Before the Minnesota Public Utilities Commission<br>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-20-723
Exhibit $\qquad$ (RRS-1)

## Pension and Benefits Expense

November 2, 2020

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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 |
| PTAC | Pension Trust Administrative Committee |
| 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

Q. Please state your name and occupation.
A. My name is Richard Schrubbe. I am the Area Vice-President of Financial Analysis and Planning for Xcel Energy Services Inc. (XES), which provides services to Northern States Power Company - Minnesota (NSPM or the Company).
Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.
A. As Area Vice-President of Financial Analysis and Planning, I am responsible for 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 $(\mathrm{O} \& M)$, 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 included as Exhibit___(RRS-1), Schedule 1.

## Q. What is the purpose of your testimony?

A. I discuss the pension benefits and other non-cash benefits the Company offers to its eligible employees and their families and I present the costs of these benefits for the 2021 test year and 2022 and 2023 plan years. In addition, I 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.

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.
Q. ARE THERE OTHER TOPICS COVERED IN YOUR TESTIMONY OR CHANGES SINCE YOUR LAST RATE CASE THAT YOU WOULD LIKE TO HIGHLIGHT?
A. Yes. First, in Docket Nos. E002/GR-12-961 and E002/GR-13-868, the Commission approved a cap and deferral mechanism for XES pension expense, as well as a deferral and 20-year amortization mechanism for NSPM pension expense. ${ }^{1}$ I quantify the regulatory assets associated with these deferral mechanisms and explain that the Company proposes to continue using them to set rates in this current case. In addition, the Company proposes to amortize the regulatory asset from the XES pension cap over the three years of the multiyear rate plan and to include the regulatory asset associated with the 20 -year amortization in rate base. Company witnesses Mr. Gregory Chamberlain and Mr. Benjamin C. Halama discuss the appropriateness of this three-year amortization period.

[^0]Second, in Order Point 6 in Docket No. E002/GR-13-868, the Commission approved the use of a five-year average discount rate for our XES pension plan under Statement of Financial Accounting Standard (FAS) 87. The Company still believes that it is appropriate to use the discount rate established using a single-year bond-matching study, and we reserve the right to propose such a study as the basis for setting the proper discount rate in future cases. However, to reduce the potential number of disputed issues in this case, we have used a five-year average discount rate as ordered by the Commission in our 2013 rate case. I discuss the discount rate and other pension assumptions in detail in Section IV of my testimony.

Finally, in Section III of my testimony I discuss pension accounting in detail, including the phase-in and amortization of pension asset gain and loss experiences.
Q. Is ANY OTHER COMPANY WITNESS ADDRESSING PENSION AND BENEFIT ISSUES? A. Yes. Company witness Ms. Ruth K. Lowenthal discusses the cash compensation offered by the Company, as well as the steps the Company has taken to help mitigate benefit cost increases. In addition, Company witness Mr. Evan Inglis discusses the appropriateness of the Company's pension investment strategy.
Q. What order points from Commission Orders do you address in your TESTIMONY?
A. Table 1 below lists the order points I respond to from Commission Orders in Docket No. E002/GR-13-868 and Docket No. E002/GR-12-961. Table 1 lists the page numbers of my testimony where each is addressed.

Table 1

## Order Point Requirements

| Docket No. <br> Order Point | $\quad$ Requirement | Page Numbers |
| :---: | :--- | :---: |
| $13-868$ | The Company shall apply the rolling five-year average <br> FAS 87 discount rate when determining the XES Plan <br> cost subject to deferral (or reversal) in subsequent years <br> (i.e., non-rate-case test years) as the 2012 mitigation <br> established in Docket No. E002/GR-12-961 continues. | p. 35 |
|  | The qualified pension asset and associated deferred-tax <br> amounts shall be included in rate base. For rate-base <br> purposes, the pension asset is to reflect the cumulative <br> difference between actual cash deposits made by the <br> Company reduced by the recognized qualified pension <br> cost determined under the ACM/FAS 87 methods since <br> plan inception, not to exceed the Company's filed request. <br> The Company shall provide a detailed compliance filing <br> which explains the calculated amount within ten days of <br> the Commission's decision. | Schedule 13 |
| $13-868$ |  |  |
| 10 | The discount rate used to calculate retiree medical benefit <br> costs for ratemaking purposes shall be set to equal 5.08\%, <br> the five-year average of the FAS 106-based discount rates. | p.53-57 |
| 13 | Any amount by which the qualified pension expense <br> allowed in rates exceeds future years' qualified pension <br> expense (calculated using the Commission-approved <br> discount-rate point of reference) the Company shall apply <br> toward the recovery of the accumulated deferred XES <br> Plan costs. "Future years" includes 2015, and each <br> subsequent year's qualified pension expense if not a rate- <br> case test year. The recoverable XES Plan expense amount <br> shall be calculated using the proximate measurement date <br> appropriate for each operating year (12/31/2013 for 2014; <br> $12 / 31 / 2014 ~ f o r ~ 2015, ~ e t c.) ~ u n t i l ~ t h e ~ n e x t ~ r a t e ~ c a s e . ~ T h e ~$ | Schedule 11 |

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?
A. I present the remainder of my testimony in the following sections:

- Section II, Pension and Benefits Overview, provides a summary of the pension and benefit costs included in our multi-year rate request.
- Section III, Pension Cost Accounting, discusses pension accounting principles and describes how the Company calculates its pension expense.
- Section IV, Pension Assumptions, presents the primary assumptions used to calculate our pension costs in this case.
- Section V, Qualified Pension and 401(k) Match Costs, quantifies the test year and multi-year rate plan expense amounts for qualified pension and 401(k).
- Section VI, Retiree Medical and FAS 112 Long-Term Disability Benefits, presents information and costs related to our request for recovery of post-retirement healthcare and long-term disability benefits.
- Section VII, Benefit Rate Base Assets and Liabilities, discusses ratemaking treatment of both the Company's prepaid benefit costs and unfunded accrued liability costs.
- Section VIII, Active Health and Welfare Costs, provides details related to the 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.
- Section X, Conclusion, summarizes the Company's request for recovery of pension and benefit-related costs.


## II. PENSION AND BENEFITS OVERVIEW

Q. What types of costs are included in the Company's pension and BENEFITS REQUEST?
A. With the exception of the workers' compensation costs discussed in Section IX of my testimony, all the Company's pension and benefits costs are recorded in FERC Account 926. The Company has grouped its pension and benefit costs into three categories based on similar budgeting practices and cost recognition requirements. The three categories are: (1) actuarial costs; (2) health and welfare costs; and (3) other retirement costs.
Q. To provide clarity, please describe how dollar amounts in your TESTIMONY ARE PRESENTED.
A. Unless specifically indicated otherwise, all the dollar values presented in my testimony are presented at the NSPM electric, state of Minnesota level.
Q. Please provide a summary of the pension and benefit costs included IN THE COMPANY'S MULTI-YEAR RATE REQUEST.
A. Table 2 below sets forth the benefit amounts incurred in 2019, the forecasted 2020 expense amounts, and the forecasted amounts for each year of the multiyear rate plan.

| Table 2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pension and Benefit Expense Summary (\$) |  |  |  |  |  |
| FERC Account 926 Pension and Benefit Costs for NSPM Electric O\&M, State of Minnesota |  |  |  |  |  |
| FERC 926 Benefit Type | 2019 Actual <br> Amounts | $2020$ <br> Forecast | 2021 Test <br> Year | $\begin{gathered} 2022 \text { Test } \\ \text { Year } \end{gathered}$ | $\begin{aligned} & 2023 \text { Test } \\ & \text { Year } \end{aligned}$ |
| Actuarial Costs |  |  |  |  |  |
| Qualified Pension (1) | 21,427,184 | 19,901,164 | 16,491,010 | 13,912,848 | 12,168,386 |
| Deferred Pension Amortization |  |  | 5,649,338 | 5,649,338 | 5,649,338 |
| FAS 106 Retiree Medical (2) | 1,310,993 | 429,647 | 373,314 | 332,652 | 1,401,575 |
| FAS 112 LTD | $(73,237)$ | 263,588 | 85,576 | 79,446 | 73,896 |
| Total Actuarial Costs | 22,664,940 | 20,594,399 | 22,599,238 | 19,974,284 | 19,293,195 |
| Health \& Welfare |  |  |  |  |  |
| Active Health Care | 31,376,607 | 33,828,936 | 35,992,899 | 38,024,418 | 39,875,075 |
| Misc Ben Programs, Life, LTD | 3,416,709 | 3,666,107 | 3,480,170 | 3,483,515 | 3,538,536 |
| Total Health \& Welfare | 34,793,316 | 37,495,043 | 39,473,068 | 41,507,933 | 43,413,611 |
| Other Retirement |  |  |  |  |  |
| 401(k) Match | 9,131,013 | 9,126,977 | 9,434,448 | 9,675,551 | 9,939,056 |
| Deferred Comp Match | 47,382 | 51,668 | 39,286 | 42,894 | 46,625 |
| NMC Employer Ret. Contr. | 840,256 | 834,888 | 789,132 | 812,443 | 834,873 |
| Ret. \& Comp Consulting | 386,985 | 480,259 | 282,793 | 282,465 | 283,144 |
| Total Other Retirement | 10,405,636 | 10,493,792 | 10,545,659 | 10,813,353 | 11,103,698 |
| Total FERC 926 | 67,863,892 | 68,583,234 | 72,617,964 | 72,295,569 | 73,810,504 |
| 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 2021-2023 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. |  |  |  |  |  |
| (2) Calculated using the 5-year average discount rate. |  |  |  |  |  |

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 2021 test year and the 2022 and 2023 plan year revenue requirements. As discussed in detail throughout my testimony, our forecasts of the pension and benefit costs included in FERC Account 926 are formulaic, are calculated in accordance with accounting rules and standards, are based on actuarial assumptions specific to the Company, and in some cases reflect specific regulatory treatment applied in prior Commission Orders.
Q. How do the amounts of pension and benefit expense in 2021, 2022, and 2023 COMPARE TO THE ACTUAL AMOUNTS INCURRED IN PRIOR YEARS?
A. Exhibit___(RRS-1), Schedule 2 to my testimony contains a comparison of the pension and benefit expense amounts in 2021-2023 to the amounts of actual expense in prior years and the forecasted amount for 2020.

## III. PENSION COST ACCOUNTING

Q. What TOPIC DO YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?
A. In this section I discuss pension accounting principles and describe how the Company calculates its test year pension expense.
Q. In ORDER TO ESTABLISH THE CONTEXT FOR YOUR DISCUSSION OF THE CALCULATION OF PENSION EXPENSE, PLEASE DESCRIBE THE QUALIFIED PENSION PLANS THE COMPANY OFFERS.
A. The Company has two qualified pension plans: the NSPM Plan and the XES Plan. Employees of NSPM are eligible to participate in the NSPM Plan, whereas employees of XES are eligible to participate in the XES Plan.
Q. Are the pension costs attributable to each plan accounted for in THE SAME WAY?
A. No. Pension costs under the NSPM Plan are determined under the Aggregate Cost Method (ACM), whereas pension costs for the XES Plan are determined in accordance with FAS 87. ${ }^{2}$ The history of the Company's use of these two different accounting methods is explained below, but the ultimate goal of both methods is the same - to provide an actuarially sound basis to calculate and recover over the course of an employee's career the amount of money that will be necessary to satisfy the Company's pension obligation to that employee. In effect, both methods allow the Company to reflect a current expense associated with a future liability.

## A. The Nature of Pension Expense

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.

[^1]Q. WHY IS THE DISTINCTION BETWEEN A PRESENT ACCRUAL AND A PRESENT CASH OUTLAY 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 about longer-term future conditions, but only by timing differences in the billing for the costs. In contrast, the current accrual for a substantial and distant future liability is affected by both past events and future forecasts. We must know what happened in the past and must have a forecast of what will happen in the future in order to derive an accurate measure of the current year expense associated with that future liability.
Q. Why are past events taken into consideration for purposes of CALCULATING PENSION EXPENSE?
A. A fundamental component of pension expense is the experience from prior years. That is, the current year's pension expense is determined by knowing the existing value of the assets in the trust, as well as the forecasted future liability. To the extent the existing value of the assets is higher than initially forecasted, the level of expense is reduced, as there is less future cost to be recognized in the current period. To the extent the existing value of the assets is lower than initially forecast, then the expense level is higher.
Q. WHAT IS THE PROCESS FOR TAKING THE PAST EVENTS INTO ACCOUNT?
A. The elements used to calculate pension costs are established at the beginning of each year based on actuarial studies that account for factors such as the expected salary increases, expected mortality rates, the Expected Return on Assets (EROA), the discount rate and other factors. At the end of the year, the
assumptions are trued up to actual experience, and the differences give rise to gains or losses.
Q. WhY is it necessary to true-up the projections to actual experience?
A. The Company makes projections so that it can reflect the most accurate forward-looking level of pension expense on its income statement. For example, our projection of future pension liability is based on our best estimate of how long employees will stay with the Company because pension benefits are designed to grow with years of service. But circumstances change over the course of a year, and the assumptions we made at the beginning of the year may have changed. To make our pension expense projections for the following year as accurate as possible, we incorporate the differences between the projections 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

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

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 corridor and the mechanics of the amortization in more detail below. ACM 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 the difference between the market-related value of the pension plan assets and the PVFB owed by the Company, and the difference is spread over the 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
achieves similar results in that it results in the spreading of unrecognized gains and losses over a period of years.
Q. Starting with the first concept you mentioned, please explain the distinction between asset gains and losses and liability gains and LOSSES.
A. The dollars in the pension trust are invested in assets such as stocks, bonds, real estate, and commodities, among other things. Each year the Company forecasts the average return that those assets will produce in that year, which is referred to as the expected return on assets, or EROA. Asset gains or losses arise when the actual returns on the pension trust assets in a given year are greater than or lesser than the expected return on assets. Suppose, for example, that the plan expects a seven percent return on its pension trust assets, which total $\$ 1$ billion. The expected return for that year would be $\$ 70$ million. If the actual return in that year is nine percent, the plan will have returns of $\$ 90$ million, and the asset gain will be $\$ 20$ million. Of course, the opposite can also occur. If the expected return is seven percent and the actual return on the assets is five percent, the plan has a return of only $\$ 50$ million and therefore suffers a $\$ 20$ million asset loss. ${ }^{3}$

The plan must also account for factors that affect the PVFB, such as the discount rate, the expected number of retirements, and wage increases. Liability gains and losses arise when those components of pension expense differ from

[^2]expectations. For example, if the Company assumes a four percent discount rate at the beginning of the year but the actual discount rate measured at year end for the next year turns out to be five percent, the Company will have a liability gain because the higher discount rate reduces the amount the Company must set aside to satisfy future pension liabilities.
Q. Is THE DISTINCTION BETWEEN ASSET GAINS AND LOSSES AND LIABILITY GAINS AND LOSSES IMPORTANT?
A. Yes. The distinction is important because, as I will discuss in more detail below, the asset gains and losses are phased in over time, whereas the liability gains and losses are not. Therefore, they must be tracked separately.
Q. Have you provided any examples of the distinction between asset GAINS AND LOSSES AND LIABILITY GAINS AND LOSSES?
A. Yes. Exhibit___(RRS-1), Schedule 3 shows the asset gains and losses and the liability gains and losses from 2008 to 2019.
Q. When the Company has asset gains or liability gains, does it WITHDRAW THOSE AMOUNTS FROM THE TRUST AND TREAT THEM AS EARNINGS?
A. No. Federal law requires that all the gains and losses stay within the pension trusts, which means that they affect the amount of pension expense in subsequent years. Generally speaking, if there is an asset or liability gain, it reduces the Company's pension expense in the following years. If there is an asset or liability loss, it increases pension expense in the following years. Thus, the Company treats gains and losses symmetrically in the sense that both must remain in the pension trust and both affect future pension expense.
Q. TURNING TO THE SECOND CONCEPT YOU IDENTIFIED EARLIER, PLEASE EXPLAIN WHAT YOU MEAN BY THE "PHASE IN" OF GAINS OR LOSSES.
A. The term "phase in" is used to describe the process of moving asset gains or losses into an amortization pool. Under FAS 87 and the ACM, the asset gains or losses are incorporated into the calculation of pension expense over a period of five years. Thus, 20 percent of a gain or loss is phased into the amortization pool during the first year after the gain or loss occurs; another 20 percent is phased into the amortization pool during the second year after the gain or loss occurs, and so forth until the fifth year, when the full amount of the gain or loss is phased in. The gains and losses that enter the amortization pool are then amortized over a specific period of years if they satisfy the criteria I discuss below. Unlike asset gains or losses, liability gains and losses are not phased in.
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.
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.
Q. PLEASE DISCUSS THE THIRD CONCEPT YOU MENTIONED - THE AMORTIZATION OF GAINS AND LOSSES.
A. In addition to phasing the asset gains or losses into the amortization pool, the Company must undertake an analysis to determine whether it will actually amortize those gains or losses.
Q. How does the Company determine whether it will amortize gains or LOSSES?
A. It depends on which plan is under review, because the analysis for FAS 87 is not the same as the analysis for the ACM. For FAS 87, which governs the XES Plan, the Company aggregates its current year's gains or losses with the other accumulated gains or losses to calculate a net unamortized gain or loss. That net unamortized gain or loss is then compared to the present value of the projected benefit obligation (PBO) and to the market-related value of the assets in the pension trust. If the net unamortized gain or loss is outside a 10 -percent corridor - that is, if it is more than 10 percent of the greater of the PBO or the market-related value of the trust assets - the Company must amortize that net gain or loss. If the net unamortized gain and loss is within the corridor, amortization does not occur.

If amortization of the unrecognized 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. For the Company's FAS 87 plan this is approximately 11 years.

For the ACM, which governs the NSPM Plan, the Company simply compares the market-related value of the pension trust assets to the PVFB. If the marketrelated value of the assets is greater than the PVFB, the plan is overfunded and there is no pension expense. Thus, there is nothing to be amortized. If the market value is less than the PVFB, the plan is underfunded, which means there is pension expense that is amortized over the remaining service lives of the employees within the actuarial formula.

Note, however, that I am using the term "amortization" as a type of shorthand insofar as the ACM is concerned. The difference between the market value of trust assets and the PVFB is not truly amortized in the sense that the amount is established in Year 1 and then that amount is fixed and recovered according to a schedule that provides for annual payments over the next several years. Instead, the Company undertakes the following process each year:

1) it calculates the difference between the market-related value of the assets and the PVFB;
2) if the PVFB exceeds the market-related value, the Company calculates the number of years over which to recover the difference; and
3) the difference is divided by the number of years to determine the amount of pension expense that would need to be recovered in the current year in order to fund the shortfall.

In Year 2, however, this entire process is repeated, and the Company comes up 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 be funded.

