970			

			_	ons				
2023	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	January 1 Prepaid (Accrued)	Contributio
Discontinued Operations ¹	-	149	(69)	(10)	45	115	(3,194)	550
Xcel Energy Nuclear	8	26	-	20	(11)	43	(1,240)	27
NSP - MN ²	152	1,586	(72)	(606)	1,457	2,517	(27,847)	5,604
NSP - WI	38	290	(9)	(70)	272	521	(4,931)	870
PSCo	598	9,658	(14,898)	(31)	3,198	(1,475)	72,788	-
SPS ³	788	931	(1,690)	(84)	(704)	(759)	(10,277)	-
Xcel Services ³	30	701	(7)	(33)	682	1,373	(11,310)	1,51
XEPC (former EMI)		1			(4)	(3)	(104)	
Total Xcel Energy	1,614	13,342	(16,745)	(814)	4,935	2,332	13,885	8,57

	Amortizations												
2024	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	January 1 Prepaid (Accrued)	Contribution					
Discontinued Operations ¹	-	138	(72)	-	43	109	(2,759)	535					
Xcel Energy Nuclear	8	27	-	-	(10)	25	(1,256)	31					
NSP - MN ²	144	1,487	(75)	-	1,406	2,962	(24,760)	5,229					
NSP - WI	35	276	(10)	-	263	564	(4,582)	809					
PSCo	535	9,181	(14,366)	-	3,077	(1,573)	74,263	-					
SPS ³	768	908	(1,654)	-	(682)	(660)	(9,518)	-					
Xcel Services ³	27	680	(7)	-	659	1,359	(11,165)	1,508					
XEPC (former EMI)				<u> </u>	(4)	(4)	(100)	1					
Total Xcel Energy	1,517	12,697	(16,184)	-	4,752	2,782	20,123	8,113					

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¹Includes NRG, BMG, Viking, Natrogas, Cheyenne, Quixx and UE.

Assumptions

Discount Rate 2.65% 4.10% Expected Return on Assets Medical Trend Pre-65 Post-65 5.00% Initial (2021) 5.50% Ultimate 4.50% 4.50% Year Ultimate Reached 2026 2026

Assumed Mortality Table

Bargaining: PriH-2012 Blue Collar headcount-weighted table adjusted for Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA

MP-2020 methodology.

Non-bargaining: PriH-2012 White Collar headcount-weighted table adjusted for Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA

MP-2020 methodology.

Contributions for PSCo and SPS are assumed equal to the net cost, but not less than zero. Contributions for other legal entities are assumed equal to the expected benefit payments. See June 4, 2021 letter for additional information on data, assumptions, models, methods, and plan provisions.

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6/4/2021

https://wtwonline.sharepoint.com/sites/tctclient_609084_2021RETANN/Documents/2021 Benefit Costs and 2022-2026 Benefit Cost Estimates - May 2021_Final.xlsx: PRW

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²Includes Eloigne and Seren.

³Includes Executive Life Insurance benefits.

Xcel Energy Inc. - LTD and Workers' Compensation Benefit Cost Estimates by Legal Entity (\$ in Thousands)

Exhibit VI Page 1 of 1

Fiscal Year Ending	2020	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	2026
U.S. GAAP	Actual	Actual	Budget	Budget	Budget	Budget	Budget
Discount Rate- Workers' Compensation	3.41%	2.53%	2.53%	2.53%	2.53%	2.53%	2.53%
Former NSP - Workers' Compensation '							
MN/SD	707	355	160	148	137	128	119
MI/WI	(46)	117	2	2	3	1	1
Subtotal	661	472	162	150	140	129	120
Former NCE - Workers' Compensation	0.5				0.7		
Colorado - PSCo	95	59	29	28	27	26	23
Deductible States - Workers' Compensation							
Deductible States - SPS (KS, OK, NM, and TX)	-	-	-	-	-	-	-
Total Xcel Energy Workers' Compensation	756	531	191	178	167	155	143
Total Acel Energy Workers Compensation	130	331	131	170	107	155	143
Discount Rate - LTD Income	3.41%	2.53%	2.53%	2.53%	2.53%	2.53%	2.53%
LTD Income							
Discontinued Operations - Cheyenne	(27)	(16)	2	1	_	1	_
Discontinued Operations ²	93	62	15	13	13	12	11
NSP-MN	516	579	129	122	114	107	99
NSP-WI	(54)	148	28	27	24	23	22
PSCo	177	91	16	14	11	9	7
SPS	79	29	5	3	2	1	-
Utility Engineering	(3)	(2)	_	1	1	1	-
Xcel Services	93	122	5	3	4	3	2
XEPC		2					-
Total Xcel Energy LTD Income	874	1,015	200	184	169	157	141
Total Xcel Energy U.S. GAAP	1,630	1,546	391	362	336	312	284
		-					

Results for former NSP states include income replacement and medical benefits as well as reserve for bankrupt insurers. Colorado results include reserve for bankrupt insurers.

The LTD and Workers' Compensation plan results reflect the final discount rate and 2021 census data.

See June 4, 2021 letter for additional information on data, assumptions, models, methods, and plan provisions.

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Includes NRG, BMG, Viking and Natrogas.

Schedule 10 Actuarial Costs 2022 Test Year

	Qualified Pension (1)	Retiree Medical (2)	FAS 112 Long- Term Disability	FAS 112 Workers Compensation
NSPM				
Total Cost from Actuarial Report	21,710,000	284,000	129,000	160,000
5 Year Average Discount Rate Adjustment	-	(479,000)	-	
Adjusted Total Cost	21,710,000	(195,000)	129,000	
Percent to NSPM Electric O&M	49.11%	49.11%	49.11%	46.73%
Amount to NSPM Electric O&M	10,662,385	(95,770)	63,355	74,767
Percent to State of Minnesota	87.16%	87.16%	87.16%	87.16%
Amount to State of Minnesota	9,293,271	(83,472)	55,220	65,167
Nuclear				
Total Cost from Actuarial Report	2,962,000	119,000		
5 Year Average Discount Rate Adjustment	_,, _	5,000		
Adjusted Total Cost	2,962,000	124,000		
Percent to NSPM Electric O&M	84.20%	84.20%		
Amount to NSPM Electric O&M	2,494,036	104,409		_
Percent to State of Minnesota	87.16%	87.16%		
Amount to State of Minnesota	2,173,787	91,003		
Xcel Energy Services				
Total Cost from Actuarial Report	17,565,000	1,181,000	5,000	
5 Year Average Discount Rate Adjustment	(1,352,432)	(180,000)	-	
SERP Adjustment	(, , , ,	, ,		
Adjusted Total Cost	16,212,568	1,001,000	5,000	_
Percent to NSPM Electric O&M	24.86%	24.86%	24.86%	
Amount to NSPM Electric O&M	4,030,317	248,841	1,243	
Percent to State of Minnesota	87.16%	87.16%	87.16%	
Amount to State of Minnesota	3,512,800	216,888	1,083	
Net Regulatory Adjustments (Cap & 10-20 year)	(188,826)	-	-	0
Affiliate Charges	310	-	2	1
Total NSPM Electric O&M, State of Minnesota	14,791,342	224,418	56,306	65,168

⁽¹⁾ Total cost amounts are from the 6/4/2021 actuarial report and reflects NSPM calculated under the Aggregate Cost Method using a 20 year amortization and XES calculated using the 5 year average discount rate and the amount (deferred) / amortized resulting from XES pension costs being above or below the updated 2019 estimate pension expense which is the amount that the company is seeking to reset the baseline in this rate filling.