In short, prior years' experience, whether positive or negative, is incorporated into the calculation of the current period recognition of pension expense. Exhibit___(RRS-1), Schedule 4 contains a decision tree for FAS 87 and a decision tree for the ACM. Both show the process for determining whether to amortize gains or losses.
Q. Order Point 40 of the Commission's September 3, 2013 Order in Docket No. E002/GR-12-961 is related to prior period gains and losses. It requires the Company to "include for each pension plan SCHEDULES OF ITS 2008 MARKET LOSS AMORTIZATION, UNTIL THE 2008 market loss amortization has been extinguished." Is the Company PROVIDING THAT INFORMATION?
A. Yes. Exhibit___(RRS-1), Schedule 3 shows the estimated 2008 Market Loss amortization by year and plan, as well as the Company's experience in each year since 2008. Schedule 3 also depicts the phase-in of the asset gains or losses, as well as the amortization of the net unamortized balances of gains and losses, with the acknowledgement that our effort to break apart the NSPM Plan provides a similar look but against a different construct than the look at the FAS 87 tracked gains and losses.
Q. Why does Schedule 3 not show the 2008 market loss amortization until it has been extinguished, as directed by Order Point 40?
A. In accordance with the requirements of ACM and FAS 87 accounting standards, the amortization amount is re-determined each year as described below and 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 redetermined each year based on the active participants in the plan. With 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 30year 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 7.10 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
describe how the current year's pension expense is calculated under the ACM and how that current pension expense incorporates past pension asset gain and loss experiences. I will also explain how the current pension expense incorporates liability gains and losses. In Section D, I provide the same types of information for FAS 87.

## C. Calculation of Pension Expense under the ACM

Q. Why does the NSPM Plan use the ACM to account for pension EXPENSE?
A. NSPM began using the ACM to calculate pension expense in 1975. Although FAS 87 became the new standard for pension accounting for financial reporting purposes in 1987, it was made subject to the effects of rate regulation as 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 ratesetting process" by regulatory agencies, such as the Commission. The authority provided by FAS 71 allowed the NSPM Plan to continue using the ACM for ratemaking purposes, as it had before 1987, and the Commission approved this continued use.
Q. Please summarize the acm and explain how pension costs are CALCULATED UNDER THAT METHOD.
A. The ACM is based on a normalized level of long-term cash funding requirements measured as a constant percentage of payroll. Under the ACM, the pension cost is the normalized amount that would need to be paid into the pension fund each year to fund earned benefits. Based on specific actuarial assumptions such as the discount rate, projected salary levels, and mortality, the PVFB is calculated and compared to the phased-in market-related value of plan
assets. The difference between the PVFB and the market value of assets is the unfunded liability that must be funded over the future working lives of current employees. I have included a summary of the ACM in Exhibit___(RRS-1), Schedule 5, along with a comparison to the FAS 87 method for calculating pension expense.
Q. Please provide an example of how the ACM works.
A. Suppose the Company determines, based on actuarial studies, that it will 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 $\$ 2.5$ billion, there is a $\$ 500$ million difference that will need to be funded. The ACM requires that the Company fund that amount based on the period approved by the Commission or the remaining future working lives of its employees, which is approximately 11 years. The Company then sets the pension expense at a levelized percentage of payroll based on the amount needed and the time remaining to fund the pension liability.
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
and liability gains and losses is the amount that is placed into the amortization pool and netted with the cumulative unrecognized gain and loss experiences.

## Q. PLEASE PROVIDE AN EXAMPLE OF HOW THE CALCULATION WORKS.

A. Consider the example set forth earlier - the market value of assets is $\$ 2.5$ billion and the PVFB is $\$ 3.0$ billion, which creates a funding obligation of $\$ 500$ million in Year 1. Now suppose the following events occur:

- The actuarially determined EROA for Year 1 was seven percent, but the fund actually earned six percent. In that instance, the fund would have an asset loss of $\$ 25$ million ( $\$ 2.5$ billion $\mathrm{x} .01=\$ 25$ million).
- The actual discount rate in Year 1 was 25 basis points higher than the actuaries had assumed, which reduced the PVFB by $\$ 15$ million. Thus, the fund has a liability gain of $\$ 15$ million for Year 1.
- The pension fund paid out $\$ 175$ million in benefits in Year 1, which is exactly equal to the expected earnings on the plan's assets during that year ( $\$ 2.5$ billion assets x .07 EROA $=\$ 175$ million).

Because the amounts paid out as benefits equal the EROA, the only changes that need to be incorporated in the Year 2 pension expense are the asset loss and the liability gain. The Year 1 asset loss was $\$ 25$ million, but under the phasein rules, only $\$ 5$ million (i.e., 20 percent) of that loss is reflected in the market value of assets in Year 2. On the other hand, the entire $\$ 15$ million liability gain is recognized in Year 2, so the Year 2 asset value drops by $\$ 5$ million and the Year 2 PVFB drops by $\$ 15$ million. Now the difference between the market value of the assets and the PVFB is $\$ 490$ million instead of $\$ 500$ million. That $\$ 490$ million is then spread over the amortization period approved by the Commission.
Q. In THAT EXAMPLE, WHAT HAPPENS TO THE ASSET LOSSES THAT HAVE NOT BEEN PHASED IN AND AMORTIZED YET?
A. The amount is reflected on the Company's books as an increase to the liability offset by a regulatory asset, resulting in no change to the net balance sheet amount of the pension plan. As discussed earlier, an additional amount of the asset losses will be phased into the amortization pool each year for the next four years and will reduce the regulatory asset by a corresponding amount each year, all else being equal.
Q. The NSPM Plan currently has prior-PERIOD ASSET LOSSES AND PRIORPERIOD LIABILITY LOSSES, BOTH OF WHICH INCREASE THE AMOUNT OF PENSION EXPENSE IN THE CURRENT YEAR. HAVE THE COMPANY'S CUSTOMERS BENEFITED FROM ASSET GAINS AND LIABILITY GAINS IN THE PAST?
A. Yes. For many years the Company had significant gains because its pension plan investments benefited from a significant and prolonged upward market movement, and customers reaped the benefits through market gains that exceeded the EROA. Mr. Inglis discusses the Company's pension plan investments in more detail in his testimony.
Q. Is THE COMPANY ASKING ITS CUSTOMERS TO RESTORE LOSSES FROM PRIOR YEARS?
A. No. We are simply calculating the current year's pension expense, which is affected by cumulative gain and loss experiences. Expense is determined by prior experience, and customers have benefitted from the prior gains. Therefore, it is reasonable, appropriate, and necessary to reflect both priorperiod gain and loss experiences in current pension expense.
Q. How have the prior gain experiences been incorporated into the 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.
Q. Do you have data to show how customers have benefited from PENSION ASSET GAINS?
A. Yes. Exhibit___(RRS-1), Schedule 6 quantifies the significant benefits that the Company's pension assets have provided to customers. Schedule 6 shows the Xcel Energy Pension Plan (XEPP) Trust activity since its inception in 1950. Although Schedule 6 reflects more than just the NSPM Plan, it does demonstrate the overall value of the pension assets, which include the NSPM assets. ${ }^{4}$ Since 1950, the Company has contributed approximately $\$ 1.3$ billion into the trust while earning approximately $\$ 4.0$ billion in investment returns, which helped pay for approximately $\$ 4.2$ billion in payments to employees. For many years these asset returns enabled the Company to recognize pension benefit costs at or very close to zero and to make no pension contributions. These low or nonexistent pension expense amounts were reflected in our rate cases, which means that customers paid much less in annual pension cost than they would have paid in the absence of the pension asset gains.

[^3]Q. What has the Company done with those gains?
A. By law, earnings on pension trust assets cannot be removed from the trust fund. Therefore, the net gains on the pension asset have been used to reduce the pension expense charged to our customers and have mitigated cash funding requirements.
Q. Is THERE ANY OTHER WAY IN WHICH CUSTOMERS HAVE BENEFITED FROM THE PENSION ASSET GAINS?
A. Yes. For more than 50 years the Company's pension plan has provided a market-competitive employee benefit, which allowed us to attract and retain employees that helped us build, operate, and maintain the electrical system that continues to provide safe, reliable electric service. The pension asset gains have helped the Company provide that benefit at a much lower cost than would have been possible without the asset gains.

## D. Calculation of Pension Expense under FAS 87

Q. Please provide an overview of FAS 87.
A. FAS 87 is an accounting standard adopted by the Financial Accounting Standards Board (FASB) in 1987 to govern employers' accounting for pensions. Under FAS 87, pension cost is generally made up of five components of costs, but a sixth component can be required provided certain criteria are met during the year. The five main components of FAS 87 pension cost are:

1) the present value of pension benefits that employees will earn during the current year (service cost);
2) increases in the present value of the PBO that plan participants have earned in previous years (interest cost);
3) expected investment earnings during the year on the pension plan assets, or EROA;
4) recognition of prior-period gains or losses (e.g., investment earnings different from assumed or amortization of unrecognized gains and losses); and
5) recognition of the cost of benefit changes the plan sponsor provides for service the employees have already performed (amortization of unrecognized prior service cost).
Q. Taking each of these five components in order, how is the service COST COMPONENT CALCULATED?
A. The service cost component recognized in a period is the actuarial present value of benefits attributed by the pension benefit formula to current employees' service during that period. In effect, the service cost is the value of benefits that the employees have earned during the current 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 so forth).
Q. Next, how is the interest cost component calculated?
A. The interest cost component recognized in a fiscal year is determined as the increase in the plan's total PBO due to the passage of time. Measuring the PBO as a present value requires accrual of an interest cost at a rate equal to the assumed discount rate. Essentially, 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.
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.
Q. CAN YOU PROVIDE AN EXAMPLE OF HOW THE INVESTMENT EARNINGS REDUCE 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

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

1) The Company first determines whether it has an asset gain or loss by comparing the actual return on assets for the prior year to the EROA for the prior year.
2) To the extent there is an asset gain or a loss, the Company phases in 20 percent of that gain or loss. The Company will also phase in portions of gains and losses from prior years that have not been fully phased in. They are phased in at the rate of 20 percent per year.
3) The Company then calculates the gain or loss on the PBO by comparing the actual year-end PBO from the prior year to the expected year-end PBO for the prior year.
4) The Company next aggregates the cumulative net gains and losses from all prior years to arrive at the cumulative unrecognized gains or losses.
5) If the cumulative unrecognized gains and losses are more than 10 percent of the greater of the PBO or the market value of assets, the balance of gains and losses that falls outside the corridor is amortized over the average expected remaining years of service of the Company's employees.
Q. Is this the same process that the Company has followed since the ORIGINATION OF THE XES PLAN?
A. Yes. The Company was required to set the phase-in period, as well as the basis for amortizing gains and losses at the time it adopted FAS 87, and it is not permitted to deviate from that basis from year to year.
Q. WITH RESPECT TO THE FIFTH COMPONENT OF THE PENSION COST CALCULATION, WHAT IS UNRECOGNIZED PRIOR SERVICE COST?
A. 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 instead provides for recognition over the future years.
Q. HOW IS UNRECOGNIZED PRIOR SERVICE COST AMORTIZED?
A. Unrecognized prior service cost is amortized over the expected remaining years of service of the participants impacted by the benefit change. Also, there is no ten-percent corridor for this purpose.
Q. How has the Company treated the asset gains of the XES Plan?
A. As noted earlier in connection with the NSPM Plan, all net asset gains have been used to reduce pension expense.
Q. Does the amortization amount of unrecognized gains and losses REPRESENT THE ENTIRE FAS 87 EXPENSE?
A. No. As I discussed earlier, it is only one component of the FAS 87 pension expense. The service costs, interest costs, EROA, and recognition of prior service costs are also components of the FAS 87 expense.
Q. You had mentioned previously that a sixth component of pension COST CAN BE REQUIRED; WHAT IS THAT?
A. 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 lumpsum 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 is monitoring its lump sums in 2020 to determine if a settlement will be triggered in late 2020. If a settlement is triggered in 2020, the Company will provide updated test year pension amounts in rebuttal testimony. 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?
A. 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.
Q. Did the XEPP FAS 88 SETTLEMENT AFFECT ONLY Minnesota customers?
A. No. The other Xcel Energy other operating companies (i.e., Northern States Power Company Wisconsin (NSPW), Public Service Company of Colorado (Public Service), and Southwestern Public Service Company (SPS)), also have employees in the XEPP. As a result, they were also subject to this provision, requiring them to also immediately recognize a portion of their unrealized losses as required by FAS 88.
Q. How do other Xcel energy jurisdictions address the FAS 88 SETTLEMENT CHARGES?
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 expense trackers employed by Public Service and SPS.
Q. Does the ACM also have a settlement accounting provision?
A. No. The ACM does not have a settlement accounting provision.

## E. Pension Funding

Q. Do the ACM and FAS 87 also GOVERN HOw RETIREMENT PLANS MUST BE FUNDED?
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; and
- 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 2021-2023 pension expense:

Table 4
2021-2023 Pension Assumptions

| Company - Accounting Method | Discount <br> Rate | EROA |
| :--- | :---: | :---: |
| NSPM - Aggregate Cost Method (ACM) | $7.10 \%$ | $7.10 \%$ |
| XES - FAS 87 (ASC 715) | $4.03 \%$ | $7.10 \%$ |

Q. Has the Company provided objective, verifiable measures to EVALUATE THE ASSUMPTIONS?
A. Yes. We have provided objective, verifiable measures where they are available. For example, we used benchmark indexes to evaluate the reasonableness of the discount rate produced by our bond-matching study, which we used in determining the Company's five-year average discount rate. For the EROA assumptions, we gathered information from the 2019 Edison Electric Institute (EEI) survey results for fiscal year 2019, and we compared those other utilities' assumptions to ours. The results are shown on Exhibit___(RRS-1), Schedule 7.
Q. What does the comparison show?
A. The EROA and wage increase assumptions used for the NSPM Plan and the XES Plan are at or near the average of the 44 EEI companies who responded to the survey.

1) The NSPM Plan discount rate of 7.10 percent is much higher than the average discount rate of 3.36 percent for the 44 EEI companies who responded to the survey. This is because the ACM requires that the discount rate be set equal to the EROA, which affects only companies using ACM. A higher discount rate assumption lowers the cost, so the

NSPM discount rate assumption lowers pension cost as compared to other utilities, all else equal.
2) Regarding the XES Plan discount rate, as I noted earlier in my testimony, the Company continues to believe that the correct method to arrive at 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 4.03 percent, compared to the EEI survey average of 3.36 percent.
3) The NSPM Plan and the XES Plan EROA assumptions of 7.10 percent are slightly higher than the 6.94 percent average for the EEI companies. The Company's slightly higher EROA also decreases costs, as compared to the 6.94 average.

## A. Discount Rate Assumption

Q. Please describe how the 4.03 percent discount rate for the Xes Plan WAS DETERMINED FOR THIS RATE CASE?
A. The Company determined the 4.03 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 4.03 percent was determined.

## Table 5

## Pension Discount Rate

| Current Rate Case - Using Historical Actuals |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Expense Period | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ | $\mathbf{2 0 2 0}$ | Five-Year |  |
| Measurement | $12 / 31 / 2015$ | $12 / 31 / 2016$ | $12 / 31 / 2017$ | $12 / 31 / 2018$ | $12 / 31 / 2019$ | Average |  |
| Date | $4.64 \%$ | $4.11 \%$ | $3.60 \%$ | $4.31 \%$ | $3.48 \%$ | $4.03 \%$ |  |
| XES FAS 87 |  |  |  |  |  |  |  |

Q. Will the Company provide an updated five-year average discount RATE TO INCORPORATE THE MOST RECENT MEASUREMENT DATE?
A. Yes. As we have done in prior rate cases, the Company will provide an updated five-year average discount rate in Rebuttal Testimony to incorporate the most recent measurement date of December 31, 2020, which will be available in late January or early February of 2021.
Q. Please describe how the discount rates listed above in Table 5 for THE FIVE-YEAR AVERAGE DISCOUNT RATE WERE DETERMINED.
A. The Company uses multiple reference points to set the discount rate. The primary basis for valuation is a bond-matching study that is performed as of December 31 of each year. The bond-matching study selects a matching bond for each of the individual projected payout durations within the plan based on projected actuarial experience, as compiled by the Company's actuary, Willis Towers Watson. The bonds selected must have a rating of $\mathrm{Aa} / \mathrm{AA}$ or higher and not have a pending review as of December 31. In addition, the bond may not have an inconsistent rating between agencies where any agency rates the
bonds below $\mathrm{Aa} / \mathrm{AA}$. If bonds are not available for a specific duration within the plan, a bond with the next closest shorter duration is used to determine the discount rate. The Company currently uses a single, average discount rate for all pension plans because the individual plans have a materially consistent duration and cash flow pattern. Individual discount rates by plan are identified and reviewed for significant deviations from the average in the determination of the overall rate.

The Company also uses other reference points to validate the rate calculated by the bond-matching study, including the Merrill Lynch Corporate (AA-AAA) $15+$ Bond Index. In addition to these reference points, the Company also reviews general survey data provided by Willis Towers Watson and EEI to assess the reasonableness of the discount rate selected.

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.
Q. DESCRIBE THE FINANCIAL VALIDATION PROCESS AND CONTROLS THAT ARE IN PLACE REGARDING SETTING THE DISCOUNT RATE.
A. The Company has a Pension Trust Administration Committee (PTAC) 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. Yearend 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 deviations between these numbers are researched to understand the underlying drivers.

Bonds selected in the bond-matching study are revalidated by Willis Towers Watson prior to the filing of the Company's $10-\mathrm{K}$ to ensure that individual bonds selected have not been downgraded or put on watch. In addition, employee data used to determine the projected future payments is compared to previous years for reasonableness of the headcount and pay rate information, both internally and by Willis Towers Watson. Final discount rates are communicated back to the PTAC for approval, and the final approved rate is included in the meeting minutes. Final approved discount rate assumptions are then provided to the audit committee as part of the Company's critical accounting policies.

In addition to the year-end discount rate analysis, discount rates are regularly recalculated over the course of the year by Goldman Sachs, Willis Towers Watson, and independently by Company personnel using projected cash flows combined with publicly published Merrill Lynch Corporate (AA-AAA) 15+ Bond Index to understand the expected impact of changing rates as market conditions change. Changes in the 10-year Treasury rate and the Merrill Lynch Corporate (AA-AAA) 15+ Bond Index are used as indicators that pension discount rates are likely deviating from current assumptions and will often drive incremental estimates of expected discount rates.
Q. HOW WAS THE 7.10 PERCENT NSPM PLAN DISCOUNT RATE DETERMINED?
A. 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 appropriate level of EROA, which is discussed below, also addresses the appropriateness of the ACM discount rate.
Q. WHAT IS YOUR CONCLUSION REGARDING THE DISCOUNT RATES USED FOR THE XES PLAN AND THE NSPM PLAN?
A. The test year discount rates for the XES Plan of 4.03 percent and the NSPM Plan of 7.10 percent are reasonable, and in the case of NSPM Plan are well above the average rates used by other companies. As I have indicated, the Company does not necessarily agree with the use of a five-year average, but we are proposing it in this case, consistent with the Commission's decision in our 2013 rate case, to reduce the number of contested issues, which will help the parties focus on evaluating the merits of our multi-year proposal.
Q. Will the Company update its proposed discount rate?
A. Yes. Consistent with the past practice, the Company will recalculate its test year pension cost using a measurement date of December 31, 2020, to capture the most current pension position and to provide an update to all elements of cost.

## B. EROA Assumption

Q. What is the test year EROA?
A. The test year EROA is 7.10 percent. In the Company's 2015 rate case, the Company's EROA assumption was 7.25 percent.
Q. Why did the Company lower the EROA assumption?
A. The Company decreased the EROA assumption primarily because the interest rates on fixed-income securities have continued to fall, which reduces the expected return on those assets.

## Q. How was the test year EROA assumption determined?

A. The EROA is, and must be, determined based on the long-term expected rates of return as dictated by the requirements of the ACM and FAS 87. The Company bases investment return assumptions on expected long-term performance for each of the investment types included in our pension asset portfolio - equity investments (such as corporate common stocks), fixedincome investments (such as corporate bonds and U.S. Treasury securities), and alternative investments (such as private equity, hedge fund-of-funds, commodities, or real estate partnerships). In reaching return assumptions, the Company considers the actual historical returns achieved, as well as the longterm return levels projected and recommended by investment experts in the marketplace. Xcel Energy continually reviews its pension investment
assumptions in order to maintain investment portfolios that provide adequate rates of return at appropriate levels of risk. Further information pertaining to the determination of EROA is 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 PTAC develops and validates rate-of-return assumptions jointly with Goldman Sachs, which is the Company's external pension investment advisor. With the help of Goldman Sachs, the Company's treasury group establishes a target investment strategy and investment mix. This investment strategy and mix are then presented at the PTAC meeting for approval. The target portfolio investment mix is then matched with expected long-term returns provided by Goldman Sachs for each of the investment classes within the portfolio. The expected long-term returns are validated against other advisor group benchmarks and expected returns by asset class provided by Willis Towers Watson. The results of these weighted average investment returns are aggregated to arrive at a single average long-term rate of return by plan that is then included in the assumptions provided to the PTAC for review, and they are included in the Company's critical accounting policies provided to the audit committee.
Q. Does the Company compare its EROA to other companies?
A. Yes. The Company compares its EROA to other utilities and also to general industry data. Exhibit___(RRS-1), Schedule 7 shows that the Company's longterm EROA assumption of 7.10 percent is slightly higher than the average of 6.94 percent for the EEI utilities. The use of a higher EROA leads to lower
pension expense for the Company relative to what the pension expense would be if it were calculated with a lower EROA.
Q. What is your conclusion regarding the 7.10 percent EROA?
A. The 7.10 percent EROA assumption is reasonable based on the requirement that the return be based on the target investment mix of the Company's pension plan assets. Mr. Inglis discusses the reasonableness of the Company's target asset allocation and investment strategy in more detail in his testimony.

## V. QUALIFIED PENSION AND 401(K) MATCH COSTS

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 $401(\mathrm{k})$ match.

## A. Qualified Pension Expense

Q. What is the level of qualified pension expense in each year of the MULTI-YEAR RATE PLAN?
A. The 2021, 2022, and 2023 qualified pension expense amounts are approximately $\$ 16.5$ million, $\$ 13.9$ million, and $\$ 12.2$ million, respectively. These amounts include costs related to both the NSPM Plan and the XES Plan. Approximately 75 percent of the Company's qualified pension expense relates to the NSPM Plan and 25 percent relates to the XES Plan.
Q. Do the NSPM plan and the XES Plan determine their Qualified PENSION EXPENSE USING DIFFERENT METHODS?
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 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 service costs.
Q. Are the two methods based on any common assumptions?
A. Yes. To calculate the pension liability under both methods, it is necessary to make assumptions about the discount rate and demographics (including 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 2020 assumptions were finalized as of December 31, 2019, and the 2021 assumptions will be finalized as of December 31, 2020. The final 2021 assumptions will be available in late January 2021. 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 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?
A. Table 6 below shows pension expense amounts since 2017 and the Company's current forecast of qualified pension expense. The forecast for 2020 and beyond assumes no changes in assumptions for the EROA, discount rate, plan contributions, wage increases, and employee turnover. The forecast also assumes that actual experience matches these assumptions, including the Company's actual return on assets equaling the EROA in 2020 and all subsequent years. Additionally, where applicable, the amounts reflect the impacts of pension expense being calculated using a five-year average discount rate and applying the two additional mitigation methods that the Commission accepted in Docket No. E002/GR-12-961, including the proposed change to the XES cap discussed below.

| Table 6 |  |
| :---: | :---: |
| Qualified Pension Expense |  |
| NSPM Electric O\&M State of MN |  |
| Year | Amount (\$) |
| 2017 | $20,626,921$ |
| 2018 | $20,549,083$ |
| 2019 | $21,427,184$ |
| 2020 Forecast | $19,901,164$ |
| 2021 Test Year | $16,491,010$ |
| 2022 Plan Year | $13,912,848$ |
| 2023 Plan Year | $12,168,386$ |

Q. WHAT ARE THE MAJOR DRIVERS OF THE DECREASE IN QUALIFIED PENSION EXPENSE?
A. The major drivers of the changes in qualified pension expense are:

- a decrease in the asset loss amortization;
- improved funded status from contributions and expected return on assets; and
- plan design changes.
Q. Please discuss the recent decrease in the asset loss Amortization AND EXPLAIN HOW THIS CONTRIBUTES TO THE DECREASE IN PENSION EXPENSE.
A. The primary reason for the asset loss amortization decrease was that the XEPP earned a 20.91 percentage return in 2019. 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 2021-2023 multi-year rate plan.
Q. Please describe how contributions and the expected return on ASSETS CONTRIBUTE TO THE DECREASE IN PENSION EXPENSE.
A. Because of funding requirements mandated by the Pension Protection Act of 2006, the Company has made significant contributions to the pension trust funds in recent years. Those contributions increase the assets upon which the pension plan earns a return, and those returns are an offset to annual pension cost. Thus, the increase in the asset base helps to reduce annual pension cost.
Q. PLEASE DISCUSS HOW PENSION PLAN DESIGN CHANGES CONTRIBUTE TO THE DECREASE IN PENSION EXPENSE.
A. Plan design changes implemented in 2011 and 2012 significantly reduced benefit levels for newly hired bargaining and non-bargaining employees. Each year as
new employees are hired the Company will continue to see increased savings as new employees are enrolled in the revised pension benefit plan. In addition, effective on January 1, 2018, the annual Retirement Spending Account credits were eliminated on a going-forward basis for all non-bargaining employees, and the Social Security Supplement was eliminated for all non-bargaining employees who will not meet certain criteria, including retirement eligibility, by December 31, 2022. The Company has estimated that these changes have reduced qualified pension expense by at least $\$ 5$ to $\$ 6$ million each year over the multi-year rate plan.
Q. HAS COVID-19 HAD ANY IMPACT ON THE QUALIFIED PENSION AMOUNTS?
A. COVID-19 has no direct impact on pension costs in the test years. There could be indirect costs associated with the pandemic, which would be caused by swings in the asset performance and discount rates, but those won't be officially measured until December 31, 2020. Through August 2020, the Xcel Energy Pension Plan's funded status has returned to pre-pandemic levels. If market conditions should suddenly turn around, there could be asset or discount rate losses in 2020 that would increase pension costs in the test years. As I mentioned previously, the Company has typically included updated cost amounts in Rebuttal Testimony.
Q. Has the Company provided the actuarial study and derivation of THE JURISDICTIONAL AMOUNT?
A. Yes. The Company has included Exhibit___(RRS-1), Schedule 9, which is an actuarial study that supports the qualified pension costs included in the multiyear rate plan. Exhibit___(RRS-1), Schedule 10 shows the conversion of the

2020 total cost amounts to the NSPM electric O\&M, state of Minnesota amount.

## B. 401(k) Match

Q. WHAT IS THE 401(K) MATCH EXPENSE AMOUNT IN EACH YEAR OF THE MULTIYEAR RATE PLAN?
A. The 2021, 2022, and 2023 401(k) match expense amounts are approximately $\$ 9.4$ million, $\$ 9.7$ million, and $\$ 9.9$ million, respectively.
Q. What were the amounts of 401(k) MATCH EXPENSES IN THE FOUR YEARS PRIOR TO THE TEST YEAR COMPARED TO THE FORECASTED AMOUNTS FOR THE MULTI-YEAR RATE PLAN PERIOD?
A. Table 7 below shows the amounts of $401(\mathrm{k})$ match expense from 2015 through 2019, as well as the forecasted amounts in 2020, the 2021 test year, and the 2022-2023 plan years.

Table 7
401(k) Match Expense

| NSPM Electric O\&M State of MN |  |
| :---: | :---: |
| Year | Amount (\$) |
| 2017 | $8,886,008$ |
| 2018 | $9,036,008$ |
| 2019 | $9,131,013$ |
| 2020 Forecast | $9,126,977$ |
| 2021 Test Year | $9,434,448$ |
| 2022 Plan Year | $9,675,551$ |
| 2023 Plan Year | $9,939,056$ |

Q. WHAT ASSUMPTIONS WERE USED TO DEVELOP THE 401(K) MATCH EXPENSE FOR 2021-2023?
A. The most recent actual $401(\mathrm{k})$ match, which was from the 2019 plan year, was used as the base year. This base year amount was then increased by the 2020 estimated and 2021-2023 budgeted merit increases to derive the amounts in 2021-2023.
Q. WHY IS THE AMOUNT OF 401(K) EXPENSE INCREASING EACH YEAR?
A. The $401(\mathrm{k})$ expense is increasing because the contribution is calculated based on a percentage of salary, and merit salary increases cause the total labor costs to increase each year. Moreover, the Company has experienced an overall increase in $401(\mathrm{k})$ participation in recent years, and that trend is expected to continue.

## C. Qualified Pension Deferred Balances

Q. What recent actions have impacted the Company's recovery QUALIFIED PENSION COSTS?
A. In Docket No. E002/GR-12-961, the Company introduced, and the Commission approved, two alternative cost recovery methods for its qualified pension costs - a twenty-year amortization period for unrecognized pension costs for the NSPM Plan and a "cap and defer" recovery of XES pension costs. In Docket No. E002/GR-13-868, the Commission approved the continuation of those methods, stating:

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
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.
Q. Is the Company proposing to continue these two proposals in this CASE?
A. Yes. The qualified pension amounts included in this rate case have been adjusted for the extension of the amortization period from 10 to 20 years and the XES pension cap that was previously approved by the Commission in the Company's 2012 rate case.
Q. WHAT IS THE IMPACT FROM THESE TWO CHANGES ON 2020 QUALIFIED PENSION EXPENSE?
A. These two changes have reduced the test year qualified pension expense by $\$ 425,679$.
Q. How would you characterize the deferred amounts?
A. These deferred amounts represent shareholder funds that the Company will not recover until a future time period, or a prepayment. The general ratemaking practice is for a utility prepayment to be added to rate base and for a customer prepayment to be subtracted from rate base.
Q. Is THE COMPANY CURRENTLY EARNING A RETURN ON THE AMOUNTS DEFERRED TO FUTURE YEARS?
A. No. Although such treatment of these funds would be appropriate in order to make shareholders whole, in Docket No. E002/GR-13-868, the Commission stated that the deferred amounts "will not be included in rate base." Consistent with this Order, the Company has not earned a return on these deferrals.
Q. Does the Company propose to include the deferred amounts in rate BASE AND TO EARN A RETURN ON THOSE AMOUNTS ON A GOING-FORWARD BASIS?
A. Yes. As I explained earlier, the normal ratemaking treatment of deferred balances is to include them in rate base and to allow a return on them. For example, the ADIT balances that customers have paid to the Company are subtracted from rate base. There is no reason to treat the deferred pension amounts differently.
Q. Did the Commission provide any other guidance with respect to the DEFERRED BALANCE IN DOCKET No. E002/GR-13-868?
A. Yes. On page 20 of the Docket No. E002/GR-13-868 Order, the Commission directed that, "if approved recovery exceeds future years' pension expense, the Company will apply that amount to recovery of the deferred XES pension expense amounts." The Commission also stated, "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."
Q. Has the Company created the required annual compliance filing THAT INCLUDES THE DEFERRED PENSION BALANCES?
A. Yes. Exhibit___(RRS-1), Schedule 11 provides the requested annual compliance filing, which shows how the deferred amount was built up and how it is expected to unwind over the course of the multi-year plan.
Q. Does the Company have any other requests related to these DEFERRED BALANCES?
A. Yes. The Company proposes to amortize the December 31, 2019 XES Plan cap cumulative deferred balance of $\$ 16,948,013$ over the three years of the multi-year plan, or $\$ 5,649,338$ per year. Mr. Chamberlain and Mr. Halama discuss the appropriateness of the three-year amortization period. The history of the cumulative deferred balance can be found in Exhibit___(RRS-1), Schedule 11, on the Sch B-XES, Page 2. For further discussion around these deferred balances, including a description of the FAS 88 settlement, see the Company's response to Information Requests (IR) DOC-2163 and DOC-2164 in Docket No. E002/GR-15-826, which can be found in Exhibit___(RRS-1), 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.
A. The Company requests that the Commission approve the 2021, 2022, and 2023 qualified pension expense amounts of $\$ 16,491,010, \$ 13,912,848$, and $\$ 12,168,386$, and the $401(\mathrm{k})$ match expense amounts of $\$ 9,434,448, \$ 9,675,551$, and $\$ 9,939,056$, respectively. The qualified pension expense amounts include continuing the two normalization methods previously approved and updating the XES Plan cap baseline to the 2021, 2022, and 2023 qualified pension forecasted amounts of $\$ 3,618,080, \$ 2,798,691$ and $\$ 2,076,185$, with the regulatory assets produced by the caps included in rate base and allowed to earn a return equal to the Company's weighted average cost of capital. Finally, the Company requests to amortize the December 31, 2019 cumulative deferred
balance related to the XES cap of $\$ 16,948,013$ over the three years of the multiyear rate plan.
Q. Is IT REASONABLE TO ASK CUSTOMERS TO PAY FOR QUALIFIED PENSION AND 401(K) MATCH BENEFIT COSTS?
A. Yes. It is appropriate that customers pay for these benefits because they reflect a reasonable and necessary level of expense. As explained in more detail in the testimony of Ms. Lowenthal, our compensation and benefits plans are required to attract, retain, and motivate employees needed to perform the work necessary to provide quality services for NSPM customers. Without the pension plan and $401(\mathrm{k})$ matching benefits, the Company would have to pay significantly higher current compensation to attract employees.

## VI. RETIREE MEDICAL AND FAS 112 LONG-TERM DISABILITY BENEFITS

Q. WHAT DO YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?
A. I discuss the Company's request to recover the expense for post-retirement healthcare benefits under FAS 106, Employers' Accounting for Post-Retirement Benefits Other Than Pensions, and for post-employment long-term disability (LTD) benefits under FAS 112, Employers' Accounting for Post-Employment Benefits.
Q. Please explain the difference between FAS 106 and FAS 112 LTD BENEFITS.
A. The FAS 106 benefits are primarily post-retirement healthcare benefits. FAS 112 encompasses a number of benefits, including LTD, self-insured workers' compensation, and continuation of life insurance.

## A. Retiree Medical

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

## Q. Please explain how retiree medical costs are determined.

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.
Q. What are the assumptions regarding the discount rate and the EROA FOR THE MULTI-YEAR RATE PERIOD?
A. The 2021-2023 multi-year rate period reflects an EROA of 4.50 percent for both bargaining and non-bargaining employees. It reflects a 4.04 percent discount rate, which is the five-year average discount rate.
Q. Please describe how the 4.04 percent discount rate was determined FOR THIS RATE CASE.
A. The Company determined the 4.04 percent discount rate consistent with the qualified pension expense calculation. Table 8 below shows how the five-year average discount rate of 4.04 was determined.

Table 8
FAS 106 Retiree Medical Discount Rate

| Current Rate Case - Using Historical Actuals |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Expense Period | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ | $\mathbf{2 0 2 0}$ | Average |  |
| Measurement <br> Date | $\mathbf{1 2 / 3 1 / 2 0 1 5}$ | $\mathbf{1 2 / 3 / 2 0 1 6}$ | $\mathbf{1 2 / 3 1 / 2 0 1 7}$ | $\mathbf{1 2 / 3 1 / 2 0 1 8}$ | $\mathbf{1 2 / 3 1 / 2 0 1 9}$ | 5-Year |  |
| Discount Rate | $4.65 \%$ | $4.13 \%$ | $3.62 \%$ | $4.32 \%$ | $3.47 \%$ | $4.04 \%$ |  |

Q. Will the Company provide an updated five-year average discount RATE TO INCORPORATE THE MOST RECENT MEASUREMENT DATE?
A. Yes. As we have done in prior rate cases, the Company will provide an updated five-year average discount rate in Rebuttal Testimony to incorporate the most recent measurement date of December 31, 2020, which will be available in late January or early February of 2021.
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. The EROA assumption is based on the expected long-term performance for each of the investment types included in its post-retirement healthcare asset portfolio. Because the post-retirement medical benefits are generally payable on a shorter time horizon than the qualified pension expense benefits are, the Company uses shorter duration investments for the post-retirement medical benefit expense, which lowers the EROA somewhat.
Q. What were the amounts of FAS 106 retiree medical expense in the FIVE YEARS PRIOR TO THE TEST YEAR, AND WHAT DOES THE COMPANY EXPECT THEM TO BE OVER THE NEXT FEW YEARS?
A. 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 2020 is primarily due to a lower
loss amortization and interest cost. The decreased loss amortization resulted from a net gain in 2019 attributable to:

- 2019 asset returns being much higher than expected;
- Claims increases being lower than expected;
- Update to the mortality assumptions; and
- Decrease in liability due to normal operation of the plan.

| Table 9 |  |
| :---: | :---: |
| FAS 106 Retiree Medical Expense |  |
| NSPM Electric O\&M State of MN |  |
| Year | Amount (\$) |
| 2017 | $1,902,338$ |
| 2018 | $1,968,757$ |
| 2019 | $1,310,993$ |
| 2020 Forecast | 429,647 |
| 2021 Test Year | 373,314 |
| 2022 Plan Year | 332,652 |
| 2023 Plan Year | $1,401,575$ |

Q. Why does the FAS 106 expense increase significantly from 2022 to 2023 OF THE PLAN YEAR?
A. Based on the actuarial study provided by Willis Towers Watson, there is a prior service credit that will be fully amortized prior to 2023 that is driving the increase in cost from 2022 to 2023. The prior service credit was created from the previously mentioned 2013 plan change that transitioned all Medicare retirees to Extend Health. The prior service cost was amortized over the average future service to retirement for employees expected to receive benefits from the plan at the time of the plan change ( 10.2 years) and will be fully amortized in 2023.
Q. Has the Company provided the actuarial study and derivation of THE JURISDICTIONAL AMOUNT?
A. Yes. The Company has included Exhibit___(RRS-1), Schedule 9, which is an actuarial study that supports the FAS 106 costs for 2021-2023. Exhibit___(RRS-1), Schedule 10 shows the conversion of the 2021 total cost amounts to the NSPM electric O\&M, state of Minnesota amount.