⁽²⁾ Calculated using the 5 year average discount rate

Docket E002/GR-21-630 Exhibit___(RRS-1), Schedule 11 Page 1 of 10

Northern States Power Company

Docket Nos. E002/GR-13-868, E002/GR-15-826 Qualified Pension Plan Annual Report - June 15, 2021 Attachment A - Page 1 of 10

Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota Summary (\$s)

Schedule A

	2014	2015	2016	2017	2018	2019 *	2020
NSPM Plan	21,935,926	18,972,305	16,229,267	18,389,047	17,824,711	17,904,424	15,738,582
XES Plan	6,682,265	7,062,295	7,471,627	11,694,048	10,909,060	4,946,575	4,384,787
Extend ACM amortization 10 to 20 years	(6,390,596)	(4,504,585)	(2,791,625)	(3,140,138)	(2,653,639)	(2,064,975)	(1,384,142)
Cap XES Plan	(1,304,253)	(1,684,283)	(2,093,615)	(5,711,893)	(5,531,048)	431,437	1,042,805
Total Pension Expense for Ratemaking	20,923,341	19,845,733	18,815,654	21,231,064	20,549,084	21,217,461	19,782,032

^{*} Please note: Last year's report filed June 17, 2020 included a formula error in that the "NSPM Plan" cell value for 2019 was pulling from the incorrect cell in the Schedule C tab of the Attachment A spreadsheet. This resulted in incorrect values being calculated and reported for both the "NSPM Plan" and "Total Pension Expense for Ratemaking" amounts for 2019. We include the correct 2019 values above.

Northern States Power Company

Docket Nos. E002/GR-13-868, E002/GR-15-826 Qualified Pension Plan Annual Report - June 15, 2021 Attachment A - Page 2 of 10

Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota XES Qualified Pension (\$s)

Schedule B

	2014	2015	2016	2017	2018	2019	2020
Discount Rate Assumption	5 Yr Avg of 5.05%	5 Yr Avg of 4.67%	5 Yr Avg of 4.50%	5 Yr Avg of 4.32%	5 Yr Avg of 4.24%	5 Yr Avg of 4.24%	5 Yr Avg of 4.03%
Total Cost Amount	26,989,000	29,148,000	27,013,000	49,566,000	45,358,000	21,759,000	20,625,000
Required Ratemaking Adjustments:	_						
5 Year Average Discount Rate	(821,051)	(1,356,060)	269,080	(380,752)	(873,228)	279,040	(769,500)
Total Cost Amount with Ratemaking Adjustments	26,167,949	27,791,940	27,282,080	49,185,248	44,484,772	22,038,040	19,855,500
Percent to Electric O&M	29.17%	29.15%	31.45%	27.31%	28.85%	25.94%	25.36%
Amount to Electric O&M	7,633,036	8,101,904	8,580,923	13,430,238	12,833,560	5,716,668	5,035,355
Percent to State of MN	87.54%	87.17%	87.07%	87.07%	87.07%	86.53%	87.08%
Amount to State of MN Electric O&M	6,682,265	7,062,295	7,471,627	11,694,048	10,909,060	4,946,575	4,384,787
2011 State of MN Amount (cap)	5,378,012	5,378,012	5,378,012	5,378,012	5,378,012	5,378,012	5,378,012
Amount Above/(Below) 2011 Level	1,304,253	1,684,283	2,093,615	6,316,036	5,531,048	(431,437)	(993,225)
Prior Year Adjustment				604,143			49,580
Amount of Expense Deferred *	(1,304,253)	(1,684,283)	(2,093,615)	(5,711,893)	(5,531,048)	431,437	1,042,805
Cumulative Amount of Expense Deferred *	(2,358,610)	(4,042,893)	(6,136,508)	(11,848,401)	(17,379,449)	(16,948,012)	(15,905,207)
Amount Used/Amortized to Satisfy the Deferral *	_	-	-	-	-	-	-

^{*} Negative amounts reflect a reduction to expense or an increase to the deferral. Positive amounts reflect an increase to expense or a decrease to the deferral. The amount of expense deferred represents the amount incurred by year rather than the calendar year total, as there may be prior-year true-ups booked in the subsequent year.

Docket E002/GR-21-630 Exhibit___(RRS-1), Schedule 11 Page 3 of 10

Northern States Power Company

Docket Nos. E002/GR-13-868, E002/GR-15-826 Qualified Pension Plan Annual Report - June 15, 2021 Attachment A - Page 3 of 10

Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota NSPM ACM Qualified Pension (\$s)

Schedule C

		2014			2015			2016			2017			2018			2019			2020
	Qualified	Qualified		Qualified	Qualified		Qualified	Qualified		Qualified	Qualified									
	Pension w/ 10	Pension w/		Pension w/	Pension w/		Pension w/	Pension w/		Pension w/	Pension w/		Qualified	Qualified		Qualified Pension	Qualified Pension	(Qualified Pension (Qualified Pension
	Yr	20 Yr	Change	10 Yr	20 Yr	Change	10 Yr	20 Yr	Change	10 Yr	20 Yr	Change	Pension w/ 10	Pension w/ 20	Change	w/ 10 Yr	w/ 20 Yr	Change	w/ 10 Yr	w/ 20 Yr
	Amortization	Amortization	(Adjustment)	Amortization	Amortization	(Adjustment)	Amortization	Amortization	(Adjustment)	Amortization	Amortization	(Adjustment)	Yr Amortization	Yr Amortization	(Adjustment)	Amortization	Amortization	(Adjustment)	Amortization	Amortization
MN																				
Total Cost	35,485,000	25,147,000	(10,338,000)	31,064,000	23,689,000	(7,375,000)	30,831,000	25,528,000	(5,303,000)	31,554,000	26,166,000	(5,388,000)	30,891,000	26,292,000	(4,599,000)	30,873,000	27,312,000	(3,561,000)	27,855,000	25,437,000
Percent to electric O&M	61.44%	61.44%	61.44%	60.69%	60.69%	60.69%	51.03%	51.03%	51.03%	56.94%	56.94%	56.94%	55.45%	55.45%	55.45%	55.41%	55.41%	55.41%	53.00%	53.00%
Amount to electric O&M	21,802,948	15,451,000	(6,351,948)	18,853,331	14,377,303	(4,476,027)	15,732,443	13,026,428	(2,706,015)	17,967,424	14,899,398	(3,068,026)	17,129,060	14,578,914	(2,550,146)	17,106,645	15,133,505	(1,973,140)	14,763,150	13,481,610
Percent to state of MN	87.5440%	87.5440%	87.5440%	87.1683%	87.1683%	87.1683%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	86.53%	86.53%	86.53%	87.08%	87.08%
Amount to state of MN	19,087,173	13,526,424	(5,560,749)	16,434,136	12,532,457	(3,901,679)	13,698,636	11,342,440	(2,356,196)	15,644,691	12,973,283	(2,671,408)	14,914,705	12,694,229	(2,220,476)	14,802,209	13,094,871	(1,707,339)	12,855,751	11,739,786
Nuclear																				
Total Cost	3,426,000	2,428,000	(998,000)	3,149,000	2,401,000	(748,000)	3,150,000	2,608,000	(542,000)	3,308,000	2,743,000	(565,000)	3,574,000	3,042,000	(532,000)	3,834,000	3,392,000	(442,000)	3,529,000	3,222,000
Percent to electric O&M	94.98%	94.98%	94.98%	92.47%	92,47%	92,47%	92,27%	92,27%	92,27%	95,28%	95.28%	95,28%	93,51%	93,51%	93.51%	93,51%	93,51%	93.51%	93,81%	93.81%
Amount to electric O&M	3,254,081	2,306,161	(947,920)	2,911,801	2,220,145	(691,657)	2,906,349	2,406,272	(500,077)	3,151,805	2,613,483	(538,322)	3,342,047	2,844,574	(497,473)	3,585,173	3,171,859	(413,314)	3,310,555	3,022,558
Percent to state of MN	87.5440%	87.5440%	87.5440%	87.1683%	87.1683%	87.1683%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	86.53%	86.53%	86.53%	87.08%	87.08%
Amount to state of MN	2,848,753	2,018,906	(829,847)	2,538,169	1,935,263	(602,906)	2,530,632	2,095,202	(435,429)	2,744,356	2,275,625	(468,731)	2,910,005	2,476,843	(433,163)	3,102,215	2,744,578	(357,637)	2,882,831	2,632,044
			(,- ,			(,,			(, -,			(, - ,			(,,			(, ,		
TOTAL																				
TOTAL Amount to electric O&M	25,057,029	17,757,161	(7,299,868)	21,765,132	16,597,448	(5,167,684)	18,638,792	15,432,700	(3,206,091)	21,119,229	17,512,881	(3,606,348)	20,471,107	17,423,488	(3,047,619)	20,691,819	18,305,364	(2,386,455)	18,073,705	16,504,168
Percent to state of MN	87.5440%	87.5440%	87.5440%	87.1683%	87.1683%	87.1683%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	87.07%	86.53%	86.53%	86.53%	87.08%	87.08%
TOTAL Amount to state of MN	21,935,926	15,545,329	(6,390,596)	18,972,305	14,467,721	(4,504,585)	16,229,267	13,437,643	(2,791,625)	18,389,047	15,248,908	(3,140,138)	17,824,711	15,171,072	(2,653,639)	17,904,424	15,839,449	(2,064,975)	15,738,582	14,371,830
Prior Year True-up		_												_			_			
Cumulative Amount of Expense I	eferred	-	(13,703,716)		_	(18,208,301)		_	(20,999,926)		_	(24,140,064)		-	(26,793,703)			(28,858,678)		