## B. FAS 112 Long-Term Disability Benefits

Q. Please describe FAS 112 long-term disability Benefits and explain HOW THEY ARE ACCOUNTED FOR.
A. LTD benefits are provided by the Company to former or inactive employees 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.

The accounting treatment varies depending on whether the cost is self-insured or fully-insured. In a fully-insured plan, the Company purchases an insurance plan from an outside insurance provider that assumes the risk. In a self-insured plan, the Company provides the benefits to the covered individuals and therefore, effectively acts as the insurer. For the self-insured piece, the Company is required to accrue for LTD costs under FAS 112, while the fullyinsured piece is simply the cost of the insurance premium incurred each year along with any other miscellaneous costs. The FAS 112 accrual represents the expected disability benefit payments for employees that are not expected to return to work.
Q. What groups of employees are covered under the self-Insured BENEFIT AND WHICH GROUPS ARE COVERED UNDER THE FULLY INSURED BENEFIT?
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.
Q. What Were the amounts of FAS 112 LONG-TERM DISABILITY EXPENSE IN THE FOUR YEARS PRIOR TO THE TEST YEAR, AND WHAT DOES THE COMPANY EXPECT THEM TO BE OVER THE NEXT FEW YEARS?
A. Table 10 below compares the FAS 112 long-term disability benefit costs from 2017 through 2023.

Table 10
FAS 112 Long-Term Disability Expense

| NSPM Electric O\&M State of MN |  |
| :---: | :---: |
| Year | Amount (\$) |
| 2017 | 62,298 |
| 2018 | 11,661 |
| 2019 | $(73,237)$ |
| 2020 Forecast | 263,588 |
| 2021 Test Year | 85,576 |
| 2022 Plan Year | 79,446 |
| 2023 Plan Year | 73,896 |

Q. What causes the fluctuations in these costs from year to year?
A. 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 cost change in 2019 and 2020 are the changes in discount rate reflected in each of the years. The discount rate increased on December 31, 2018, which caused 2019 costs to decrease, and the discount rate decreased on December 31, 2019, which caused 2020 costs to increase. 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 slightly in 2021-2023 due to lower year-to-year benefit payments through normal operation of the plan and because we have assumed no further changes to the discount rate. It is reasonable to assume no further changes to the FAS 112 discount rate because our assumptions are the most reasonable estimate to determine 2021 to 2023 costs at this point in time.
Q. Will the Company provide an updated FAS 112 discount rate to INCORPORATE THE MOST RECENT MEASUREMENT DATE?
A. Yes. As we have done in prior rate cases, the Company will provide updated FAS 112 costs in Rebuttal Testimony to incorporate the most recent measurement date of December 31, 2020, which will be available in late January or early February of 2021.
Q. Has The Company investigated whether it should use only fully INSURED PLANS?
A. Yes. The Company has evaluated fully insuring the plans that are currently selfinsured, but we determined that it was more costly to fully insure them than to self-insure them due to the small number of individuals covered and the degree of uncertainty around anticipated claims.
Q. Has the Company provided the actuarial study and derivation of THE JURISDICTIONAL AMOUNT?
A. Yes. Exhibit___(RRS-1), Schedule 9, which is an actuarial study that supports the FAS 112 LTD costs for 2021-2023. Exhibit___(RRS-1), Schedule 10 shows the conversion of the 2021 total cost amounts to the NSPM electric O\&M, state of Minnesota amount.

## C. Retiree Medical and FAS 112 Long-Term Disability Benefits Summary

Q. Please summarize the Company's request regarding the multi-year RATE PLAN AMOUNTS FOR THESE TWO BENEFITS.
A. The Company requests that the Commission approve retiree medical expense in the amounts of $\$ 0.4$ million, $\$ 0.3$ million, and $\$ 1.4$ million. The Company requests that the Commission approve FAS 112 long-term disability benefit expense in the amounts of $\$ 0.1$ million, $\$ 0.1$ million, and $\$ 0.1$ million for 2021 , 2022, and 2023 respectively.
Q. IS IT REASONABLE TO ASK CUSTOMERS TO PAY FOR RETIREE MEDICAL AND FAS 112 LONG-TERM DISABILITY BENEFIT COSTS?
A. Yes. It is appropriate that customers pay for these benefits because they reflect a reasonable and necessary level of expense, and because these are
commitments that the Company made to employees who provided quality service to NSPM customers for many years. Stated differently, the FAS 106 and 112 expenses represent benefits that our former employees have already earned, and the Company is required to comply with its obligations to disabled and retired employees. These expenses are akin to accounts payable, which are amounts the Company must pay to satisfy its legal obligations.

## VII. BENEFIT RATE BASE ASSETS AND LIABILITIES

Q. What topic do you discuss in this section of your testimony?
A. 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.
Q. What do you mean when you refer to the actuarially calculated EXPENSE THAT IS COMPARED TO THE CUMULATIVE CONTRIBUTIONS BY THE Company?
A. As I discussed earlier in my testimony, the annual qualified pension expense is 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 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 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?
A. 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 <br> Contribution | Pension Expense | Cumulative <br> Prepaid Pension <br> 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 $1^{5}$ below visually depicts the prepaid pension asset as the excess contributions over the recognized pension expense.

[^4]Figure 1

Q. WHY ARE THE CONTRIBUTIONS AND EXPENSE DIFFERENT IN ANY GIVEN YEAR?
A. 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.
Q. CAN THE UTILITY WITHDRAW THE PREPAID PENSION ASSET AND USE IT TO FUND CAPITAL REQUIREMENTS OR TO PAY FOR OPERATION AND MAINTENANCE EXPENSE?
A. No. As I noted earlier in my discussion of the calculation of qualified pension expense, federal law prohibits the withdrawal of any amounts from the pension trust fund except for the payment of benefits and plan expenses. Once the contributions are made, they are essentially locked away.

## B. Ratemaking Treatment of Prepaid Pension Asset

Q. How are prepayments and unfunded liabilities generally treated FOR PURPOSES OF SETTING RATES?
A. Prepayments by the utility are generally treated as an addition to rate base, whereas prepayments by customers are generally treated as a reduction to rate base.
Q. Is the Company proposing to apply the standard ratemaking TREATMENT OF PREPAYMENTS AND UNFUNDED LIABILITIES IN THIS CASE?
A. Yes. In this case, the Company is proposing to include the Company's prepayments of pension expense as an addition to rate base, and to treat the customers' prepayments of non-qualified pension expense, FAS 106, and FAS 112 as a reduction to rate base. Because the prepaid pension asset is larger than the unfunded liability, the Company has a net asset and therefore has an increase to rate base. The Company proposes to earn a return on the asset at the Company's weighted average cost of capital (WACC).
Q. Is THE COMPANY PROPOSING TO EARN A RETURN ON THE FULL AMOUNT OF THE NET PREPAID PENSION ASSET?
A. No. The net amount of the asset will be further offset by the ADIT associated with it. Thus, instead of earning a return on the full amount of the net asset (i.e., the prepaid pension asset less the unfunded accrued liabilities of retiree medical and post-employment benefits) the Company earns a return only on the portion that remains after the ADIT is subtracted from it.
Q. How does ADIT arise in connection with the prepaid pension asset OR ACCRUED UNFUNDED LIABILITY?
A. When the Company makes a contribution, it is allowed to deduct the contribution amount (up to IRS-imposed limits). That deduction shields income from taxes, which gives rise to deferred taxes. Thus, the amount by which the contributions in a particular year exceed the annual recognized cost for that year gives rise to a deferred tax liability. The opposite situation occurs when the annual cost recognized for a particular benefit exceeds the contribution, which give rise to a deferred tax asset. Mr. Halama discusses ADIT and how it impacts our filing.
Q. What amount of benefit assets and liabilities is included in the Test YEAR RATE BASE?
A. Table 12 below shows the amount included in rate base for all benefit types included in 2021. This table also shows the amounts that must be offset by the ADIT associated with the benefit asset or liability balance. This same information can also be found in the Non-Plant Rate Base (Assets/Liabilities) Schedule. The net balance is approximately $\$ 94.3$ million on a Minnesota electric jurisdictional basis. This amount should be added to the Company's
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 <br> and Long-Term) | Non-Plant Rate <br> Base <br> Asset/(Liability) | Associated <br> Accumulated <br> Deferred Tax <br> Asset/(Liability) | Net Rate Base <br> Impact <br> Asset/(Liability) |
| Prepaid Pension Asset | $169,535,703$ | $(47,655,130)$ | $121,880,573$ |
| Retiree Medical - FAS 106 | $(29,211,739)$ | $8,211,186$ | $(21,000,553)$ |
| Post-Employment Benefits <br> FAS 112 | $(9,196,088)$ | $2,584,947$ | $(6,611,141)$ |
| Total | $\mathbf{1 3 1 , 1 2 7 , 8 7 6}$ | $\mathbf{( 3 6 , 8 5 8 , 9 9 7 )}$ | $\mathbf{9 4 , 2 6 8 , 8 7 9}$ |

Q. What is the Company's request with respect to the net pension asset BALANCE OF $\$ 94.3$ 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, 2021-2023?
A. Yes. Exhibit___(RRS-1), Schedule 13 shows the annual calculation of the total NSPM prepaid pension asset or liability from 2015 through 2023. Schedule 13 also shows a detailed calculation by month that supports the 2021-2023 NSPM electric state of Minnesota prepaid pension asset balances that are being requested in rate base for this case.
Q. What has caused the recent growth of the prepaid pension asset?
A. 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.
Q. How did the Company respond to the combination of heightened 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.
Q. HOW CAN THE PENSION PLAN BE UNDERFUNDED AND YET THE COMPANY HAS A PREPAID PENSION ASSET?
A. The Company can have an underfunded pension plan at the same time it has a prepaid pension asset because they measure different things. The underfunded pension plan occurs when the projected benefit obligation exceeds the fair value of the pension plan assets. A prepaid pension asset occurs when the cumulative cash contributions to the trust exceed the cumulative pension expense recognized under FAS 87 since the inception of the pension plan.

## C. Justification for Including the Net Asset in Rate Base

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

Second, having an adequately funded pension plan helps attract and retain the employees who provide safe and reliable electric service to our customers. Therefore, the prepaid pension asset is just that - an asset for the Company and the Company should earn a return on that asset, just as it earns a return on other assets.

Third, customers are receiving the benefit of a return on the prepaid pension asset, and therefore it is appropriate that the Company earn a return on its prepayment as well.
Q. Please explain what you mean when you state that customers are RECEIVING THE BENEFIT OF A RETURN ON THE PREPAID PENSION ASSET.
A. As I explained earlier in my testimony, the annual pension cost determined under both accounting methods, the ACM (NSPM Plan) and FAS 87 (XES Plan), includes an EROA. The EROA percentage is multiplied by the value of the assets in the pension trust, and the product of that calculation is subtracted from the annual pension cost. Thus, the return on the prepaid pension asset reduces the annual qualified pension cost passed on to ratepayers on a dollar-for-dollar basis.
Q. What is the EROA for the NSPM Plan and the XES Plan?
A. The EROA for both the NSPM Plan and the XES Plan is 7.10 percent for 2021, 2022, and 2023. That percentage is applied to the balance in the pension 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.

Figure 2


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.
Q. Has the Company quantified the reduction in annual pension EXPENSE THAT CUSTOMERS EXPERIENCED AS A RESULT OF THE PREPAID ASSETS?
A. Yes. As shown in Table 13, the Company's qualified pension expense was reduced by $\$ 14.4$ million in 2020 on an electric basis because of earnings on prepaid pension assets:

| Table 13 |  |  |  |
| :---: | :---: | :---: | :---: |
| Amounts are NSPM Electric State of MN (2021 13-month Average) |  |  |  |
| Pension Plan | Prepaid Pension <br> Asset Balance | EROA | Rate Reduction from <br> Prepaid Pension <br> Asset |
| NSPM | $169,535,703$ | $7.10 \%$ | $12,037,035$ |
| XES | $32,715,322$ | $7.10 \%$ | $2,322,788$ |
| Total |  |  | $\mathbf{\$ 1 4 , 3 5 9 , 8 2 3}$ |

Thus, the earnings on the prepaid pension asset reduced the Company's revenue requirement by nearly $\$ 14.4$ million in 2020 and is expected to reduce the revenue requirement by a similar amount through 2023. 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 7.10 percent, whereas the Company is seeking a WACC of 7.42 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?
A. No, for three separate reasons. First, the NSPM pension plan balance on which customers earn a return is much larger than the balance on which they pay a return. Second, customers earn a return on the XES prepaid pension asset, but do not pay a return on that asset because it is not included in rate base for ratemaking purposes. ${ }^{6}$ Third, the prepaid pension asset allows the Company to avoid paying incremental PBGC premiums that would be added to the pension expense paid by customers in the absence of the prepaid pension asset.
Q. Please explain the first reason, which is that the balance of the NSPM PREPAID PENSION ASSET ON WHICH CUSTOMERS EARN A RETURN IS MUCH LARGER THAN THE BALANCE ON WHICH THEY PAY A RETURN.
A. The 7.10 percent EROA is applied to the full amount of the NSPM prepaid pension asset, which totals approximately $\$ 169.5$ million. As shown in Table 13 , that reduces the pension expense included in rates by more than $\$ 12$ million per year. In contrast, customers pay a 7.42 percent return on only $\$ 94.3$ million because the amount included in rate base reflects reductions for ADIT and the unfunded FAS 106 and FAS 112 liabilities. Thus, the balance on which customers earn a return is far larger than the balance on which they pay a return.
Q. THE SECOND REASON YOU LISTED EARLIER IS THAT CUSTOMER 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 $\$ 32.7$ million in 2021 . With an EROA of 7.10 percent for the XES Plan,

[^5]NSPM's electric retail customers will receive the benefit of approximately $\$ 2.3$ million (electric retail) of return on an asset on which they pay no return. That 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?
A. Yes. Table 14 (on the next page) shows that customers receive approximately $\$ 12.0$ 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 additional $\$ 2.3$ million of return on the XES prepaid pension asset, even though they pay no return on that asset. That results in a total savings to customers of approximately $\$ 14.4$ million. In contrast, multiplying the NSPM prepaid pension asset of $\$ 94.3$ million by the 7.42 percent WACC requested by the Company results in a return of approximately $\$ 7.0$ million on an electric O\&M basis. Even when that amount is grossed up for taxes, the total amount paid by customers is $\$ 9.8$ million Thus, as shown in Table 14 , even when customers pay a WACC return on the net prepaid pension asset, they realize a net benefit of approximately $\$ 4.5$ million on an electric basis as compared to a situation in which there was no prepaid pension asset.

| Amounts are NSPM Electric State of MN |  |  |  |
| :--- | ---: | ---: | ---: |
| Table 14 |  |  |  |
| $\begin{array}{l}\text { Prepaid pension asset } \\ \text { balance (excluding the } \\ \text { XES prepaid pension } \\ \text { asset) }\end{array}$ |  |  |  |
| EROA for NSPM plans | x |  |  |
| $\begin{array}{l}\text { Initial return benefit to } \\ \text { customers }\end{array}$ | $=$ | $\$ 169,535,703$ |  |
| $\begin{array}{l}\text { Balance of XES prepaid } \\ \text { pension asset }\end{array}$ |  | $7.10 \%$ |  |
| $\begin{array}{l}\text { EROA for XES prepaid } \\ \text { pension asset }\end{array}$ |  |  | $\$ 12,037,035$ |$]$|  |
| :--- |
| Return on XES prepaid <br> pension asset |
| Total annual reduction in <br> rates attributable to <br> prepaid pension asset |
| Prepaid pension asset net <br> of ADIT and after FAS <br> 106 and FAS 112 offsets |

Q. DOES THE PREPAID PENSION ASSET BENEFIT CUSTOMERS IN ANY OTHER WAY?
A. Yes. As I noted earlier, the third reason that customers realize a benefit from the prepaid pension asset is that the contributions that helped create the prepaid pension asset allow the Company to avoid incurring PBGC premiums
that would otherwise be included within the annual pension cost charged to customers.
Q. Please describe the pbgc.
A. The PBGC is a federal agency established by Congress as part of ERISA to insure pension benefits under private sector defined benefit pension plans. If a pension plan is terminated without sufficient money to pay all benefits, PBGC's insurance program will pay employees the benefits promised under the pension plan, up to the limits set by law. The funding for the PBGC comes partly from premiums charged to pension sponsors and partly from returns on assets held by the PBGC.
Q. What types of premiums does the PBGC charge?
A. The PBGC charges two types of premiums: (1) a per capita premium that is charged to all single-employer defined benefit plans; and (2) a variable premium charged to underfunded plans. The amounts of the premiums are set by Congress and must be paid by sponsors of the defined benefit plans, such as NSPM.
Q. Are the variable premiums applicable to underfunded plans INCREASING?
A. Yes. For 2020, the variable-rate premium for a single-employer plan such as that of NSPM is $\$ 45$ per $\$ 1,000$ of unfunded vested benefits.
Q. ARE THE COMPANY'S PENSION PLANS CURRENTLY UNDERFUNDED?
A. Yes. And absent the prepaid pension asset, the plan would be further underfunded. ${ }^{7}$
Q. BY HOW MUCH WOULD THE PENSION PLANS BE UNDERFUNDED IN THE ABSENCE OF THE PREPAID PENSION ASSET?
A. In the absence of the gross prepaid pension asset, the NSPM Plan would be further underfunded by $\$ 169$ million using a 13-month average for 2021.
Q. By how much would the PBGC premiums increase in 2020 In the ABSENCE OF THE PREPAID PENSION ASSET?
A. The PBGC premiums would be approximately $\$ 3.1$ million higher in 2020 on a NSPM Electric, state of Minnesota basis, without the prepaid pension asset.
Q. Are PBGC premiums included in the annual pension cost?
A. Yes. PBGC premiums are included in the annual pension cost calculation. Therefore, the existence of the prepaid asset will avoid the need for NSPM's electric retail customers to pay an additional $\$ 3.1$ million in 2020.
Q. Does the avoidance of incremental PBGC premiums provide an ADDITIONAL OFFSET TO THE PERCENTAGE DIFFERENCE BETWEEN THE EROA AND THE WACC?
A. Yes. In addition to the $\$ 4.5$ million net benefit that I described earlier; customers avoid an additional $\$ 3.1$ million of PBGC premiums as a result of

[^6]the prepaid pension asset. Because customers realize nearly $\$ 7.6$ million in net benefit as a result of the prepaid pension asset, it is reasonable to include the net asset in rate base and for the Company to earn a WACC return on the asset.
Q. PLEASE SUMMARIZE THE COMPANY'S REQUEST WITH RESPECT TO THE PREPAID PENSION ASSET.
A. The Company requests that the prepaid pension asset be included in rate base. That is how other prepayments are treated, including prepayments by customers, and there is no reason to treat the prepaid pension asset differently. Moreover, customers realize a significantly greater rate reduction from the prepaid pension asset than the return they are asked to pay, so it is reasonable and equitable for the prepaid pension asset to be included in rate base and to earn a WACC return.

## D. Commission Precedent on Prepaid Pension Asset

Q. WHAT TOPIC DO YOU DISCUSS IN THIS SECTION OF YOUR TESTIMONY?
A. I describe the way the Commission has treated the prepaid pension asset in recent cases, and I explain why I respectfully disagree with the Commission's reasoning in those cases.
Q. How Has the Commission treated the prepaid pension asset in recent RATE CASES?
A. In several recent cases, the Commission has excluded the utilities' prepaid pension assets from rate base and disallowed any return on those assets. ${ }^{8}$ I

[^7]respectfully submit that the reasoning employed by the Commission in those cases is either mistaken or does not apply to NSPM.
Q. What reasons has the Commission asserted to deny utilities' 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 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 that attributable to ratepayer contributions and market returns.." ${ }^{13}$

[^8]None of those reasons justifies excluding NSPM's prepaid pension asset from rate base.
Q. PLEASE EXPLAIN YOUR DISAGREEMENT WITH THE FIRST REASON - THAT THE UTILITY RECOVERS ITS ALLOWABLE PENSION EXPENSE FROM RATEPAYERS AND IS NOT BEING DENIED RECOVERY OF THIS OPERATING COST.
A. That rationale confuses income statement items, such as O\&M expense, with balance sheet items, such as capital assets. The annual pension expense included in rates is an $O \& M$ expense, whereas the contributions to the pension trust represent a capital cost on which the utility is entitled to a return. The inclusion of pension expense in rates does not compensate investors with a return on the capital they have advanced to fund the pension trust. ${ }^{14}$

The Commission's rationale for denying rate base treatment of the contributions to the pension trust costs is akin to saying that utility investors do not need a return on the capital they have invested in a transmission line because the $\mathrm{O} \& \mathrm{M}$ costs necessary to operate and maintain the transmission line are included in rates. The utility and its investors are entitled to recover both the O\&M expenses associated with the transmission line and a return on their capital investment in the transmission line. Similarly, NSPM and its investors are entitled to recover both the annual pension expense and a return on the prepayments to the pension trust.

[^9]Q. PLEASE ADDRESS THE SECOND RATIONALE, WHICH IS THAT PENSION-PLAN ASSETS AND BENEFIT OBLIGATIONS GO UP AND DOWN DEPENDING ON 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?
A. All asset balances are "temporary" in the sense that they rise and fall as new investments are made and depreciation expense is recognized. Moreover, the Company accounts for the changes in the prepaid pension asset balance by using a 13-month average, as it does for other balances that vary over the year, 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
the Company is required to make investments in physical assets such as transmission and distribution lines to provide service; the dollars contributed to the pension trust are real, out-of-pocket dollars provided by investors, just like dollars spent on physical assets; and investors are entitled to a return on those dollars comparable to the return available on other types of investments.

Moreover, there is no valid basis to assert that the prepaid pension asset is different because it is a balance sheet asset, rather than a physical asset. ADIT balances are also non-physical, balance sheet assets, but they are included in rate base as reductions to the balance on which the utility earns a return.
Q. Do you also disagree with the rationale that the prepaid pension ASSET ALREADY EARNS AN INVESTMENT RETURN?
A. I agree that the prepaid pension asset earns an investment return, but as I have explained, every dollar of that investment return is used to reduce the pension expense charged to customers. Investors receive no benefit whatsoever from the investment return. The fact that customers benefit from the investment return on the prepaid pension assets does not justify to denying investors an investment return on the prepaid pension asset.
Q. Please turn now to the final reason listed earlier, which is that it WOULD BE "IMPRACTICAL, IF NOT IMPOSSIBLE, TO EQUITABLY SEPARATE THE PREPAID AMOUNT ATTRIBUTABLE SOLELY TO [THE UTILITY'S] CONTRIBUTIONS FROM THAT ATTRIBUTABLE TO RATEPAYER CONTRIBUTIONS AND MARKET RETURNS."
A. Whatever validity that reason may have with respect to other Minnesota utilities, it has none insofar as NSPM is concerned because the entire prepaid pension
asset that the Company seeks to include in rate base resulted from investor contributions. As I have explained several times in my testimony, the prepaid pension asset represents the difference between the cumulative contributions by investors and the cumulative recognized pension expense. Market returns are not included in the calculation, and neither are "ratepayer contributions." ${ }^{15}$
Q. In PRIOR CASES, PARTIES HAVE ARGUED THAT SOME OF THE PREPAID PENSION ASSET MUST BE ATTRIBUTABLE TO MARKET RETURNS OR RATEPAYER CONTRIBUTIONS BECAUSE THE PREPAID PENSION ASSET HAS INCREASED IN YEARS IN WHICH THERE WAS NO COMPANY CONTRIBUTION TO THE PENSION TRUST. Is THAT A VALID ARGUMENT?
A. No. That argument misunderstands the role played by negative pension expense and fails to recognize that negative pension expense does, in fact, represent an investor contribution.
Q. PLEASE EXPLAIN WHAT YOU MEAN WHEN YOU REFER TO "NEGATIVE PENSION EXPENSE."
A. As I explained earlier, annual pension cost is calculated using the following formula:

$$
\begin{array}{ll} 
& \text { Current service cost } \\
+ & \text { Interest cost } \\
- & \text { EROA } \\
+/- & \text { Loss (gain) due to difference between expected and actual experience } \\
& \text { of plan assets or liabilities from prior periods } \\
+ & \text { Amortization of unfunded prior service cost } \\
= & \text { Annual pension cost }
\end{array}
$$

[^10]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?
A. 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

[^11]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 $\$ 94.3$ million more in its bank account, and customers would be earning a return on $\$ 94.3$ million less of pension assets. But in reality, the $\$ 94.3$ million remains in the pension trusts, and customers are earning a return on that $\$ 94.3$ million. Thus, NSPM and its shareholders have indeed advanced the $\$ 94.3$ 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
to the exact same prepaid pension asset balance that NSPM has calculated in this case.
Q. Please summarize your views regarding the Commission's reasons FOR DENYING UTILITIES' REQUESTS TO INCLUDE THEIR PREPAID PENSION ASSET IN RATE BASE IN RECENT CASES.
A. I respectfully submit that the Commission's rationales in prior cases are either based on mistaken premises or grounded on facts that do not apply to NSPM. Therefore, the Commission should approve the Company's request to include its prepaid pension asset in rate base and to earn a WACC return on it.

## E. Precedent from Other Xcel Energy Jurisdictions

Q. Do Xcel Energy operating companies in other jurisdictions earn a RETURN ON THEIR PREPAID PENSION ASSETS?
A. Yes. Regulatory commissions in Colorado, New Mexico, and Texas all allow the Xcel Energy operating companies in those jurisdictions to include their prepaid pension assets in rate base and to earn a return on them.
Q. HAS THE ISSUE OF WHETHER TO ALLOW A PREPAID PENSION ASSET TO BE INCLUDED IN RATE BASE AND TO EARN A RETURN BEEN A CONTESTED ISSUE IN THOSE JURISDICTIONS?
A. Yes. It has been a contested issue in all three jurisdictions. I am familiar with the decisions in those jurisdictions because I have been the Xcel Energy operating company's pension witness in all three jurisdictions.
Q. Please describe how the issue has been addressed in Colorado.
A. In a 2017 gas rate case, the Public Utilities Commission of Colorado denied Public Service's request to include its prepaid pension asset in rate base. ${ }^{17}$ Public Service appealed the Colorado commission's decision to state district court. In a decision that was issued in March 2020, the state district court found that Public Service had a constitutional right to earn a return on its prepaid pension asset because the prepaid pension asset was no different from other assets used by the utility to provide service:

> [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. ${ }^{19}$
Q. Is the prepaid pension asset of NSPM also a "service-producing ASSET," AS THAT TERM WAS USED BY THE COLORADO COURT?
${ }^{17}$ In the Matter of Advice Letter No. 912-Gas Filed by Public Service Company of Colorado to Roll the Pipeline System Integrity Adjustment ("PSLA") Costs Into Base Rates Beginning in 2019 and Increase Rates for All Natural Gas Sales and Transportation Services by Implementing a General Rate Scbedule 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 If 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 I 79 (Decision Mailed July 14, 2020).
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.

Q Please describe how the prepaid pension asset has been treated in New Mexico.
A. In a 2014 order, the New Mexico Public Regulation Commission allowed SPS to include its prepaid pension asset in rate base and to earn a return on it. The New Mexico Attorney General appealed that issue to the New Mexico Supreme Court, which upheld the New Mexico commission's decision to 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. ${ }^{20}$

[^12]Q. Is THERE ANY MATERIAL DIFFERENCE BETIWEEN THE PREPAID PENSION asset at issue in the New Mexico case and NSPM's prepaid PENSION ASSET?
A. No. Both the SPS and NSPM prepaid pension assets represent investor contributions that reduce the pension expense included in rates and that help attract and retain employees. Therefore, both should be included in rate base.
Q. Please describe how the Public Utility Commission of Texas has treated SPS's prepaid pension asset.
A. In a 2015 base rate case, parties challenged SPS's request to include its prepaid pension asset in rate base and to earn a WACC return on that asset. The Texas commission rejected those challenges:

Accounting in accordance with GAAP requires that the amount by which the cash contributions made to the pension trust exceed the accumulated pension cost to be recorded as a prepaid pension asset.

Investment income on the prepaid pension asset reduces qualified pension costs calculated under FAS 87, which benefits customers by reducing the amount of pension costs included in base rates.

The prepaid pension asset is appropriately included in rate base because it represents a prepayment by SPS. ${ }^{21}$

[^13] Order on Rehearing at 23 (Feb. 23, 2016).
Q. Is THERE ANY MATERIAL DIFFERENCE BETWEEN THE PREPAID PENSION asset at issue in the Texas case and NSPM's prepaid pension ASSET?
A. No. Just like the New Mexico prepaid pension asset, the Texas prepaid pension asset was created by investor contributions that reduced the pension expense included in rates. The Texas prepaid pension asset also helped SPS attract and retain employees. All of those things are true of the NSPM prepaid pension asset as well. Therefore, it should be included in rate base.

## VIII. ACTIVE HEALTH AND WELFARE COSTS

Q. What are the active health and welfare amounts for 2021, 2022, and 2023?
A. The 2021, 2022, and 2023 health and welfare expense amounts are approximately $\$ 36.0$ million, $\$ 38.0$ million, and $\$ 39.9$ million, respectively.
Q. What types of benefit costs are included in active health and WELFARE?
A. Active health and welfare costs can be broken down into three categories. The first and largest category is for active healthcare costs; the second category is for miscellaneous benefit programs and costs; and the third category contains life, LTD, and business travel insurance premiums.
Q. Since active health and welfare consists of three categories of COSTS, CAN YOU PROVIDE A FURTHER BREAKDOWN OF COSTS IN THE TEST YEAR?
A. Yes. Exhibit___(RRS-1), Schedule 14, shows the components that are included in each category and the amount for each component in the test year. The active healthcare category makes up 90 percent of the total health and welfare costs, so the remainder of this section of testimony will focus on active healthcare.
Q. What types of costs are included in active healthcare?
A. Active healthcare costs are all costs associated with providing healthcare coverage to our employees. As explained in more detail by Ms. Lowenthal, active healthcare benefits include medical, pharmacy, dental and vision claims, administrative fees, employee withholdings, pharmacy rebates, Health Savings Account (HSA) contributions, transitional reinsurance fees, trustee fees, interest income and opt-out finding.
Q. Did the Company make any adjustments to the per book amounts for ACTIVE HEALTHCARE CLAIMS?
A. Yes. Table 15 below shows both the per book and actual incurred amounts of active health and welfare claims for the five years prior to the test year and for the 2021 test year and 2022 and 2023 planned years.

| Table 15 <br> Active Health Care <br> Per Book and Actual Incurred Claims <br> NSPM Electric O\&M State of MN (\$) |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Per Book <br> Amount | IBNR <br> Adjustment | Actual Incurred <br> Claims |
| 2017 | $33,501,711$ | 740,938 | $34,242,649$ |
| 2018 | $34,120,041$ | $-263,278$ | $33,856,764$ |
| 2019 | $29,721,385$ | $1,655,221$ | $31,376,607$ |
| 2020 Forecast | $34,803,794$ | $-974,858$ | $33,828,936$ |
| 2021 Test Year | n/a | n/a | $35,992,899$ |
| 2022 Plan Year | n/a | n/a | $38,024,418$ |
| 2023 Plan Year | n/a | n/a | $39,875,075$ |

Q. WHY WAS IT NECESSARY TO MAKE AN ADJUSTMENT TO THE PER BOOK CLAIMS AMOUNT?
A. 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
part of the prior period, and at that time it trues up the IBNR estimate to the actual incurred amount. Therefore, the per book amounts need to be adjusted so that they reflect the actual incurred claim amounts during that period. After the adjustment, the periods include only the actual amounts incurred for the twelve months.
Q. HOW WERE THE 2021-2023 ACTIVE HEALTHCARE COSTS DETERMINED?
A. The Company's actuary, Willis Towers Watson, calculated the 2021 test year medical and pharmacy amounts by using the actual experience from the following periods and weighting them.

80 percent weighting was applied to:

- Medical claims incurred January 1, 2019 through December 31, 2019, paid through February 29, 2020.
- Pharmacy claims incurred January 1, 2019 through December 31, 2019, paid through February 29, 2020.

20 percent weighting was applied to:

- Medical claims incurred January 1, 2018 through December 31, 2018, paid through February 29, 2020.
- Pharmacy claims incurred January 1, 2018 through December 31, 2018, paid through February 29, 2020.
Willis Towers Watson then adjusted for changes in plan design, regulations, administrative fees, etc., and it trended the data forward to 2021 using inflation factors. These costs are calculated at a plan level, meaning all companies with employees in that plan are calculated together. Willis Towers Watson then adjusts this estimate to account for actual claims experience by company. Medical and pharmacy trends were then applied to derive the 2022 and 2023 amounts.
Q. What is the Company's basis for having a 20216.40 percent medical and pharmacy healthcare trend?
A. The assumption reflects Willis Towers Watson's overall expectation of healthcare cost increases based on survey averages, carrier information, and an analysis of the broad healthcare market. Exhibit__(RRS-1), Schedule 15 provides a summary of this analysis. This study is from June 2020 and is focused on 2021 expected cost increases. The information is intended to support the trend assumptions used in Xcel Energy's 2021 active healthcare budgeting done by Willis Towers Watson. Overall, the Willis Towers Watson survey data indicates each pricing group has a different split of the total cost between medical and pharmacy cost, but they expect the total trend to fall between 5.0 percent and 6.5 percent as documented in the trend surveys. PricewaterhouseCoopers ( PwC ) estimates that medical and pharmacy costs will rise 6.00 percent in 2020. This information, which was gathered by PwC's Health Research Institute, was based on PwC's own internal research and input from health plan actuaries, industry leaders, analyst reports, and employer surveys. Finally, the Aon Carrier Trend Report expects 2020 medical costs to increase by 6.50 percent.
Q. What percentage does total health and welfare costs increase FROM 2021-2023 AFTER USING THE METHODOLOGY DESCRIBED ABOVE?
A. As shown in Table 16 below, the amounts reflect an average increase of 5.6 percent, which is right in line with the expected healthcare trend.

| Table 16 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Active Health Care Expense |  |  |  |  |

Q. Do you believe the Company's estimate of healthcare costs is REPRESENTATIVE OF COSTS THE COMPANY EXPECTS TO INCUR IN FUTURE YEARS?
A. Yes. As shown in Table 16 above, the Company's active healthcare costs are currently forecasted to grow approximately 4-6 percent per year for 2021, 2022, and 2023. This growth rate is typical as compared to other organizations, as demonstrated by the attachment referred to above. The Company has implemented several plan design changes to help control the pace of growth, as discussed by Ms. Lowenthal. However, active healthcare costs have continued to increase, and the Company's forecasts through 2023 are reasonable.
Q. HOW HAS THE PANDEMIC OF 2020 IMPACTED HEALTH CARE COSTS?
A. Due to the nationwide shutdown and ongoing COVID-19 concerns, the Company has seen lower-than-anticipated health care costs for the first half of 2020. Based on discussions Willis Towers Watson has had with health care systems, the expectation is that the systems will capture anywhere from 85 percent to 90 percent of original 2020 revenue projections. Of the 10 percent to 15 percent projected 2020 lost revenue, a significant portion will not be made
up (e.g., routine office visits), while a portion (e.g., elective surgeries) will be made up by the end of 2020 , or likely to be made up in early 2021. This potential for deferred care carrying over into 2021 could make our existing 2021 test year health care amount too low.
Q. Why is it reasonable for customers to pay active health and welfare COSTS INCURRED BY THE COMPANY?
A. It is appropriate that customers pay for these benefits because they reflect a reasonable and necessary level of expense. Employees expect their employer to provide a reasonable level of health and welfare benefits, and any employer that does not do so is at a significant disadvantage in the labor market. Thus, our compensation plans and benefits are required to attract, retain, and motivate employees needed to perform the work necessary to provide quality services for NSPM customers.

## IX. WORKERS' COMPENSATION FERC 925 COSTS

Q. What types of costs are included in FERC Account 925, Injuries and Damages?
A. FERC Account 925 is composed of workers' compensation coverage and other liability insurance costs. The workers' compensation benefit covers workrelated injury costs for medical claims, permanent or partial disability, lost time, rehabilitation costs, prescription drugs, etc. The other liability insurance includes coverage for general liability, excess liability, fiduciary insurance, and directors' and officers' insurance. Because my area of responsibility is in benefits accounting, my testimony is limited to the workers' compensation costs.
Q. PLEASE EXPLAIN HOW WORKERS' COMPENSATION COSTS ARE DETERMINED.
A. Similar to LTD costs, the accounting treatment for workers' compensation 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 fullyinsured portion is the cost of the insurance premiums that the Company must pay each year.
Q. What has been the trend for the workers' compensation costs over THE LAST SEVERAL YEARS AND FOR THE MULTI-YEAR RATE PLAN PERIOD?
A. Table 17 below compares the workers' compensation benefit costs from 2017 through 2023.