Northern States Power Company

Docket Nos. E002/GR-13-868, E002/GR-15-826 Qualified Pension Plan Annual Report - June 15, 2021 Attachment A - Page 4 of 10

Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota Qualified Pension Actuarial Reports

Schedule D

XCEL ENERGY INC. - Qualified Pension Plans Cost Estimates by Legal Entity (\$ in Thousands)

EXHIBIT I Page 1 of 6

				Amort	izations				-	
2014	Service Cost II	nterest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued)	Contribution
Xcel Energy Pension Plan (XEPP)										
Discontinued Operations ¹	_	3,485	(4,660)	_	3,668	2,493	N/A	N/A	34,644	3,689
Xcel Energy Nuclear	6,876	4,227	(5,633)	44	1,078	6,592	3,426	2,428	(1,632)	4,575
NSP - MN	22,823	43,082	(57,287)	892	43,707	53,217	35,485	25,147	407,285	47,523
NSP - WI	4,527	7,257	(9,642)	111	6,617	8,870	N/A	N/A	58,556	8,030
Xcel Services ²	20,993	24,087	(32,085)	245	13,749	26,989	N/A	N/A	88,822	26,161
XEPC (former EMI)	-	21	(28)	-	(14)	(21)	N/A	N/A	(263)	22
Total XEPP	55,219	82,159	(109,335)	1,292	68,805	98,140	38,911	27,575	587,412	90,000
NCE Non-Bargaining Pension Plan										
Discontinued Operations - Cheyenne	-	159	(222)	-	190	127	N/A	N/A	1,447	179
PSCo	6,264	9,110	(12,726)	136	5,079	7,863	N/A	N/A	16,520	10,390
SPS	3,122	3,905	(5,460)		5,351	6,972	N/A	N/A	43,365	4,431
Total NCE	9,386	13,174	(18,408)	190	10,620	14,962	N/A	N/A	61,332	15,000
SPS Bargaining Plan										
SPS	6,062	16,539	(20,719)	-	7,975	9,857	N/A	N/A	124,408	-
Total SPS	6,062	16,539	(20,719)	-	7,975	9,857	N/A	N/A	124,408	-
PSCo Bargaining Plan										
Discontinued Operations - Cheyenne	_	580	(760)	_	549	369	N/A	N/A	7,031	328
PSCo	17,675	44,167	(57,983)	(3,228)	28,813	29,444	N/A	N/A	326,103	24,672
Total PSCo	17,675	44,747	(58,743)	(3,228)	29,362	29,813	N/A	N/A	333,134	25,000
Total Xcel Energy	88,342	156,619	(207,205)	(1,746)	116,762	152,772	38,911	27,575	1,106,286	130,000

¹ Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS

Assumptions

Discount Rate - U.S. GAAP 4.74% XEPP NCE 4.32% SPS 5.00% PSC₀ 4.89% Discount Rate - Aggregate Normal Cos 7.25% Salary Scale 3.75% Expected Return on Assets XEPP 7.25% NCE 7.10% SPS 6.85% PSC₀

Assumed Mortality Table

Bargaining Participants RP-2000 Blue Collar projected with scale AA to 2021 for retirees and 2029 for other participants

Non-bargaining Participants RP-2000 White Collar projected with scale AA to 2021 for retirees and 2029 for other participants

See May 7, 2014 letter for additional information on data, assumptions, methods and plan provisions.

Contributions already made are allocated in accordance with the January 14, 2014 contribution directives provided by Xcel Energy.

5/7/2014

J:\Clients\66120\RET\2014\Projections\01 February Forecasts\03b Analysis\Pension - Qualified\Qualified Plans 2014 - February Projections.xls: 2014



² Includes Eloigne

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Northern States Power Company

Docket Nos. E002/GR-13-868, E002/GR-15-826 Qualified Pension Plan Annual Report - June 15, 2021 Attachment A - Page 5 of 10

Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota Qualified Pension Actuarial Reports

Schedule D

XCEL ENERGY INC. - Qualified Pension Plans Benefit Cost Estimates by Legal Entity (\$ in Thousands)

EXHIBIT I Page 1 of 6

				Amort	izations				_		
2015	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued) ¹	Contribution	PBO
Xcel Energy Pension Plan (XEPP)											
Discontinued Operations ²	_	3,382	(4,924)	_	3,994	2,452	N/A	N/A	35,842	2,543	85,512
Xcel Energy Nuclear	7,270	4,004	(5,829)	44	1,239	6,728	3,149	2,401	(3,648)	3,010	101,201
NSP - MN	24,286	39,210	(57,001)	892	44,953	52,340	31,064	23,689	401,607	29,693	998,470
NSP - WI	4,759	6,520	(9,483)	111	6,804	8,711	N/A	N/A	57,718	4,927	165,669
Xcel Services ³	23,730	23,646	(34,416)	245	15,943	29,148	N/A	N/A	92,732	17,811	598,887
XEPC (former EMI)	,	21	(31)	-	(9)	(19)	N/A	N/A	(220)	16	528
Total XEPP	60,045	76,783	(111,684)	1,292	72,924	99,360	34,213	26,090	584,031	58,000	1,950,267
NCE Non-Bargaining Pension Plan						1					
Discontinued Operations - Cheyenne	-	158	(250)	-	188	96	N/A	N/A	1,499	203	4,261
PSCo PSCo	5,830	7,908	(12,511)	92	4,594	5,913	N/A	N/A	16,458	10,170	213,403
SPS	3,459	3,602	(5,701)	39	4,657	6,056	N/A	N/A	38,696	4,627	97,098
Total NCE	9,289	11,668	(18,462)	131	9,439	12,065	N/A	N/A	56,653	15,000	314,762
SPS Bargaining Plan											
SPS	7,547	16,582	(22,909)	-	10,430	11,650	N/A	N/A	114,985	7,000	403,592
Total SPS	7,547	16,582	(22,909)	-	10,430	11,650	N/A	N/A	114,985	7,000	403,592
PSCo Bargaining Plan						1					
Discontinued Operations - Cheyenne	-	542	(756)	_	576	362	N/A	N/A	6,991	126	13,577
PSCo	22,430	42,949	(60,079)	(3,228)	31,783	33,855	N/A	N/A	321,416	9,874	1,064,554
Total PSCo	22,430	43,491	(60,835)	(3,228)	32,359	34,217	N/A	N/A	328,407	10,000	1,078,131
Total Xcel Energy	99,311	148,524	(213,890)	(1,805)	125,152	157,292	34,213	26,090	1,084,076	90,000	3,746,752

¹ Includes \$4,730 transfer from NCE to XEPP for non-de minimis asset transfer on December 31, 2014

Assumptions Discount Rate - ASC 715 XEPP 4.09% NCE SPS 3.84% 4.21% PSCo 4.15% Discount Rate - Aggregate Normal Cost 7.25% Expected Return on Assets XEPP 7.25% NCE 7.10% 7.25%

Assumed Mortality Table Bargaining Participants

PSC₀

RP-2014 Blue Collar projected with generational mortality improvements using an adjusted SOA MP-2014 methodology RP-2014 White Collar, as adjusted for 2014 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2104 methodology

Non-bargaining Participants

See May 7, 2015 letter for additional information on data, assumptions, methods and plan provisions.