Table 17
Workers' Compensation Expense

| NSPM Electric O\&M State of MN (\$) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | FAS 112 | Insurance <br> Premiums <br> \& Other | Captive <br> Distributions | Total Workers' <br> Compensation |
| 2017 | 255,880 | $1,914,890$ | $-1,980,981$ | 189,790 |
| 2018 | 157,468 | $1,880,119$ |  | $2,037,587$ |
| 2019 | $-705,352$ | $1,909,207$ |  | $1,203,855$ |
| 2020 Forecast | 312,092 | $1,823,473$ |  | $2,135,565$ |
| 2021 Test Year | 92,362 | $1,840,908$ | $-895,983$ | $1,037,288$ |
| 2022 Plan Year | 85,532 | $1,815,649$ | $-883,056$ | $1,018,124$ |
| 2023 Plan Year | 79,644 | $1,830,163$ | $-889,787$ | $1,020,020$ |

Q. How did you calculate the workers' compensation amounts for 2021 THROUGH 2023?
A. The FAS 112 amounts are based on the 2021 through 2023 projected cost amounts from the Willis Towers Watson actuarial calculation provided in May 2020. The insurance premium amounts were based on the actual premiums paid through October 2019 and held flat through 2023.
Q. What causes the fluctuations in these costs from year to year?
A. The FAS 112 workers compensation self-insured costs fluctuate from year to year because of changes to the discount rate or demographic adjustments, similar to FAS 112 LTD costs, which were discussed above. The workers compensation premium portion remained relatively stable from 2017 to 2023, with the big swing in costs being driven by the captive distribution. Captive distributions are distributions (refunds) from the captive insurance account that are received from time to time. Company witness Mr. Robert Miller discusses captive distributions in more detail.
Q. Has the Company provided the actuarial study and derivation of THE JURISDICTIONAL AMOUNT?
A. Yes. The Company has included Exhibit___(RRS-1), Schedule 9, which is an actuarial study that supports the FAS 112 workers compensation costs in 20202023. Exhibit___(RRS-1), Schedule 10 shows the conversion of the 202 total cost amounts to the NSPM electric O\&M, state of Minnesota amount.
Q. Is THE COMPANY SEEKING TO RECOVER THE FORECASTED WORKERS’ COMPENSATION EXPENSE AS SHOWN IN TABLE 17 AS PART OF ITS MULTI-YEAR RATE PLAN?
A. Yes. Mr. Halama has incorporated the budgeted amounts into the 2021 test year and 2022 and 2023 plan year revenue requirements. These costs are calculated in accordance with accounting rules and standards and are based on actuarial assumptions specific to the Company.

## X. CONCLUSION

## Q. PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATIONS.

A. The assumptions that the Company has used to determine the test year pension expense are reasonable, as shown by comparison with other utilities' pension assumptions. In addition, we are proposing to use a five-year average discount rate - as the Commission approved in a prior Company case - to reduce the potential number of disputed issues in this current case. Our annual qualified pension expense decreases each year through the multi-year rate plan period, in part due to the benefit plan design changes that have reduced employee benefit levels.

The Company should be allowed to recover the costs of its FAS 106 postretirement medical benefit and its FAS 112 benefit. Those are reasonable costs that are part of the total compensation package the Company needs to attract and retain good employees.

The Company should also be allowed to include its prepaid pension asset in rate base and to earn a return on that asset at the Company's WACC. The gains
from that asset help reduce pension expense in the test year, but shareholders have no access to those gains. The Company requests that the prepaid pension asset be included in rate base and that it earn a return, similar to other prepayments.

Regarding healthcare costs, we have implemented measures to help control the pace of growth in our healthcare costs, and the result is reflected in a lower inflation factor during the multi-year rate plan period than that recommended by our actuaries and PwC.

Finally, our workers' compensation costs are necessary, and the forecasted amounts presented in my testimony should be approved for recovery in rates.

In summary, and as discussed in more detail by Ms. Lowenthal, the non-cash employee benefits discussed in my testimony are part of the Company's overall compensation and benefits package and are necessary to attract and retain the employees required to provide high-quality service to our customers. The forecasted amounts of pension and benefits costs I present are reasonable and accurately reflect our expected pensions and benefits expense in the multi-year rate plan period. As such, I recommend that the Commission approve these levels of expense to be included in rates.
Q. Does this conclude your Direct Testimony?
A. 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

|  | 2017 Actuals | 2018 Actuals | 2019 Actuals | 2020 Forecast | 2021 Forecast | 2022 Forecast | 2023 Forecas |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retirement |  |  |  |  |  |  |  |
| 401K Match | 10,353,515 | 10,484,554 | 10,488,184 | 10,481,742 | 10,834,853 | 11,111,744 | 11,414,363 |
| Qualified Pension (A) | 25,093,293 | 25,119,979 | 24,775,021 | 22,918,384 | 19,013,759 | 15,949,671 | 13,892,614 |
| Deferred Pension Amortization | - | - | - | - | 5,649,338 | 5,649,338 | 5,649,338 |
| Deferred Compensation Plan | 52,054 | 51,305 | 54,424 | 59,337 | 45,117 | 49,262 | 53,545 |
| NMC Employer Retirement Contribution | 1,105,886 | 1,007,100 | 965,146 | 958,814 | 906,267 | 933,039 | 958,798 |
| Retirement \& Compensation Consulting | 518,623 | 582,968 | 444,504 | 551,547 | 324,769 | 324,392 | 325,172 |
| FAS 88 nonqualified settlement | - | - | - | - | - | - | - |
| Other | - | - | - | - | - | - | - |
| Total Retirement | 37,123,371 | 37,245,906 | 36,727,280 | 34,969,824 | 36,774,103 | 34,017,445 | 32,293,830 |
| Health \& Welfare |  |  |  |  |  |  |  |
| Active Health Care | 39,034,455 | 39,589,763 | 34,138,968 | 39,969,905 | 41,750,514 | 43,668,582 | 45,793,942 |
| Adjust to Incurred Claims | 863,302 | $(305,483)$ | 1,901,242 | (1,119,561) | $(415,000)$ |  |  |
| Life \& LTD insurance, Misc Ben Programs | 4,711,786 | 4,421,603 | 3,924,546 | 4,210,287 | 3,996,749 | 4,000,591 | 4,063,779 |
| FAS 106 Retiree Medical | 2,216,506 | 2,284,365 | 1,505,850 | 493,422 | 428,727 | 382,029 | 1,609,618 |
| FAS 112 LTD (long-term disability) | 72,586 | 13,530 | $(84,123)$ | 302,714 | 98,278 | 91,238 | 84,865 |
| Other | - |  |  |  | - | - |  |
| Total Health \& Welfare | 46,898,635 | 46,003,778 | 41,386,483 | 43,856,766 | 45,859,268 | 48,142,441 | 51,552,204 |
| Total Benefits | 84,022,006 | 83,249,684 | 78,113,763 | 78,826,589 | 82,633,372 | 82,159,885 | 83,846,034 |

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

|  | 2017 Actuals | 2018 Actuals | 2019 Actuals | 2020 Forecast | 2021 Forecast | 2022 Forecast | 2023 Forecast |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retirement |  |  |  |  |  |  |  |
| 401K Match | 8,886,008 | 9,036,008 | 9,131,013 | 9,126,977 | 9,434,448 | 9,675,551 | 9,939,056 |
| Qualified Pension (A) | 20,626,921 | 20,549,083 | 21,427,184 | 19,901,164 | 16,491,010 | 13,912,848 | 12,168,386 |
| Deferred Pension Amortization | - | - | - | - | 5,649,338 | 5,649,338 | 5,649,338 |
| Deferred Compensation Plan | 44,676 | 44,217 | 47,382 | 51,668 | 39,286 | 42,894 | 46,625 |
| NMC Employer Retirement Contribution | 949,138 | 867,959 | 840,256 | 834,888 | 789,132 | 812,443 | 834,873 |
| Retirement \& Compensation Consulting | 445,113 | 502,425 | 386,985 | 480,259 | 282,793 | 282,465 | 283,144 |
| FAS 88 nonqualified settlement | - | - | - |  | - | - | - |
| Other | - | - | - |  | - | - | - |
| Total Retirement | 30,951,856 | 30,999,692 | 31,832,820 | 30,394,955 | 32,686,007 | 30,375,539 | 28,921,421 |
| Health \& Welfare |  |  |  |  |  |  |  |
| Active Health Care | 33,501,711 | 34,120,041 | 29,721,386 | 34,803,794 | 36,354,260 | 38,024,418 | 39,875,075 |
| Adjust to Incurred Claims | 740,938 | $(263,278)$ | 1,655,221 | $(974,858)$ | $(361,361)$ | - | - |
| Life \& LTD insurance, Misc Ben Programs | 4,043,937 | 3,810,714 | 3,416,709 | 3,666,107 | 3,480,170 | 3,483,515 | 3,538,536 |
| FAS 106 Retiree Medical | 1,902,338 | 1,968,757 | 1,310,993 | 429,647 | 373,314 | 332,652 | 1,401,575 |
| FAS 112 LTD (long-term disability) | 62,298 | 11,661 | $(73,237)$ | 263,588 | 85,576 | 79,446 | 73,896 |
| Other | - | - |  |  |  |  |  |
| Total Health \& Welfare | 40,251,222 | 39,647,896 | 36,031,072 | 38,188,279 | 39,931,958 | 41,920,030 | 44,889,082 |
| Total Benefits | 71,203,078 | 70,647,588 | 67,863,892 | 68,583,234 | 72,617,964 | 72,295,569 | 73,810,504 |

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

## Benefit Costs

## Retirement

401K Match
Qualified Pension
Deferred Compensation Plan
NMC Employer Retirement Contribution Retirement \& Compensation Consulting
FAS 88 nonqualified settlement
Other
Total Retirement

## Health \& Welfare

Active Health Care
Life \& LTD insurance, Misc Ben Programs
FAS 106 Retiree Medical
FAS 112 LTD (long-term disability)
Other
Total Health \& Welfare
Total Benefits

Retirement
401K Match
Qualified Pension
Deferred Compensation Plan
Retirement \& Compensation Consulting
FAS 88 qualified settlement
FAS 88 nonqualified settlement
Other
Total Retirement

## Health \& Welfare

Active Health Care
Life \& LTD insurance, Misc Ben Programs
FAS 106 Retiree Medical
FAS 112 LTD (long-term disability)
Other
Total Health \& Welfare

Total Benefits

| 2017 Actuals | 2018 Actuals | 2019 Actuals | 2020 Forecast | 2021 Forecast | 2022 Forecast | 2023 Forecast |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10,597,175 | 10,656,570 | 10,726,655 | 11,213,541 | 11,347,767 | 11,654,420 | 11,969,428 |
| 34,862,000 | 34,465,000 | 34,707,000 | 31,384,000 | 26,238,000 | 21,560,000 | 18,862,000 |
| 20,738 | 20,910 | 25,032 | 20,014 | 13,455 | 15,321 | 17,243 |
| 1,159,245 | 1,076,993 | 1,012,685 | 1,047,780 | 1,031,730 | 1,061,782 | 1,092,735 |
| 422,881 | 110,104 | $(153,529)$ | 388,930 | 182,731 | 181,281 | 180,915 |
| - | - | - | - | - | - | - |
| - | - | - | - | - | - | - |
| 47,062,039 | 46,329,577 | 46,317,843 | 44,054,265 | 38,813,683 | 34,472,804 | 32,122,321 |
| 41,660,769 | 43,770,034 | 38,055,414 | 44,404,769 | 46,345,941 | 48,668,960 | 51,121,639 |
| 5,109,622 | 4,410,233 | 3,757,858 | 4,464,823 | 4,143,614 | 4,140,876 | 4,210,893 |
| 2,335,000 | 2,207,000 | 1,614,000 | 894,000 | 677,000 | 505,000 | 2,675,000 |
| 120,000 | $(22,000)$ | $(153,000)$ | 516,000 | 177,000 | 166,000 | 156,000 |
| - | - | (362) |  | - | - | - |
| 49,225,391 | 50,365,267 | 43,273,910 | 50,279,591 | 51,343,555 | 53,480,837 | 58,163,532 |
| 96,287,430 | 96,694,844 | 89,591,753 | 94,333,857 | 90,157,238 | 87,953,641 | 90,285,853 |

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

| 2017 Actuals | 2018 Actuals | 2019 Actuals | 2020 Forecast | 2021 Forecast | 2022 Forecast | 2023 Forecast |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
| $10,441,898$ | $10,899,361$ | $12,033,361$ | $11,560,177$ | $12,776,097$ | $13,159,380$ | $13,554,162$ |
| $28,256,000$ | $23,352,000$ | $21,759,000$ | $20,625,000$ | $16,844,000$ | $13,141,000$ | $9,898,000$ |
| 124,718 | 118,874 | 127,547 | 165,149 | 135,080 | 144,690 | 154,588 |
| 929,845 | $1,843,994$ | $2,059,641$ | $1,111,955$ | 738,913 | 738,957 | 740,432 |
| $21,181,000$ | $22,259,000$ | $(124,000)$ | - | - | - | - |
| - | - | - | $1,069,000$ | - | - | - |
| - | - | $(143)$ |  | - | - | - |
| $60,933,461$ | $58,473,229$ | $35,855,406$ | $34,531,281$ | $30,494,091$ | $27,184,027$ | $24,347,181$ |
|  |  |  |  |  |  |  |
| $41,215,822$ | $39,265,443$ | $36,914,180$ | $43,929,526$ | $49,550,879$ | $52,003,247$ | $54,589,048$ |
| $5,462,713$ | $6,029,821$ | $6,270,684$ | $5,617,570$ | $5,818,525$ | $5,930,980$ | $6,030,710$ |
| $1,491,000$ | $1,527,000$ | $1,253,000$ | $1,197,000$ | $1,159,000$ | $1,209,000$ | $1,420,000$ |
| 17,000 | 91,000 | 3,000 | 93,000 | 6,000 | 6,000 | 4,000 |
|  |  | - |  |  |  |  |
| $48,186,535$ | $46,913,264$ | $44,440,864$ | $50,837,096$ | $56,534,404$ | $59,149,227$ | $62,043,758$ |
| $109,119,996$ | $105,386,492$ | $80,296,270$ | $85,368,377$ | $87,028,494$ | $86,333,254$ | $86,390,939$ |

## 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 2008-2019. 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 2008-2019 represent actual results. The estimated amortization of these actual results are then shown through 2030.
- 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 2019 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 percent per year while liability gains/losses are moved into the amortization pool at 100 percent 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 phasein of assets the $\$ 200,340$ is built up in row 1 at 20 percent 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 2030 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.
o 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 percent 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 percent 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 percent 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").
o 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.

Xcel Energy Inc. - MN Electric Rate Case - Order Point 40 Approximate Pension Cost Attributable to 2008-2019 Gains and Losses - Illustrative NSPM Aggregate Cost Method (\$ in 000s)

Section 1

## 2008 Experience

1 Asset loss (A) \& Phase-in amount (B-W)
2 Asset loss offset by surplus ${ }^{2}$
3 Asset loss previously amortized
4 Asset loss remaining to amortize
5 Asset loss amortization
Liability loss ${ }^{3}$
7 Liability loss offset by surplus ${ }^{2}$
8 Liability loss previously amortized
9 Liability loss remaining to amortize
10 Liability loss amortization

Exhibit___(RRS-1), Schedule 3
Page 4 of 12

| 11 Asset gain (A) \& Phase-in amount (C-W) | $(13,435)$ | $(2,687)$ | $(5,374)$ | $(8,061)$ | $(10,748)$ | $(13,435)$ | $(13,435)$ | $(13,435)$ | $(13,435)$ | $(13,435)$ | $(13,435)$ | $(13,435)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 Asset gain previously amortized |  |  | 363 | 1,040 | 1,966 | 2,754 | 3,712 | 4,576 | 5,363 | 6,080 | 6,733 | 7,328 |
| 13 Asset gain remaining to amortize |  | $(2,687)$ | $(5,011)$ | $(7,021)$ | $(8,782)$ | $(10,681)$ | $(9,723)$ | $(8,859)$ | $(8,072)$ | $(7,355)$ | $(6,702)$ | $(6,107)$ |
| 14 Asset gain amortization |  | (363) | (677) | (926) | (788) | (958) | (864) | (787) | (717) | (653) | (595) | (542) |
| 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 ${ }^{2}$ |  | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ |
| 17 Liability loss previously amortized |  | - | $(4,136)$ | $(7,713)$ | $(10,731)$ | $(12,514)$ | $(14,137)$ | $(15,600)$ | $(16,933)$ | $(18,147)$ | $(19,254)$ | $(20,262)$ |
| 18 Liability loss to amortize |  | 30,606 | 26,470 | 22,893 | 19,875 | 18,092 | 16,469 | 15,006 | 13,673 | 12,459 | 11,352 | 10,344 |
| 19 Liability loss amortization |  | 4,136 | 3,577 | 3,018 | 1,783 | 1,623 | 1,463 | 1,333 | 1,214 | 1,107 | 1,008 | 919 |
| 2010 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 Asset gain (A) \& Phase-in amount (D-W) | $(18,960)$ |  | $(3,792)$ | $(7,584)$ | (11,376) | $(15,168)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ |
| 21 Asset gain previously amortized |  |  | - | 512 | 1,444 | 2,335 | 3,486 | 4,860 | 6,112 | 7,253 | 8,293 | 9,240 |
| 22 Asset gain remaining to amortize |  |  | $(3,792)$ | $(7,072)$ | $(9,932)$ | $(12,833)$ | $(15,474)$ | $(14,100)$ | $(12,848)$ | $(11,707)$ | $(10,667)$ | (9,720) |
| 23 Asset gain amortization |  |  | (512) | (932) | (891) | $(1,151)$ | $(1,374)$ | $(1,252)$ | $(1,141)$ | $(1,040)$ | (947) | (863) |
| 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 |
| 25 Liability loss previously amortized |  |  | - | $(1,652)$ | $(3,046)$ | $(3,870)$ | $(4,620)$ | $(5,295)$ | $(5,910)$ | $(6,471)$ | $(6,982)$ | $(7,448)$ |
| 26 Liability loss to amortize |  |  | 12,224 | 10,572 | 9,178 | 8,354 | 7,604 | 6,929 | 6,314 | 5,753 | 5,242 | 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-W) | 7,909 |  |  | 1,582 | 3,164 | 4,746 | 6,328 | 7,909 | 7,909 | 7,909 | 7,909 | 7,909 |
| 29 Asset loss previously amortized |  |  |  | - | (209) | (474) | (857) | $(1,343)$ | $(1,926)$ | $(2,457)$ | $(2,941)$ | $(3,382)$ |
| 30 Asset loss remaining to amortize |  |  |  | 1,582 | 2,955 | 4,272 | 5,471 | 6,566 | 5,983 | 5,452 | 4,968 | 4,527 |
| 31 Asset loss amortization |  |  |  | 209 | 265 | 383 | 486 | 583 | 531 | 484 | 441 | 402 |
| 32 Liability loss ${ }^{3}$ | 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 |  |  |  | - | $(3,731)$ | $(5,936)$ | $(7,943)$ | $(9,751)$ | $(11,399)$ | $(12,900)$ | $(14,268)$ | $(15,515)$ |
| 34 Liability loss to amortize |  |  |  | 28,302 | 24,571 | 22,366 | 20,359 | 18,551 | 16,903 | 15,402 | 14,034 | 12,787 |
| 35 Liability loss amortization |  |  |  | 3,731 | 2,205 | 2,007 | 1,808 | 1,648 | 1,501 | 1,368 | 1,247 | 1,136 |
| 2012 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 Asset gain (A) \& Phase-in amount (F-W) | $(18,826)$ |  |  |  | $(3,765)$ | $(7,530)$ | $(11,295)$ | $(15,060)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ |
| 37 Asset gain previously amortized |  |  |  |  | - | 338 | 983 | 1,899 | 3,068 | 4,468 | 5,743 | 6,905 |
| 38 Asset gain remaining to amortize |  |  |  |  | $(3,765)$ | $(7,192)$ | $(10,312)$ | $(13,161)$ | $(15,758)$ | $(14,358)$ | $(13,083)$ | $(11,921)$ |
| 39 Asset gain amortization |  |  |  |  | (338) | (645) | (916) | $(1,169)$ | $(1,400)$ | $(1,275)$ | $(1,162)$ | $(1,059)$ |
| 40 Liability loss ${ }^{3}$ | 21,129 |  |  |  | 21,129 | 21,129 | 21,129 | 21,129 | 21,129 | 21,129 | 21,129 | 21,129 |
| 41 Liability loss previously amortized |  |  |  |  | - | $(1,896)$ | $(3,622)$ | $(5,177)$ | $(6,594)$ | $(7,885)$ | $(9,061)$ | $(10,133)$ |
| 42 Liability loss to amortize |  |  |  |  | 21,129 | 19,233 | 17,507 | 15,952 | 14,535 | 13,244 | 12,068 | 10,996 |
| 43 Liability loss amortization |  |  |  |  | 1,896 | 1,726 | 1,555 | 1,417 | 1,291 | 1,176 | 1,072 | 977 |
| 2013 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 44 Asset loss (A) \& Phase-in amount (G-W) | 1,138 |  |  |  |  | 228 | 456 | 683 | 911 | 1,138 | 1,138 | 1,138 |
| 45 Asset loss previously amortized |  |  |  |  |  | - | (20) | (59) | (114) | (185) | (270) | (347) |
| 46 Asset loss remaining to amortize |  |  |  |  |  | 228 | 436 | 624 | 797 | 953 | 868 | 791 |
| 47 Asset loss amortization |  |  |  |  |  | 20 | 39 | 55 | 71 | 85 | 77 | 70 |
| 48 Liability loss ${ }^{3}$ | 14,141 |  |  |  |  | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 |
| 49 Liability loss previously amortized |  |  |  |  |  | - | $(1,269)$ | $(2,412)$ | $(3,454)$ | $(4,403)$ | $(5,268)$ | $(6,056)$ |
| 50 Liability loss to amortize |  |  |  |  |  | 14,141 | 12,872 | 11,729 | 10,687 | 9,738 | 8,873 | 8,085 |
| 51 Liability loss amortization |  |  |  |  |  | 1,269 | 1,143 | 1,042 | 949 | 865 | 788 | 718 |
| 2014 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 52 Asset gain (A) \& Phase-in amount (H-W) | (252) |  |  |  |  |  | (50) | (100) | (151) | (202) | (252) | (252) |
| 53 Asset gain previously amortized |  |  |  |  |  |  | - | 4 | 13 | 25 | 41 | 60 |
| 54 Asset gain remaining to amortize |  |  |  |  |  |  | (50) | (96) | (138) | (177) | (211) | (192) |
| 55 Asset gain amortization |  |  |  |  |  |  | (4) | (9) | (12) | (16) | (19) | (17) |
| 56 Liability gain ${ }^{3}$ | $(8,004)$ |  |  |  |  |  | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ |
| 57 Liability gain previously amortized |  |  |  |  |  |  | - | 711 | 1,359 | 1,949 | 2,487 | 2,977 |
| 58 Liability gain to amortize |  |  |  |  |  |  | $(8,004)$ | $(7,293)$ | $(6,645)$ | $(6,055)$ | $(5,517)$ | $(5,027)$ |
| 59 Liability gain amortization |  |  |  |  |  |  | (711) | (648) | (590) | (538) | (490) | (447) |