6.75%

Contributions already made are allocated in accordance with the January 15, 2015 contribution directives provided by Xcel Energy on January 12, 2015.

² Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS

³ Includes Eloigne

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Northern States Power Company

Docket Nos. E002/GR-13-868, E002/GR-15-826 Qualified Pension Plan Annual Report - June 15, 2021 Attachment A - Page 6 of 10

Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota Qualified Pension Actuarial Reports

Schedule D

XCEL ENERGY INC. - Qualified Pension Plans Benefit Cost by Legal Entity (\$ in Thousands)

EXHIBIT I

			_	Amo	ortizations				_		
2016	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued)1	Contribution	PBO
Xcel Energy Pension Plan (XEPP)											
Discontinued Operations	-	3,510	(4,715)	-	3,353	2,148	N/A	N/A	35,936	3,805	78,354
Xoel Energy Nuclear	6,523	4,246	(5,708)	44	559	5,666	3,150	2,608	(7,363)	4,629	94,849
NSP - MN	21,784	41,185	(55,238)	892	36,218	44,841	30,831	25,528	378,989	44,773	928,274
NSP - WI	4,417	6,816	(9,157)	111	5,392	7,579	N/A	N/A	53,939	7,436	152,545
Xoel Services ³	23,328	26,949	(36,170)	245	12,661	27,013	N/A	N/A	85,540	29,333	605,484
XEPC (former EMI)	-	22	(30)	-	(7)	(15)	N/A	N/A	(185)	24	495
Total XEPP	56,052	82,728	(111,016)	1,292	58,176	87,232	33,981	28,136	546,856	90,000	1,860,001
NCE Non-Bargaining Pension Plan											
Discontinued Operations - Cheyenne	-	170	(232)	-	157	95	N/A	N/A	1,606	133	3,948
PSCo PSCo	5,196	8,803	(12,001)	1	3,503	5,502	N/A	N/A	19,102	6,906	205,036
SPS	3,087	3,770	(5,141)	-	3,421	5,137	N/A	N/A	34,788	2,961	87,644
Total NCE	8,283	12,743	(17,374)	1	7,081	10,734	N/A	N/A	55,496	10,000	296,628
SPS Bargaining Plan											
SPS	6,674	17,489	(22,461)	-	8,565	10,267	N/A	N/A	110,335	15,000	379,750
Total SPS	6,674	17,489	(22,461)	-	8,565	10,267	N/A	N/A	110,335	15,000	379,750
PSCo Bargaining Plan											
Discontinued Operations - Cheyenne	-	540	(680)	-	449	309	N/A	N/A	6,755	115	11,934
PSCo .	20,730	46,602	(58,768)	(3,212)	23,268	28,620	N/A	N/A	297,435	9,885	1,019,820
Total PSCo	20,730	47,142	(59,448)	(3,212)	23,717	28,929	N/A	N/A	304,190	10,000	1,031,754
Total Xcel Energy	91,739	160,102	(210,299)	(1,919)	97,539	137,162	33,981	28,136	1,016,877	125,000	3,568,133

¹ Includes \$4,128 transfer from NCE to XEPP for non-de minimis asset transfer on December 31, 2015

Assumptions Discount Rate - U.S. GAAP XEPP 4 64% NCE 4.48% 4.73% PSC₀ 4.71% Discount Rate - Aggregate Normal Cost 7.10% Salary Scale Expected Return on Assets XEPP 7.10% NCE 6.90% 6.75% PSCo 6.50%

Assumed Mortality Table Bargaining Participants

RP-2014 Blue Collar projected with generational mortality improvements using an adjusted SOA MP-2014 methodology

ng Participants RP-2014 White Collar, as adjusted for 2014 Xoel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2014 methodology

Non-bargaining Participants RP-2014 White Collar, as adjusted for 2014 Xoel Energy See May 13, 2016 letter for additional information on data, assumptions, methods, and plan provisions.

Contributions already made are allocated in accordance with the January 4, 2016 contribution directives provided by Xcel Energy on January 26, 2016.

5/13/2016

WillisTowers Watson I.I "I'I.I

²Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS

³ Includes Eloigne

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Northern States Power Company

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Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota Qualified Pension Actuarial Reports

Schedule D

XCEL ENERGY INC. - Qualified Pension Plans Benefit Cost Estimates by Legal Entity (\$ in Thousands)

EXHIBIT I Page 1 of 1

				Amo	rtizations							
			Expected					Aggregate Cost	Aggregate Cost	January 1		
	Service	Interest	Return	Prior Service	Net		Settlement	Compensation	20-year Amortization	Prepaid		
2017	Cost	Cost	on Assets	Cost	(Gain)/Loss	Net Cost	Charge	Method	Method	(Accrued)	Contribution	PBO
Xcel Energy Pension Plan (XEPP)												
Discontinued Operations ¹	-	3,070	(4,547)	-	3,676	2,199	4,547	N/A	N/A	37,594	4,570	77,403
Xoel Energy Nuclear	6,578	3,905	(5,777)		748	5,498	1,355	3,308	2,743	(8,397)	6,713	98,345
NSP - MN	21,253	36,802	(54,289)		38,861	43,643	46,816	31,554	26,166	378,945	54,028	938,163
NSP - WI	4,618	6,218	(9,180)	138	5,846	7,640	7,107	N/A	N/A	53,800	9,284	157,457
Xcel Services ²	24,702	25,913	(38,193)		15,589	28,256	21,310	N/A	N/A	95,517	45,680	658,883
XEPC (former EMI)	-	22	(32)		(3)	(13)	1	N/A	N/A	(146)	33	537
Total XEPP	57,151	75,930	(112,018)	1,443	64,717	87,223	81,136	34,862	28,909	557,313	120,308	1,930,788
NCE Non-Bargaining Pension Plan												
Discontinued Operations - Cheyenne	-	155	(226)	-	174	103	-	N/A	N/A	1,645	133	4,117
PSCo	4,828	7,769	(11,356)	1	3,937	5,179	-	N/A	N/A	16,497	7,589	204,341
SPS	3,008	3,333	(4,871)	-	3,278	4,748	-	N/A	N/A	28,980	3,500	87,994
Total NCE	7,836	11,257	(16,453)	1	7,389	10,030	-	N/A	N/A	47,122	11,222	296,452
SPS Bargaining Plan												
SPS	6,750	16,377	(23,012)		9,703	9,818	-	N/A	N/A	115,195	20,002	395,607
Total SPS	6,750	16,377	(23,012)	-	9,703	9,818	-	N/A	N/A	115,195	20,002	395,607
PSCo Bargaining Plan												
Discontinued Operations - Cheyenne	-	456	(608)	-	454	302	-	N/A	N/A	6,561	111	11,290
PSCo .	22,452	42,789	(57,179)	(3,212)	24,418	29,268	-	N/A	N/A	278,738	9,911	1,047,481
Total PSCo	22,452	43,245	(57,787)	(3,212)	24,872	29,570	-	N/A	N/A	285,299	10,022	1,058,771
Total Xcel Energy	94,189	146,809	(209,270)	(1,768)	106,681	136,641	81,136	34,862	28,909	1,004,929	161,554	3,681,618

¹ Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS

Discount Rate - U.S. GAAP XEPP

4.11% 3.97% 4.25% 4.21% NCE SPS PSCo Discount Rate - Aggregate Normal Cost Salary Scale Expected Return on Assets XEPP 3.75% 7.10% NCE 6.90% SPS PSCo

Assumed Mortality Table

RP-2014 Blue Collar projected with generational mortality improvements using an adjusted SOA MP-2016 methodology RP-2014 White Collar, as adjusted for 2014 Xeel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 methodology Bargaining Participants Non-bargaining Participants

See May 17, 2017 letter for additional information on data, assumptions, methods and plan provisions. Settlement charge is calculated using a discount rate of 3.00% and year-end asset value of \$1,603M. See December 31, 2017 disclosures for additional information on data, assumptions, methods and plan provisions. Settlement charge is calculated using a discount rate of 3.00% and year-end asset value of \$1,603M. See December 31, 2017 disclosures for additional information of data, assumptions, methods and plan provisions. Contributions already made are allocated to in accordance with the January 32, 2017 and December 28, 2017 certification directives provided by Xeel Energy on January 23, 2017 and December 28, 2017, respectively.