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

Xcel Energy Inc. - MN Electric Rate Case - Order Point 40
Exhibit___(RRS-1), Schedule 3 Approximate Pension Cost Attributable to 2008-2019 Gains and Losses - Illustrative ${ }^{1}$ NSPM Aggregate Cost Method

Page 5 of 12 (\$ in 000s)

| Section 1 | A (Gain)/Loss | $\begin{aligned} & \text { B } \\ & 2009 \end{aligned}$ | $2010$ | $2011$ | $\begin{aligned} & E \\ & 2012 \end{aligned}$ | $2013$ | $2014$ | $\begin{aligned} & H \\ & 2015 \end{aligned}$ | $2016$ | $2017$ | $2018$ | $2019$ | $2020$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2015 Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60 Asset loss (A) \& Phase-in amount (I-W) | 38,169 |  |  |  |  |  |  |  | 7,634 | 15,268 | 22,901 | 30,535 | 38,169 |
| 61 Asset loss previously amortized |  |  |  |  |  |  |  |  | - | (678) | $(1,974)$ | $(3,833)$ | $(6,205)$ |
| 62 Asset loss remaining to amortize |  |  |  |  |  |  |  |  | 7,634 | 14,590 | 20,927 | 26,702 | 31,964 |
| 63 Asset loss amortization |  |  |  |  |  |  |  |  | 678 | 1,296 | 1,859 | 2,372 | 2,839 |
| 64 Liability loss ${ }^{3}$ | 5,350 |  |  |  |  |  |  |  | 5,350 | 5,350 | 5,350 | 5,350 | 5,350 |
| 65 Liability loss previously amortized |  |  |  |  |  |  |  |  | - | (475) | (908) | $(1,303)$ | $(1,662)$ |
| 66 Liability loss to amortize |  |  |  |  |  |  |  |  | 5,350 | 4,875 | 4,442 | 4,047 | 3,688 |
| 67 Liability loss amortization |  |  |  |  |  |  |  |  | 475 | 433 | 395 | 359 | 328 |
| 2016 Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 68 Asset loss (A) \& Phase-in amount (J-W) | 1,171 |  |  |  |  |  |  |  |  | 234 | 468 | 703 | 937 |
| 69 Asset loss previously amortized |  |  |  |  |  |  |  |  |  | - | (21) | (61) | (118) |
| 70 Asset loss remaining to amortize |  |  |  |  |  |  |  |  |  | 234 | 447 | 642 | 819 |
| 71 Asset loss amortization |  |  |  |  |  |  |  |  |  | 21 | 40 | 57 | 73 |
| 72 Liability gain ${ }^{3}$ | $(4,312)$ |  |  |  |  |  |  |  |  | $(4,312)$ | $(4,312)$ | $(4,312)$ | $(4,312)$ |
| 73 Liability gain previously amortized |  |  |  |  |  |  |  |  |  | - | 383 | 732 | 1,050 |
| 74 Liability gain to amortize |  |  |  |  |  |  |  |  |  | $(4,312)$ | $(3,929)$ | $(3,580)$ | $(3,262)$ |
| 75 Liability gain amortization |  |  |  |  |  |  |  |  |  | (383) | (349) | (318) | (290) |
| 2017 Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 76 Asset gain (A) \& Phase-in amount (K-W) | $(33,765)$ |  |  |  |  |  |  |  |  |  | $(6,753)$ | $(13,506)$ | $(20,259)$ |
| 77 Asset gain previously amortized |  |  |  |  |  |  |  |  |  |  | - | 600 | 1,746 |
| 78 Asset gain remaining to amortize |  |  |  |  |  |  |  |  |  |  | $(6,753)$ | $(12,906)$ | $(18,513)$ |
| 79 Asset gain amortization |  |  |  |  |  |  |  |  |  |  | (600) | $(1,146)$ | $(1,644)$ |
| 80 Liability loss ${ }^{3}$ | 1,098 |  |  |  |  |  |  |  |  |  | 1,098 | 1,098 | 1,098 |
| 81 Liability loss previously amortized |  |  |  |  |  |  |  |  |  |  | - | (98) | (187) |
| 82 Liability loss to amortize |  |  |  |  |  |  |  |  |  |  | 1,098 | 1,000 | 911 |
| 83 Liability loss amortization |  |  |  |  |  |  |  |  |  |  | 98 | 89 | 81 |
| 2018 Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 84 Asset loss (A) \& Phase-in amount (L-W) | 47,471 |  |  |  |  |  |  |  |  |  |  | 9,494 | 18,988 |
| 85 Asset loss previously amortized |  |  |  |  |  |  |  |  |  |  |  | - | (843) |
| 86 Asset loss remaining to amortize |  |  |  |  |  |  |  |  |  |  |  | 9,494 | 18,145 |
| 87 Asset loss amortization |  |  |  |  |  |  |  |  |  |  |  | 843 | 1,612 |
| 88 Liability loss ${ }^{3}$ | 1,990 |  |  |  |  |  |  |  |  |  |  | 1,990 | 1,990 |
| 89 Liability loss previously amortized |  |  |  |  |  |  |  |  |  |  |  | - | (177) |
| 90 Liability loss to amortize |  |  |  |  |  |  |  |  |  |  |  | 1,990 | 1,813 |
| 91 Liability loss amortization |  |  |  |  |  |  |  |  |  |  |  | 177 | 161 |


| 2019 Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 92 Asset gain (A) \& Phase-in amount (M-W) | $(51,654)$ |  |  |  |  |  |  |  |  |  |  |  | $(10,331)$ |
| 93 Asset gain previously amortized |  |  |  |  |  |  |  |  |  |  |  |  | - |
| 94 Asset gain remaining to amortize |  |  |  |  |  |  |  |  |  |  |  |  | $(10,331)$ |
| 95 Asset gain amortization |  |  |  |  |  |  |  |  |  |  |  |  | (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) |
| Total 2008-2019 Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100 Total 2008-2019 asset experience amortization |  | - | (363) | 4,226 | 8,202 | 7,664 | 6,220 | 5,090 | 5,136 | 5,061 | 4,727 | 5,245 | 4,804 |
| 101 Total 2008-2019 liability experience amortization |  | - | 4,136 | 5,229 | 8,143 | 6,708 | 7,375 | 5,933 | 5,882 | 4,976 | 4,633 | 4,398 | 3,528 |
| 102 Other impacts including AVA limits, interest, contributions and allocation percents ${ }^{4}$ |  | - | (242) | $(2,488)$ | 349 | 1,079 | 1,950 | 3,444 | 2,420 | 5,211 | 5,811 | 6,197 | 6,197 |
| 103 Total aggregate normal cost |  | - | 3,531 | 6,967 | 16,694 | 15,451 | 15,545 | 14,467 | 13,438 | 15,248 | 15,171 | 15,840 | $\underline{ } 14,529$ |

$1,2,3,4$ See page 9 for footnotes.

Xcel Energy Inc. - MN Electric Rate Case - Order Point 40 Approximate Pension Cost Attributable to 2008-2019 Gains and Losses - Illustrative NSPM Aggregate Cost Method (\$ in 000s)

| Section 1 | $\begin{gathered} \text { A } \\ \text { (Gain)/Loss } \end{gathered}$ | $\begin{aligned} & \hline N \\ & 2021 \\ & \hline \end{aligned}$ | $2022$ | $2023$ | $2024$ | $2025$ | $2026$ | $2027$ | $2028$ | $2029$ | $2030$ | $\begin{gathered} \quad \times \\ \text { Total } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Asset loss (A) \& Phase-in amount (B-W) | 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 ${ }^{2}$ |  | $(80,136)$ | $(80,136)$ | $(80,136)$ | $(80,136)$ | $(80,136)$ | $(80,136)$ | $(80,136)$ | $(80,136)$ | $(80,136)$ | $(80,136)$ |  |
| 3 Asset loss previously amortized |  | (70,443) | $(74,863)$ | $(78,890)$ | $(82,560)$ | $(85,904)$ | $(88,951)$ | $(91,727)$ | $(94,256)$ | $(96,561)$ | $(98,661)$ |  |
| 4 Asset loss remaining to amortize |  | 49,761 | 45,341 | 41,314 | 37,644 | 34,300 | 31,253 | 28,477 | 25,948 | 23,643 | 21,543 |  |
| 5 Asset loss amortization |  | 4,420 | 4,027 | 3,670 | 3,344 | 3,047 | 2,776 | 2,529 | 2,305 | 2,100 | 1,913 | 100,574 |
| 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 |  |
| 7 Liability loss offset by surplus ${ }^{2}$ |  | $(20,518)$ | $(20,518)$ | $(20,518)$ | $(20,518)$ | $(20,518)$ | $(20,518)$ | $(20,518)$ | $(20,518)$ | $(20,518)$ | $(20,518)$ |  |
| 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-W) | $(13,435)$ | (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 |  | 7,870 | 8,364 | 8,814 | 9,224 | 9,598 | 9,939 | 10,250 | 10,533 | 10,791 | 11,026 |  |
| 13 Asset gain remaining to amortize |  | $(5,565)$ | $(5,071)$ | $(4,621)$ | $(4,211)$ | $(3,837)$ | $(3,496)$ | $(3,185)$ | $(2,902)$ | $(2,644)$ | $(2,409)$ |  |
| 14 Asset gain amortization |  | (494) | (450) | (410) | (374) | (341) | (311) | (283) | (258) | (235) | (214) | $(11,240)$ |
| 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 |  |
| 16 Liability loss offset by surplus ${ }^{2}$ |  | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ | $(19,954)$ |  |
| 17 Liability loss previously amortized |  | $(21,181)$ | $(22,018)$ | $(22,781)$ | $(23,476)$ | $(24,109)$ | $(24,686)$ | $(25,212)$ | $(25,691)$ | $(26,128)$ | $(26,526)$ |  |
| 18 Liability loss to amortize |  | 9,425 | 8,588 | 7,825 | 7,130 | 6,497 | 5,920 | 5,394 | 4,915 | 4,478 | 4,081 |  |
| 19 Liability loss amortization |  | 837 | 763 | 695 | 633 | 577 | 526 | 479 | 437 | 398 | 362 | 26,888 |
| 2010 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 Asset gain (A) \& Phase-in amount (D-W) | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ | $(18,960)$ |  |
| 21 Asset gain previously amortized |  | 10,103 | 10,890 | 11,607 | 12,260 | 12,855 | 13,397 | 13,891 | 14,341 | 14,751 | 15,125 |  |
| 22 Asset gain remaining to amortize |  | $(8,857)$ | $(8,070)$ | $(7,353)$ | $(6,700)$ | $(6,105)$ | $(5,563)$ | $(5,069)$ | $(4,619)$ | $(4,209)$ | $(3,835)$ |  |
| 23 Asset gain amortization |  | (787) | (717) | (653) | (595) | (542) | (494) | (450) | (410) | (374) | (341) | $(15,466)$ |
| 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 |  |
| 25 Liability loss previously amortized |  | $(7,872)$ | $(8,259)$ | $(8,611)$ | $(8,932)$ | $(9,224)$ | $(9,490)$ | $(9,733)$ | $(9,954)$ | $(10,156)$ | $(10,340)$ |  |
| 26 Liability loss to amortize |  | 4,352 | 3,965 | 3,613 | 3,292 | 3,000 | 2,734 | 2,491 | 2,270 | 2,068 | 1,884 |  |
| 27 Liability loss amortization |  | 387 | 352 | 321 | 292 | 266 | 243 | 221 | 202 | 184 | 167 | 10,507 |
| 2011 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 Asset loss (A) \& Phase-in amount (E-W) | 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 |  | $(3,784)$ | $(4,150)$ | $(4,484)$ | $(4,788)$ | $(5,065)$ | $(5,318)$ | $(5,548)$ | $(5,758)$ | $(5,949)$ | $(6,123)$ |  |
| 30 Asset loss remaining to amortize |  | 4,125 | 3,759 | 3,425 | 3,121 | 2,844 | 2,591 | 2,361 | 2,151 | 1,960 | 1,786 |  |
| 31 Asset loss amortization |  | 366 | 334 | 304 | 277 | 253 | 230 | 210 | 191 | 174 | 159 | 6,282 |
| 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 |  |
| 33 Liability loss previously amortized |  | $(16,651)$ | $(17,686)$ | $(18,629)$ | $(19,488)$ | $(20,271)$ | $(20,984)$ | $(21,634)$ | $(22,226)$ | $(22,766)$ | $(23,258)$ |  |
| 34 Liability loss to amortize |  | 11,651 | 10,616 | 9,673 | 8,814 | 8,031 | 7,318 | 6,668 | 6,076 | 5,536 | 5,044 |  |
| 35 Liability loss amortization |  | 1,035 | 943 | 859 | 783 | 713 | 650 | 592 | 540 | 492 | 448 | 23,706 |
| 2012 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 36 Asset gain (A) \& Phase-in amount (F-W) | $(18,826)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ | $(18,826)$ |  |
| 37 Asset gain previously amortized |  | 7,964 | 8,929 | 9,808 | 10,609 | 11,339 | 12,004 | 12,610 | 13,162 | 13,665 | 14,123 |  |
| 38 Asset gain remaining to amortize |  | $(10,862)$ | $(9,897)$ | $(9,018)$ | $(8,217)$ | $(7,487)$ | $(6,822)$ | $(6,216)$ | $(5,664)$ | $(5,161)$ | $(4,703)$ |  |
| 39 Asset gain amortization |  | (965) | (879) | (801) | (730) | (665) | (606) | (552) | (503) | (458) | (418) | (14,541) |
| 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 |  |
| 41 Liability loss previously amortized |  | $(11,110)$ | $(12,000)$ | $(12,811)$ | $(13,550)$ | $(14,223)$ | $(14,836)$ | $(15,395)$ | $(15,904)$ | $(16,368)$ | $(16,791)$ |  |
| 42 Liability loss to amortize |  | 10,019 | 9,129 | 8,318 | 7,579 | 6,906 | 6,293 | 5,734 | 5,225 | 4,761 | 4,338 |  |
| 43 Liability loss amortization |  | 890 | 811 | 739 | 673 | 613 | 559 | 509 | 464 | 423 | 385 | 17,176 |
| 2013 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 44 Asset loss (A) \& Phase-in amount (G-W) | 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 |  | (417) | (481) | (539) | (592) | (640) | (684) | (724) | (761) | (794) | (825) |  |
| 46 Asset loss remaining to amortize |  | 721 | 657 | 599 | 546 | 498 | 454 | 414 | 377 | 344 | 313 |  |
| 47 Asset loss amortization |  | 64 | 58 | 53 | 48 | 44 | 40 | 37 | 33 | 31 | 28 | 853 |
| 48 Liability loss ${ }^{3}$ | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 | 14,141 |  |
| 49 Liability loss previously amortized |  | $(6,774)$ | $(7,428)$ | $(8,024)$ | $(8,567)$ | $(9,062)$ | $(9,513)$ | $(9,924)$ | $(10,299)$ | $(10,640)$ | $(10,951)$ |  |
| 50 Liability loss to amortize |  | 7,367 | 6,713 | 6,117 | 5,574 | 5,079 | 4,628 | 4,217 | 3,842 | 3,501 | 3,190 |  |
| 51 Liability loss amortization |  | 654 | 596 | 543 | 495 | 451 | 411 | 375 | 341 | 311 | 283 | 11,234 |
| 2014 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 52 Asset gain (A) \& Phase-in amount (H-W) | (252) | (252) | (252) | (252) | (252) | (252) | (252) | (252) | (252) | (252) | (252) |  |
| 53 Asset gain previously amortized |  | 77 | 93 | 107 | 120 | 132 | 143 | 153 | 162 | 170 | 177 |  |
| 54 Asset gain remaining to amortize |  | (175) | (159) | (145) | (132) | (120) | (109) | (99) | (90) | (82) | (75) |  |
| 55 Asset gain amortization |  | (16) | (14) | (13) | (12) | (11) | (10) | (9) | (8) | (7) | (7) | (184) |
| 56 Liability gain ${ }^{3}$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ | $(8,004)$ |  |
| 57 Liability gain previously amortized |  | 3,424 | 3,831 | 4,202 | 4,540 | 4,848 | 5,128 | 5,383 | 5,616 | 5,828 | 6,021 |  |
| 58 Liability gain to amortize |  | $(4,580)$ | $(4,173)$ | $(3,802)$ | $(3,464)$ | $(3,156)$ | $(2,876)$ | $(2,621)$ | $(2,388)$ | $(2,176)$ | $(1,983)$ |  |
| 59 Liability gain amortization |  | (407) | (371) | (338) | (308) | (280) | (255) | (233) | (212) | (193) | (176) | $(6,197)$ |
| ${ }^{1,2,3}$ See page 9 for footnotes. |  |  |  |  |  |  |  |  |  |  |  |  |

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Section 1

## 2015 Experience

60 Asset loss (A) \& Phase-in amount (I-W)
61 Asset loss previously amortized 62 Asset loss remaining to amortize 63 Asset loss amortization

## 64 Liability loss ${ }^{3}$

65 Liability loss previously amortized
66 Liability loss to amortize
67 Liability loss amortization
2016 Experience
68 Asset loss (A) \& Phase-in amount (J-W)
69 Asset loss previously amortized
70 Asset loss remaining to amortize
71 Asset loss amortization

## 72 Liability gain ${ }^{3}$

73 Liability gain previously amortized
74 Liability gain to amortize
75 Liability gain amortization
76 Asset gain (A) \& Phase-in amount (K-W)
77 Asset gain previously amortized
78 Asset gain remaining to amortize
79 Asset gain amortization
80 Liability loss ${ }^{3}$
81 Liability loss previously amortized
82 Liability loss to amortize
83 Liability loss amortization
2018 Experience
84 Asset loss (A) \& Phase-in amount (L-W)
85 Asset loss previously amortized
86 Asset loss remaining to amortize
87 Asset loss amortization
88 Liability loss ${ }^{3}$
89 Liability loss previously amortized
90 Liability loss to amortize
91 Liability loss amortization

## 2019 Experience

92 Asset gain (A) \& Phase-in amount (M-W)
93 Asset gain previously amortized
94 Asset gain remaining to amortize
95 Asset gain amortization
96 Liability gain ${ }^{3}$
97 Liability gain previously amortized

98 Liability gain to amortize
99 Liability gain amortization

## Total 2008-2019 Experience

100 Total 2008-2019 asset experience amortization
101 Total 2008-2019 liability experience amortization
102 Other impacts including AVA limits, interest, contributions and allocation percents ${ }^{4}$
103 Total aggregate normal cost
${ }^{1,2,3,4}$ See page 9 for footnotes.