² Includes Eloigne

Docket E002/GR-21-630 Exhibit____(RRS-1), Schedule 11 Page 8 of 10

Northern States Power Company

Docket Nos. E002/GR-13-868, E002/GR-15-826 Qualified Pension Plan Annual Report - June 15, 2021 Attachment A - Page 8 of 10

Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota Qualified Pension Actuarial Reports

Schedule D

XCEL ENERGY INC. - Qualified Pension Plans Benefit Cost Estimates by Legal Entity (\$ in Thousands)

EXHIBIT I Page 1 of 1

			_	Amo	rtizations							
2018	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	Estimated Settlement Charge ¹	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued) ¹	Contribution	PBO
Xcel Energy Pension Plan (XEPP)												
Discontinued Operations ²	-	2,736	(4,539)	-	3,615	1,812	4,838	N/A	N/A	35,418	4,864	78,815
Xcel Energy Nuclear	6,284	3,738	(6,200)	(214)	1,129	4,737	1,314	3,574	3,042	(9,131)	6,524	107,357
NSP - MN	21,644	31,479	(51,967)	100	37,329	38,585	47,459	30,891	26,292	342,488	56,623	927,782
NSP - WI	4,777	5,442	(9,025)	(30)	5,673	6,837	7,232	N/A	N/A	48,153	9,597	156,748
Xcel Services ³	22,849	23,771	(39,361)	(985)	17,078	23,352	22,006	N/A	N/A	87,739	42,356	690,963
XEPC (former EMI)	-	21	(34)	-	2	(11)	4	N/A	N/A	(101)	36	584
Total XEPP	55,554	67,187	(111,126)	(1,129)	64,826	75,312	82,853	34,465	29,334	504,566	120,000	1,962,249
NCE Non-Bargaining Pension Plan												
Discontinued Operations - Cheyenne	-	133	(218)	_	177	92	175	N/A	N/A	1,675	137	3,931
PSCo	4,297	6,958	(11,341)	(165)	4,403	4,152	4,465	N/A	N/A	18,891	6,830	206,586
SPS	2,656	3,045	(4,957)	(137)	3,386	3,993	3,212	N/A	N/A	27,599	3,033	91,051
Total NCE	6,953	10,136	(16,516)	(302)	7,966	8,237	7,852	N/A	N/A	48,165	10,000	301,568
SPS Bargaining Plan												
SPS	7.062	15,365	(23,370)	_	10,682	9,739	_	N/A	N/A	125,403	5,000	424,828
Total SPS	7,082	15,365	(23,370)	-	10,682	9,739	-	N/A	N/A	125,403	5,000	424,828
P\$Co Bargaining Plan												
Discontinued Operations - Cheyenne	_	404	(571)	_	469	302	-	N/A	N/A	6,370	150	11,411
PSCo .	24,788	40,296	(57,179)	(3,212)	26,855	31,548	-	N/A	N/A	259,393	14,850	1,127,594
Total PSCo	24,788	40,700	(57,750)	(3,212)	27,324	31,850	-	N/A	N/A	265,763	15,000	1,139,005
Total Xcel Energy	94,357	133,388	(208,762)	(4,643)	110,798	125,138	90,705	34,465	29,334	943,897	150,000	3,827,650

¹ Includes actual September 1, 2018 and December 31, 2018 settlement charges. Settlement charges are allocated in proportion to the unrecognized loss balance of each legal entity at the time of the settlement.

Assumptions used to determine 2018 benefit cost

Discount Rate - U.S. GAAP 3.60% NCE SPS 3.52% 3.71% Discount Rate - Aggregate Normal Cost 7.10% Expected Return on Assets
XEPP 7.10% NCE 6.90% 6.75% SPS

Assumed Mortality Table

RP-2014 Blue Collar projected with generational mortality improvements using an adjusted SOA MP-2016 methodology RP-2014 White Collar, as adjusted for 2014 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 methodology

Bargaining Participants Non-bargaining Participants

See May 18, 2018 letter for additional information on data, assumptions, methods, and plan provisions.

Contributions already made are allocated in accordance with the January 2, 2018 contribution directives provided by Xcel Energy on January 3, 2018.

1/22/2019 http://natct.internal.towerswatson.com/clients/609084A/XoelRETActuarial-2019iDocuments/Valuations/Disclosure/2018 Cost Ali Plans to Xoel Q4 Settlement Assets.xisx

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See September 14, 2018 and January 7, 2019 emails for assumptions and additional information

² Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS

³ Includes Eloigne

Docket E002/GR-21-630 Exhibit___(RRS-1), Schedule 11 Page 9 of 10

Northern States Power Company

Docket Nos. E002/GR-13-868, E002/GR-15-826 Qualified Pension Plan Annual Report - June 15, 2021 Attachment A - Page 9 of 10

Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota Qualified Pension Actuarial Reports

Schedule D

XCEL ENERGY INC. - Qualified Pension Plans Cost by Legal Entity EXHIBIT I Page 1 of 6

				Amortiz	zations							
			Expected Return	Prior Service	Net		Settlement	Aggregate Cost Compensation	Aggregate Cost 20-year Amortization	January 1 Prepaid		
2019	Service Cost	Interest Cost	on Assets	Cost	(Gain)/Loss	Net Cost	Charge 1	Method	Method	(Accrued)	Contribution	PBO
Xcel Energy Pension Plan (XEPP)												
Discontinued Operations ²	-	3,051	(4,468)	-	3,050	1,633	-	N/A	N/A	33,632	3,785	73,890
Xcel Energy Nuclear	5,834	4,153	(6,079)		630	4,324	-	3,834	3,392	(8,658)	5,052	100,213
NSP - MN	19,598	32,928	(48,176)		29,580	34,030	-	30,873		313,067	41,669	806,830
NSP - WI	4,433	5,709	(8,356)	(30)		6,203	-	N/A		43,681	7,239	139,764
Xcel Services ³	21,737	26,095	(38,200)	(985)	13,112	21,759	-	N/A	N/A	84,737	32,227	632,568
XEPC (former EMI)	-	23	(33)	-	2	(8)	-	N/A	N/A	(58)	28	546
Total XEPP	51,602	71,959	(105,312)	(1,129)	50,821	67,941	-	34,707	30,704	466,401	90,000	1,753,811
NCE Non-Bargaining Pension Plan												
Discontinued Operations - Cheyenne	-	146	(203)	-	146	89	-	N/A	N/A	1,545	65	3,601
PSCo	3,915	7,642	(10,625)	(165)	3,321	4,088	-	N/A	N/A	17,104	3,434	187,999
SPS	2,431	3,347	(4,645)	(137)	2,608	3,604	-	N/A	N/A	23,427	1,501	83,030
Total NCE	6,346	11,135	(15,473)	(302)	6,075	7,781	-	N/A	N/A	42,076	5,000	274,630
SPS Bargaining Plan												
SPS	6,377	16,788	(23,998)	-	8,741	7,908	-	N/A	N/A	120,664	15,000	394,752
Total SPS	6,377	16,788	(23,998)	-	8,741	7,908	-	N/A	N/A	120,664	15,000	394,752
PSCo Bargaining Plan												
Discontinued Operations - Cheyenne	-	416	(547)	_	421	290	_	N/A	N/A	6,218	386	9,963
PSCo	21,667	43,985	(57,881)	(3,212)	22,122	26,681	-	N/A	N/A	242,695	39,614	1,041,247
Total PSCo	21,667	44,401	(58,428)	(3,212)	22,543	26,971	-	N/A	N/A	248,913	40,000	1,051,210
Total Xcel Energy	85,992	144,283	(203,211)	(4,643)	88,180	110,601	-	34,707	30,704	878,054	150,000	3,474,403

¹ Settlement accounting may be required if lump sum benefit payments exceed the sum of service cost and interest on a plan by plan basis. No settlements have been estimated at this time.

³ Includes Eloigne

Assumptions	
Discount Rate - U.S. GAAP	
XEPP	4.31%
NCE	4.25%
SPS	4.37%
PSCo	4.36%
Discount Rate - Aggregate Normal Cost	7.10%
Salary Scale	3.75%
Expected Return on Assets	
XEPP	7.10%
NCE	6.90%
SPS	6.75%
PSCo PSCo	6.50%
Assumed Mortality Table	

Bargaining Participants RP-2014 Blue Collar projected with generational mortality improvements using an adjusted SOA MP-2016 methodology

Non-bargaining Participants RP-2014 White Collar, as adjusted for 2014 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 methodology See May 17, 2019 letter for additional information on data, assumptions, methods, and plan provisions.

See May 17, 2019 letter for additional information on data, assumptions, methods, and plan provisions. Contributions already made are allocated in accordance with the January 2, 2019 contribution directives.

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² Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS

Docket E002/GR-21-630 Exhibit___(RRS-1), Schedule 11 Page 10 of 10

Northern States Power Company

Docket Nos. E002/GR-13-868, E002/GR-15-826 Qualified Pension Plan Annual Report - June 15, 2021 Attachment A - Page 10 of 10

Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota Qualified Pension Actuarial Reports

Schedule D

XCEL ENERGY INC. - Qualified Pension Plans Cost by Legal Entity

EXHIBIT I Page 1 of 6

				Amorti	zations							
2020	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	Settlement Charge ¹	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued)	Contribution	PBO
Xcel Energy Pension Plan (XEPP)												
Discontinued Operations ²	-	2,572	(4,525)	-	3,345	1,392	-	N/A	N/A	35,792	3,493	76,854
Xcel Energy Nuclear	5,830	3,543	(6,236)	(214)	874	3,797	-	3,529		(7,919)	4,846	105,931
NSP - MN	21,118	27,680	(48,698)		31,625	31,904	-	27,855		320,792	39,113	836,251
NSP - WI	4,723	4,790	(8,441)		4,764	5,812		N/A		44,732	6,734	143,385
Xcel Services ³ XEPC (former EMI)	23,511	22,522 21	(39,614)	(985)	15,191	20,625	-	N/A N/A		95,273 (22)	30,787 27	675,394 714
Mankato Energy Center ⁴	78	21	(35)		,	(7) 78	-	N/A N/A	N/A N/A	(22)	78	/14
Total XEPP	55,260	61,128	(107,549)		55,806	63,601		31,384		488,648	85,078	1,838,529
	00,200	01,120	(107,010)	(.,,	00,000	00,001		01,001	20,000	100,010	00,010	1,000,020
NCE Non-Bargaining Pension Plan		***	(0.00)							4 400	400	
Discontinued Operations - Cheyenne PSCo	3,875	116 6.204	(200) (10,688)		151 3,891	67 3,117		N/A N/A	N/A N/A	1,426 15,687	193 10,379	3,579 191,074
SPS	2,484	2,632	(4.525)	(137)	2,639	3,093		N/A		20,024	4.428	81,928
Total NCE	6,359	8,952	(15,413)		6,681	6,277	-	N/A		37,137	15,000	276,581
ana n ni						1						
SPS Bargaining Plan SPS	7,148	15,243	(24,816)		10.477	8,052		N/A	N/A	127,961	10,000	436,854
Total SPS	7,148	15,243	(24,816)		10,477	8,052		N/A		127,961	10,000	436,854
			(=-,,									
PSCo Bargaining Plan		351	(529)		448	270		N/A	N/A	0.214	354	10.217
Discontinued Operations - Cheyenne PSCo	26,603	39,586	(59.815)	(2,650)	25,984	29,708	- 1	N/A N/A		6,314 255,652	39,646	10,217 1,138,688
Total PSCo	26,603	39,937	(60,344)		26,432	29,978		N/A		261,966	40,000	1,148,905
						1						
Total Xcel Energy	95,370	125,260	(208,122)	(3,996)	99,396	107,908	-	31,384	28,659	915,712	150,078	3,700,869

¹ Settlement accounting may be required if lump sum benefit payments exceed the sum of service cost and interest on a plan by plan basis. No settlements have been estimated at this time

Cost reflects final census data. See May 15, 2020 letter for additional details.

Assumptions	
Discount Rate - U.S. GAAP	
XEPP	3.48%
NCE	3.39%
SPS	3.58%
PSCo	3.58%
Discount Rate - Aggregate Normal Cost	7.10%
Salary Scale	3.75%
Expected Return on Assets	
XEPP	7.10%
NCE	6.90%
SPS	6.75%
PSCo PSCo	6.50%

Assumed Mortality Table Bargaining Participants

Pri-2012 Blue Collar, as adjusted for 2019 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2019 methodology Pri-2012 White Collar, as adjusted for 2019 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2019 methodology

² Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS

³ Includes Eloigne

See May 15, 2020 letter for additional information on data, assumptions, methods, and plan provisions. Contributions already made are allocated in accordance with the January 2, 2020 contribution directives.

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 □ Public Document – Trade Secret Data Excised

□ Public Document

Xcel Energy

Docket No.: E002/GR-15-826

Response To: MN Department of Commerce Information Request No. 2163

Requestor: Nancy Campbell / Mark Johnson

Date Received: July 15, 2018

Request:

Topic: Qualified Pension Plan Report

Reference(s): June 17, 2019 Compliance Filing, Schedule B – Total Cost Amount

a) Please provide all supporting calculations and assumptions for the XES Pension "Total Cost Amount" for 2016 to 2018.

- b) The XES Pension "Total Cost Amount" in 2017 was \$27,013,000 and increased in 2018 to \$49,566,000. Please explain and provide a breakout of the causes for why there was a \$22.5 million increase in total pension expense for XES on a total company basis before allocations to Minnesota.
- c) Please explain why the cumulative deferral at the end of 2014 is \$2.359 million when the first year deferral for 2014 is \$1.304 million.

Response:

- a) See Attachment A page 6-8, of the June 17, 2019 compliance filing, for the 2016 to 2018 actuarial reports from Willis Towers Watson. These actuary reports provide the supporting calculations and assumptions for the XES pension total cost amounts.
- b) The \$22.5 million increase in pension costs from 2016 to 2017 was primarily due to a \$21.3 million FAS 88 settlement charge. A settlement charge is a component of net periodic pension expense. According to accounting guidance published by the Financial Accounting Standards Board, if the level of lump-sum payouts exceeds the sum of the service cost and interest cost for a given year, settlement accounting is triggered and the Company is immediately required to recognize a portion of unrealized losses currently deferred as a regulatory asset. When Settlement Accounting is not

Page 2 of 4

triggered, the unrecognized loss is amortized over a much longer period of time. Thus, Settlement Accounting is not an increase in the overall pension expenses, but rather an acceleration of the timing by which an amount of the pension expense will be recognized.

c) The Company respectfully notes that this request misstates the facts in referring to the 2014 deferral as the "first year deferral." The XES capping deferral began in 2013 per the rate order. The amount deferred in 2013 was \$1,054,357, which, together with the 2014 deferral equals the \$2.359 million cumulative deferral noted in the question. The 2013 deferral amount was reported in the 2013 to 2017 compliance filings but was removed in 2018 as the Company felt only showing five years of history was appropriate.

Preparer: Levi Glines

Title: Consultant

Department: Payroll and Benefits Accounting

Telephone: 612-337-2372

Date: July 29, 2019

☐ Non Public Document – Contains Trade Secret Data

☐ Public Document – Trade Secret Data Excised

☑ Public Document

Xcel Energy

Docket No.: E002/GR-15-826

Response To: MN Department of Commerce Information Request No. 2164

Requestor: Nancy Campbell / Mark Johnson

Date Received: July 15, 2018

Request:

Topic: Qualified Pension Plan Report

Reference(s): June 17, 2019 Compliance Filing, Schedule C- NSPM ACM

Qualified Pension

a) Please explain why the cumulative deferral at the end of 2014 is \$13.704 million when the first year deferral for 2014 is \$6.39 million.

- b) For the Total Cost Amounts for Minnesota and Nuclear in 2014 to 2018 (in red boxes) please provide all assumptions and calculations on a live spreadsheet including the comparable information included in the rate case.
- c) Please explain why the NSPM deferral was so high for 2014 of (\$6,390,596) and 2015 of (\$4,504,585) and why this deferral is reasonable.

Response:

- a) The Company respectfully notes that this request misstates the facts in referring to the 2014 deferral as the "first year deferral.: The ACM 10-20 deferral started in 2013 per the rate order. The Company deferred \$7,313,120 in 2013, which, together with the 2014 deferral equals the \$13.704 million cumulative deferral noted in the question. The 2013 deferral amount was included in the 2013 to 2017 compliance filings but it was removed in 2018 as the Company felt only showing five years of history was appropriate.
- b) See Attachment A, pages 4-8, of the June 17, 2019 compliance filing for the actuarial reports from Willis Towers Watson that support the Minnesota and Nuclear amounts from 2014 to 2018. These reports also include the assumptions used to calculate the amounts and include the information in

the last rate case. These are the only reports provided by our actuary and we do not receive detailed support for these calculations that can be provided in a spreadsheet.

c) The Company objects to this request on the grounds that it is argumentative and mischaracterizes the facts present. This deferral is the result of smoothing the amortization period for the NSPM plan from 10-20 years. The deferrals in 2014 and 2015 were higher than other years because at that time the asset values under the 20-year method were higher than the 10-year method causing a greater deferral. Since that time the asset values under the 20-year method have been reduced relative to the 10-year method. The lower asset value under the 20-year method begins to offset the benefits of the longer amortization period. Therefore, the forecasted aggregate cost under the 20-year method does not decrease as fast as the 10-year method. Eventually, the 20-year method will result in a larger cost than under the 10-year method winding down the cumulative deferral balance.

This deferral is reasonable because it was one of two mitigation measures approved by the Commission to smooth out pension expense.

Preparer: Levi Glines

Title: Consultant

Department: Payroll and Benefits Accounting

Telephone: 612-337-2372

Date: July 29, 2019

2 Beginning Asset (Liability) Balance

Recognized Expense

2015

115,599,406

(34,213,000)

2016

114,121,017

(33,981,000)

2017

129,569,692

(34,862,000)

2018

154,828,347

(34,465,000)

Northern Sates Power Company Minnesota Prepaid Pension Asset

2020

195,621,202

(31,384,000)

2021

208,196,202

(31,811,000)

2022

209,528,202

(24,672,000)

2023

208,799,202

(19,919,000)

2024

223,396,202

(13,796,000)

2019

183,510,347

(34,707,000)

Line No

4	Cash Contributions	32,734,611	49,429,675	60,740,655	63,147,000	46,817,855	43,959,000	33,143,000	23,943,000	34,516,000	43,920,000			
5	Other			(620,000)										
6	Ending Asset (Liability) Balance	114,121,017	129,569,692	154,828,347	183,510,347	195,621,202	208,196,202	209,528,202	208,799,202	223,396,202	253,520,202			
7	•													
8														
9								2022 Test Year						
10		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
11	Beginning Asset (Liability) Balance	209,528,202	231,415,202	229,359,202	227,303,202	225,247,202	223,191,202	221,135,202	219,079,202	217,023,202	214,967,202	212,911,202	210,855,202	209,528,202
12	Recognized Expense	(2,056,000)	(2,056,000)	(2,056,000)	(2,056,000)	(2,056,000)	(2,056,000)	(2,056,000)	(2,056,000)	(2,056,000)	(2,056,000)	(2,056,000)	(2,056,000)	(24,672,000)
13	Cash Contributions	23,943,000												23,943,000
14	Ending Asset (Liability) Balance	231,415,202	229,359,202	227,303,202	225,247,202	223,191,202	221,135,202	219,079,202	217,023,202	214,967,202	212,911,202	210,855,202	208,799,202	208,799,202
15														
16	Beginning Asset (Liability) Balance	209,528,202												208,799,202
17	ADIT Percent	-28.00%												-28.00%
18	ADIT Amount	(58,670,201)												(58,466,073)
19	Net Prepaid Pension Asset	150,858,001												150,333,129
20	% to MN Electric	79.96%												79.96%
21	Actual Total	120,633,577												120,213,863
22											2	022 Test Year BOY 8	& EOY Average	120,423,720
23														
24								2023 Plan Year						
25		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
26	Beginning Asset (Liability) Balance	208,799,202	241,655,285	239,995,369	238,335,452	236,675,535	235,015,619	233,355,702	231,695,785	230,035,869	228,375,952	226,716,035	225,056,119	208,799,202
27	Recognized Expense	(1,659,917)	(1,659,917)	(1,659,917)	(1,659,917)	(1,659,917)	(1,659,917)	(1,659,917)	(1,659,917)	(1,659,917)	(1,659,917)	(1,659,917)	(1,659,917)	(19,919,000)
28	Cash Contributions	34,516,000												34,516,000
29	Ending Asset (Liability) Balance	241,655,285	239,995,369	238,335,452	236,675,535	235,015,619	233,355,702	231,695,785	230,035,869	228,375,952	226,716,035	225,056,119	223,396,202	223,396,202
	1													

21	Necognized Expense	(1,000,017)	(1,000,017)	(1,000,017)	(1,000,017)	(1,000,017)	(1,000,017)	(1,000,017)	(1,000,017)	(1,000,017)	(1,000,017)	(1,000,017)	(1,000,017)	(13,313,000)
28	Cash Contributions	34,516,000												34,516,000
29	Ending Asset (Liability) Balance	241,655,285	239,995,369	238,335,452	236,675,535	235,015,619	233,355,702	231,695,785	230,035,869	228,375,952	226,716,035	225,056,119	223,396,202	223,396,202
30														
31	Beginning Asset (Liability) Balance	208,799,202												223,396,202
32	ADIT Percent	-28.00%											_	-28.00%
33	ADIT Amount	(58,466,073)												(62,553,394)
34	Net Prepaid Pension Asset	150,333,129											_	160,842,808
35	% to MN Electric	79.96%												79.96%
36	Actual Total	120,213,863												128,617,926
37											2	023 Plan Year BOY &	EOY Average	124,415,895
38														
39								2024 Plan Year						
40		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
41	Reginning Asset (Liability) Balance	223 396 202	266 166 535	265 016 869	263 867 202	262 717 535	261 567 869	260 418 202	259 268 535	258 118 869	256 969 202	255 819 535	254 669 869	223 396 202

33	i I							2024 Flail Teal						
40	1	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
41	Beginning Asset (Liability) Balance	223,396,202	266,166,535	265,016,869	263,867,202	262,717,535	261,567,869	260,418,202	259,268,535	258,118,869	256,969,202	255,819,535	254,669,869	223,396,202
42	Recognized Expense	(1,149,667)	(1,149,667)	(1,149,667)	(1,149,667)	(1,149,667)	(1,149,667)	(1,149,667)	(1,149,667)	(1,149,667)	(1,149,667)	(1,149,667)	(1,149,667)	(13,796,000)
43	Cash Contributions	43,920,000												43,920,000
44	Ending Asset (Liability) Balance	266,166,535	265,016,869	263,867,202	262,717,535	261,567,869	260,418,202	259,268,535	258,118,869	256,969,202	255,819,535	254,669,869	253,520,202	253,520,202
45	·-													
46	Beginning Asset (Liability) Balance	223,396,202												253,520,202
47	ADIT Percent	-28.00%											_	-28.00%
48	ADIT Amount	(62,553,394)												(70,988,445)
49	Net Prepaid Pension Asset	160,842,808											_	182,531,757
50	% to MN Electric	79.96%												79.96%
51	Actual Total	128,617,926												145,961,491
52	<u> </u>										20	24 Plan Year BOY	& EOY Average	137,289,708

Schedule 14
2022 Test Year Active Health Care O&M Costs by Category

Allocation Percentages									
	MN Electric	MN Electric O&M							
Company		O&M	State of MN						
NSPM		49.11%	87.16%						
Nuclear		84.20%	87.16%						
YES		24 86%	87 16%						

		NSPM		Nuclear			XES			Totals	
			MN Electric			MN Electric			MN Electric		MN Electric
	Total Cost	MN Electric O&M	O&M State of MN	Total Cost	MN Electric O&M	O&M State of MN	Total Cost	MN Electric O&M	O&M State of MN	MN Electric O&M	O&M State of MN
Misc Benefit Programs & Costs											
Adoption Assistance	2,470	1,213	1,057	824	694	605	4,455	1,107	965	3,014	2,627
HR Service Center	34,512	16,950	14,773	11,509	9,691	8,446	823,575	204,734	178,445	231,375	201,665
Communications, Printing & Postage	51,045	25,070	21,851	17,022	14,333	12,492	92,057	22,885	19,946	62,287	54,289
Ergonomists for field workers		-	-	0	0	0	120,000	29,831	26,001	29,831	26,001
Return to Work (STD/LTD)	24,451	12,009	10,467	36,653	30,862	26,899	348,220	86,565	75,449	129,436	112,815
Financial Planning	0	0	0	0	0	0	12,700	3,157	2,752	3,157	2,752
Cobra Admin Fees	21,094	10,360	9,030	7,034	5,923	5,162	38,042	9,457	8,243	25,739	22,434
H&W Audit Fees	15,809	7,764	6,767	5,272	4,439	3,869	28,512	7,088	6,178	19,291	16,814
Flex Spending - Admin Fees (HCRA, DCRA, TRA)	-	-	-	-	-	-	-	-	-	-	-
Bus Pass Subsidy	85,000	41,746	36,385	0	0	0	600,000	149,155	130,003	190,901	166,388
Employee Assistance Program	62,730	30,808	26,852	20,910	17,606	15,346	95,273	23,684	20,643	72,099	62,841
Tuition Reimbursement Program	247,993	121,796	106,157	82,701	69,635	60,694	447,242	111,181	96,905	302,612	263,755
STD and LTD admin fees	92,160	45,262	39,450	-	-	-	125,760	31,263	27,249	76,525	66,699
Wellness Clinics / Programs	200,842	98,639	85,973	66,976	56,395	49,153	362,211	90,043	78,481	245,076	213,607
WTW H&W admin fees payable from VEBA trust	124,161	60,979	53,149	41,405	34,863	30,387	223,919	55,664	48,517	151,507	132,052
WTW H&W admin fees not payable from VEBA trust	161,814	79,472	69,267	53,961	45,436	39,602	291,825	72,545	63,230	197,453	172,099
Total Misc Benefit Programs & Costs	1,124,081	552,068	481,179	344,267	289,877	252,655	3,613,791	898,360	783,005	1,740,305	1,516,839
Active Health Care											
VEBA Paid Claims MEDICAL	30,722,254	15,088,554	13,151,093	8,671,969	7,301,891	6,364,284	44,055,889	10,951,948	9,545,653	33,342,394	29,061,030
VEBA Paid Claims PHARMACY	7,713,330	3,788,231	3,301,799	1,642,022	1,382,600	1,205,066	9,791,590	2,434,112	2,121,558	7,604,944	6,628,423
VEBA Paid Claims DENTAL	1,879,754	923,200	804,655	734,680	618,608	539,175	3,217,371	799,813	697,112	2,341,621	2,040,943
VEBA Paid Claims VISION	1,070,701	-	-	701,000	-	-	0,211,011	-	-		-
HSA Funding	30,359	14,910	12,996	48.419	40,769	35,534	230,693	57,348	49,985	113,028	98,514
Employee Withholdings	(3,439,220)	(1,689,097)	(1,472,207)	(1,336,626)	(1,125,453)	(980,938)	(6,784,485)	(1,686,570)	(1,470,004)	(4,501,120)	(3,923,149)
Pharmacy Rebates	(1,642,264)	(806,562)	(702,994)	(529,459)	(445,810)	(388,565)	(2,793,097)	(694,342)	(605,184)	(1,946,714)	(1,696,744)
Administration Fees	1,177,374	578,241	503,992	392,937	330,857	288,373	2,068,959	514,327	448,284	1,423,425	1,240,649
Opt-out Funding, Affordable Care Act	4.000	1.965	1,712	0	0	0	60,000	14,916	13,000	16,880	14,713
Total Active Health Care	36,445,587	17,899,442	15,601,047	9,623,942	8,103,462	7,062,929	49,846,920	12,391,553	10,800,404	38,394,458	33,464,379
Life, LTD & Business Travel Ins											
Life Insurance	2,402,953	1,180,157	1,028,618	919,341	774,095	674,697	3,182,675	791,188	689,595	2,745,440	2,392,909
Life insurance withholdings	(1,919,188)	(942,567)	(821,535)	(787,193)	(662,825)	(577,714)	(2,661,420)	(661,608)	(576,654)	(2,267,000)	(1,975,903)
Business Travel Insurance	18,698	9,183	8,004	6,236	5,251	4,577	33,722	8,383	7,307	22,817	19,887
LTD insurance premiums	1,896,428	931,389	811,793	147,589	124,272	108,314	2,347,196	583,495	508,570	1,639,155	1,428,677
Total Life, LTD & Business Travel Ins	2,398,891	1,178,162	1,026,879	285,973	240,792	209,873	2,902,173	721,457	628,818	2,140,412	1,865,570
Total Life, LTD & Dusilless Havelills	2,350,051	1,170,102	1,020,079	200,973	240,192	203,013	2,302,173	121,451	020,010	2,140,412	1,000,070
Total	39,968,560	19,629,672	17,109,105	10,254,182	8,634,131	7,525,457	56,362,884	14,011,371	12,212,227	42,275,175	36,846,789
Affiliate Charges		562	490							562	490
Grand Total	39,968,560	19,630,234	17,109,594	10,254,182	8,634,131	7,525,457	56,362,884	14,011,371	12,212,227	42,275,737	36,847,279

Medical Pharmacy Trend

Medical underwriting trend encompasses several components. It is not solely the price inflation for a given medical service unit. The components found in trend include the following:

- Unit price inflation: Annual price inflation for a fixed "market basket" of services
- **Technology and intensity**: The additional cost of newer, more expensive technology and services (advanced imaging, advancements in prescription drugs, etc.).
- **Utilization**: Greater use of medical services over time. Driven by an aging population and the availability of greater medical technology.
- Cost-shifting: Typically occurs as a result of costs being held down (fixed fee schedules for government programs such as Medicare and Medicaid) which are passed on to private payers, notably employer-sponsored medical plans.
- Plan design leveraging (high deductible plans): When plans with high member cost sharing (such as deductibles >\$1,000) don't periodically increase their fixed cost elements (deductibles, out-of-pocket maximums), they tend to experience a "leveraged" (higher) trend due to medical trend pushing more people above deductibles and out-of-pocket maximums each year.
- Impact of large claims: The incidence of large claims in a population is another factor affecting observed trend.

The factors above in large part explain why observed medical trends have exceeded historical CPI increases by a significant margin. Currently, medical trends are still roughly twice the rate of CPI.

Survey data shows that medical cost is expected to rise between 4% and 7% in 2021

- 1. Pricewaterhouse Coopers medical cost trend: Behind the numbers 2021
- Expected medical and Rx cost increase 6%

https://www.pwc.com/us/en/industries/health-industries/library/assets/hri-behind-the-numbers-2021.pdf

2. Aon Carrier Trend Report

Expected medical cost increase 7%

https://www.aon.com/unitedkingdom/employee-benefits/resources/whitepapers/2021-global-medical-trendrates-report.jsp

3. Willis Towers Watson Emerging from the Pandemic Survey

Expected medical and pharmacy cost increase 4.2%

https://www.willistowerswatson.com/en-US/Insights/2021/02/2021-emerging-from-the-pandemic-survey

Summary

The total cost trend is based on expected cost increases for medical, specialty pharmacy and non-specialty pharmacy as they have different expected cost increases:

- Based on our analysis we expect medical cost trend to be 5% and pharmacy trend in total to be 10%,
 - 10% pharmacy trend is made up of a Specialty pharmacy trend of 13% and a Non-specialty pharmacy trend of 3%
- Each pricing group has a different split of the total cost between medical and pharmacy cost, but we expect the total trend to fall between 5.5% and 6.0%