Xcel Energy Inc. - MN Electric Rate Case - Order Point 40
Exhibit___(RRS-1), Schedule 3 Approximate Pension Cost Attributable to 2008-2019 Gains and Losses - Illustrative ${ }^{5}$

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Section 2

## 2008 Experience

1 Asset loss (A) \& Phase-in amount (B-W)
2 Asset loss previously amortized
Asset loss remaining to amortize
4 Asset loss amortization ${ }^{6}$

Liability gain previously amortized
7 Liability gain remaining to amortize
8 Liability gain amortization ${ }^{6}$

## 2009 Experience

9 Asset loss (A) \& Phase-in amount (C-W)
10 Asset loss previously amortized
11 Asset loss remaining to amortize
12 Asset loss amortization ${ }^{6}$
4 Liability loss previously amortized
15 Liability loss to amortize
16 Liability loss amortization ${ }^{6}$

## 2010 Experience

17 Asset gain (A) \& Phase-in amount (D-W)
18 Asset gain previously amortized
19 Asset gain remaining to amortize 20 Asset gain amortization ${ }^{6}$

21 Liability loss ${ }^{7}$ Liability loss previously amortized
23 Liability loss to amortize
24 Liability loss amortization ${ }^{6}$

## 2011 Experience

25 Asset loss (A) \& Phase-in amount (E-W)
26 Asset loss previously amortized
27 Asset loss remaining to amortize
28 Asset loss amortization ${ }^{6}$
29 Liability loss $^{7}$
31 Liability loss to amortize
Liability loss amortization ${ }^{6}$

## 2012 Experience

33 Asset gain (A) \& Phase-in amount (F-W)
34 Asset gain previously amortized
35 Asset gain remaining to amortize
36 Asset gain amortization ${ }^{6}$
$\begin{array}{ll}37 & \text { Liability loss }{ }^{7} \\ 38 & \text { Liability loss previously amortized }\end{array}$
39 Liability loss to amortize
40 Liability loss amortization ${ }^{6}$

## 2013 Experience

41 Asset loss (A) \& Phase-in amount (G-W)
42 Asset loss previously amortized
43 Asset loss remaining to amortize
44 Asset loss amortization ${ }^{6}$
45 Liability gain ${ }^{7}$
46 Liability gain previously amortized
47 Liability gain to amortize
48 Liability gain amortization ${ }^{6}$

## 2014 Experience

49 Asset loss (A) \& Phase-in amount (H-W)
50 Asset loss previously amortized
51 Asset loss remaining to amortize
52 Asset loss amortization ${ }^{6}$
53 Liability loss ${ }^{7}$
54 Liability loss previously amortized
55 Liability loss to amortize
56 Liability loss amortization ${ }^{6}$
$\overline{5,6,7,9}$ See page 9 for footnotes.

Xcel Energy Inc. - MN Electric Rate Case - Order Point 40
Exhibit___(RRS-1), Schedule 3

## Approximate Pension Cost Attributable to 2008-2019 Gains and Losses - Illustrative ${ }^{5}$

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Section 2

## 2015 Experience

57 Asset loss (A) \& Phase-in amount (I-W)
58 Asset loss previously amortized
59 Asset loss remaining to amortize
60 Asset loss amortization ${ }^{6}$
$61{\text { Liability } \text { gain }^{7}}^{7}$ Liability gain previously amortized
63 Liability gain to amortize
64 Liability gain amortization ${ }^{\text {b }}$

## 2016 Experience

65 Asset loss (A) \& Phase-in amount (J-W)
66 Asset loss previously amortized
67 Asset loss remaining to amortize
68 Asset loss amortization ${ }^{6}$
69 Liability loss $^{7}$
70 Liability loss previously amortized
71 Liability loss to amortize
72 Liability loss amortization ${ }^{6}$

## 2017 Experience

| 73 Asset gain (A) \& Phase-in amount (K-W) | $(8,969)$ | $(1,648)$ | $(3,144)$ | $(4,640)$ |
| :---: | :---: | :---: | :---: | :---: |
| 74 Asset gain previously amortized |  | - | 330 | 577 |
| 75 Asset gain remaining to amortize |  | $(1,648)$ | $(2,814)$ | $(4,063)$ |
| 76 Asset gain amortization ${ }^{\circ}$ |  | (330) | (247) | (354) |
| 77 Liability loss ${ }^{7}$ | 15,442 | 15,442 | 15,442 | 15,442 |
| 78 Liability loss previously amortized |  | - | $(3,087)$ | $(4,172)$ |
| 79 Liability loss to amortize |  | 15,442 | 12,355 | 11,270 |
| 80 Liability loss amortization ${ }^{6}$ |  | 3,087 | 1,085 | 981 |
| 2018 Experience |  |  |  |  |
| 81 Asset loss (A) \& Phase-in amount (L-W) | 16,220 |  | 2,946 | 5,892 |
| 82 Asset loss previously amortized |  |  | - | (259) |
| 83 Asset loss remaining to amortize |  |  | 2,946 | 5,633 |
| 84 Asset loss amortization ${ }^{\circ}$ |  |  | 259 | 490 |
| 85 Liability gain $^{7}$ | $(6,738)$ |  | $(6,738)$ | $(6,738)$ |
| 86 Liability gain previously amortized |  |  | - | 592 |
| 87 Liability gain to amortize |  |  | $(6,738)$ | $(6,146)$ |
| 88 Liability gain amortization ${ }^{6}$ |  |  | (592) | (535) |

## 2019 Experience

| 89 Asset gain (A) \& Phase-in amount (M-W) | $(14,796)$ | $(2,959)$ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 90 Asset gain previously amortized |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 91 Asset gain remaining to amortize |  |  |  |  |  |  |  |  |  |  |  |  | $(2,959)$ |
| 92 Asset gain amortization ${ }^{\circ}$ |  |  |  |  |  |  |  |  |  |  |  |  | (258) |
| 93 Liability loss ${ }^{7}$ | 9,599 |  |  |  |  |  |  |  |  |  |  |  | 9,599 |
| 94 Liability loss previously amortized |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95 Liability loss to amortize |  |  |  |  |  |  |  |  |  |  |  |  | 9,599 |
| 96 Liability loss amortization ${ }^{6}$ |  |  |  |  |  |  |  |  |  |  |  |  | 835 |
| Total 2008-2019 Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 97 Total 2008-2019 asset experience amortization |  | 933 | 1,797 | 2,544 | 3,317 | 3,858 | 3,490 | 3,027 | 2,751 | 6,339 | 4,964 | 2,055 | 1,903 |
| 98 Total 2008-2019 liability experience amortization |  | (590) | (58) | 272 | 1,039 | 2,594 | 1,915 | 2,898 | 2,384 | 8,097 | 9,254 | 2,659 | 3,240 |
| 99 Other impacts including corridor and net gain/loss position prior to $2008^{8}$ |  | (343) | $(1,217)$ | $(1,191)$ | $(1,546)$ | $(1,913)$ | $(1,894)$ | $(1,874)$ | $(1,668)$ | $(5,662)$ | $(4,400)$ | $(1,771)$ | $(1,723)$ |
| 100 Total gain/loss amortization |  | - | 522 | 1,625 | 2,810 | 4,539 | 3,511 | 4,051 | 3,467 | 8,774 | 9,818 | 2,943 | 3,420 |
| Inside gain/loss recognition corridor (Yes/No) |  | Yes | No | No | No | No | No | No | No | No | No | No | No |

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| Section 2 | $\begin{gathered} \mathrm{A} \\ \text { (Gain)/Loss } \end{gathered}$ | $\begin{gathered} \hline N \\ 2021 \\ \hline \end{gathered}$ | $\begin{gathered} \circ \\ 2022 \\ \hline \end{gathered}$ | $\begin{array}{r} P \\ 2023 \\ \hline \end{array}$ | $\begin{gathered} Q \\ 2024 \\ \hline \end{gathered}$ | $\begin{gathered} R \\ 2025 \end{gathered}$ | $\begin{gathered} \mathrm{S} \\ 2026 \\ \hline \end{gathered}$ | $\begin{gathered} \text { T } \\ 2027 \end{gathered}$ | $2028$ | $2029$ | $\begin{gathered} W \\ 2030 \end{gathered}$ | $\begin{gathered} x \\ \text { Total } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2008 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Asset loss (A) \& Phase-in amount (B-W) <br> 2 Asset loss previously amortized | 48,577 | $\begin{array}{r} 48,577 \\ (34,361) \\ \hline \end{array}$ | $\begin{gathered} 48,577 \\ (35,581) \\ \hline \end{gathered}$ | $\begin{gathered} 48,577 \\ (36,685) \\ \hline \end{gathered}$ | $\begin{gathered} 48,577 \\ (37,683) \\ \hline \end{gathered}$ | $\begin{gathered} 48,577 \\ (38,586) \\ \hline \end{gathered}$ | $\begin{gathered} 48,577 \\ (39,406) \\ \hline \end{gathered}$ | $\begin{gathered} 48,577 \\ (40,158) \\ \hline \end{gathered}$ | $\begin{gathered} 48,577 \\ (40,849) \\ \hline \end{gathered}$ | $\begin{gathered} 48,577 \\ (41,483) \\ \hline \end{gathered}$ | $\begin{gathered} 48,577 \\ (42,065) \\ \hline \end{gathered}$ |  |
| 3 Asset loss remaining to amortize |  | 14,216 | 12,996 | 11,892 | 10,894 | 9,991 | 9,171 | 8,419 | 7,728 | 7,094 | 6,512 |  |
| 4 Asset loss amortization ${ }^{6}$ |  | 1,220 | 1,104 | 998 | 903 | 820 | 752 | 691 | 634 | 582 | 534 | 42,599 |
| 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 Liability gain previously amortized |  | 4,692 | 4,817 | 4,930 | 5,032 | 5,124 | 5,208 | 5,285 | 5,355 | 5,420 | 5,479 |  |
| 7 Liability gain remaining to amortize |  | $(1,452)$ | $(1,327)$ | $(1,214)$ | $(1,112)$ | $(1,020)$ | (936) | (859) | (789) | (724) | (664) |  |
| 8 Liability gain amortization ${ }^{6}$ |  | (125) | (113) | (102) | (92) | (84) | (77) | (70) | (65) | (59) | (54) | $(5,533)$ |
| 2009 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 Asset loss (A) \& Phase-in amount (C-W) | 249 | 249 | 249 | 249 | 249 | 249 | 249 | 249 | 249 | 249 | 249 |  |
| 10 Asset loss previously amortized |  | (169) | (176) | (182) | (188) | (193) | (198) | (202) | (206) | (210) | (213) |  |
| 11 Asset loss remaining to amortize |  | 80 | 73 | 67 | 61 | 56 | 51 | 47 | 43 | 39 | 36 |  |
| 12 Asset loss amortization ${ }^{6}$ |  | 7 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 3 | 3 | 216 |
| 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 |  |
| 14 Liability loss previously amortized |  | $(3,657)$ | $(3,768)$ | $(3,868)$ | $(3,959)$ | $(4,041)$ | $(4,116)$ | $(4,184)$ | $(4,247)$ | $(4,305)$ | $(4,358)$ |  |
| 15 Liability loss to amortize |  | 1,293 | 1,182 | 1,082 | 991 | 909 | 834 | 766 | 703 | 645 | 593 |  |
| 16 Liability loss amortization ${ }^{6}$ |  | 111 | 100 | 91 | 82 | 75 | 68 | 63 | 58 | 53 | 49 | 4,407 |
| 2010 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 Asset gain (A) \& Phase-in amount (D-W) | $(1,791)$ | $(1,791)$ | $(1,791)$ | $(1,791)$ | $(1,791)$ | $(1,791)$ | $(1,791)$ | $(1,791)$ | $(1,791)$ | $(1,791)$ | $(1,791)$ |  |
| 18 Asset gain previously amortized |  | 1,146 | 1,201 | 1,251 | 1,296 | 1,337 | 1,374 | 1,408 | 1,439 | 1,468 | 1,494 |  |
| 19 Asset gain remaining to amortize |  | (645) | (590) | (540) | (495) | (454) | (417) | (383) | (352) | (323) | (297) |  |
| 20 Asset gain amortization ${ }^{6}$ |  | (55) | (50) | (45) | (41) | (37) | (34) | (31) | (29) | (26) | (24) | $(1,518)$ |
| 21 Liability loss ${ }^{7}$ <br> 22 Liability loss previously amortized | 3,342 | $\begin{gathered} 3,342 \\ (2,375) \\ \hline \end{gathered}$ | $\begin{gathered} 3,342 \\ (2,458) \end{gathered}$ | $\begin{gathered} 3,342 \\ (2,533) \end{gathered}$ | $\begin{gathered} 3,342 \\ (2,601) \\ \hline \end{gathered}$ | $\begin{gathered} 3,342 \\ (2,662) \\ \hline \end{gathered}$ | $\begin{gathered} 3,342 \\ (2,718) \\ \hline \end{gathered}$ | $\begin{gathered} 3,342 \\ (2,769) \\ \hline \end{gathered}$ | $\begin{gathered} 3,342 \\ (2,816) \\ \hline \end{gathered}$ | $\begin{array}{r} 3,342 \\ (2,859) \\ \hline \end{array}$ | $\begin{gathered} 3,342 \\ (2,899) \end{gathered}$ |  |
| 23 Liability loss to amortize |  | 967 | 884 | 809 | 741 | 680 | 624 | 573 | 526 | 483 | 443 |  |
| 24 Liability loss amortization ${ }^{6}$ |  | 83 | 75 | 68 | 61 | 56 | 51 | 47 | 43 | 40 | 36 | 2,935 |
| 2011 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 Asset loss (A) \& Phase-in amount (E-W) 26 Asset loss previously amortized | 3,628 | $\begin{array}{r} 3,628 \\ (2,186) \\ \hline \end{array}$ | $\begin{gathered} 3,628 \\ (2,310) \\ \hline \end{gathered}$ | $\begin{array}{r} 3,628 \\ (2,422) \\ \hline \end{array}$ | $\begin{gathered} 3,628 \\ (2,523) \\ \hline \end{gathered}$ | $\begin{gathered} 3,628 \\ (2,615) \\ \hline \end{gathered}$ | $\begin{gathered} 3,628 \\ (2,698) \\ \hline \end{gathered}$ | $\begin{array}{r} 3,628 \\ (2,774) \\ \hline \end{array}$ | $\begin{array}{r} 3,628 \\ (2,844) \\ \hline \end{array}$ | $\begin{gathered} 3,628 \\ (2,908) \\ \hline \end{gathered}$ | $\begin{gathered} 3,628 \\ (2,967) \\ \hline \end{gathered}$ |  |
| 27 Asset loss remaining to amortize |  | 1,442 | 1,318 | 1,206 | 1,105 | 1,013 | 930 | 854 | 784 | 720 | 661 |  |
| 28 Asset loss amortization ${ }^{6}$ |  | 124 | 112 | 101 | 92 | 83 | 76 | 70 | 64 | 59 | 54 | 3,021 |
| 29 Liability loss $^{7}$ 30 Liability loss previously amortized | 8,038 | $\begin{gathered} 8,038 \\ (5,462) \\ \hline \end{gathered}$ | $\begin{gathered} 8,038 \\ (5,683) \\ \hline \end{gathered}$ | $\begin{gathered} 8,038 \\ (5,883) \\ \hline \end{gathered}$ | $\begin{gathered} 8,038 \\ (6,064) \\ \hline \end{gathered}$ | $\begin{gathered} 8,038 \\ (6,228) \\ \hline \end{gathered}$ | $\begin{gathered} 8,038 \\ (6,376) \\ \hline \end{gathered}$ | $\begin{gathered} 8,038 \\ (6,512) \\ \hline \end{gathered}$ | $\begin{gathered} 8,038 \\ (6,637) \\ \hline \end{gathered}$ | $\begin{gathered} 8,038 \\ (6,752) \\ \hline \end{gathered}$ | $\begin{gathered} 8,038 \\ (6,857) \\ \hline \end{gathered}$ |  |
| 31 Liability loss to amortize |  | 2,576 | 2,355 | 2,155 | 1,974 | 1,810 | 1,662 | 1,526 | 1,401 | 1,286 | 1,181 |  |
| 32 Liability loss amortization ${ }^{6}$ |  | 221 | 200 | 181 | 164 | 148 | 136 | 125 | 115 | 105 | 97 | 6,954 |
| 2012 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 33 Asset gain (A) \& Phase-in amount (F-W) | $(3,403)$ | $(3,403)$ | $(3,403)$ | $(3,403)$ | $(3,403)$ | $(3,403)$ | $(3,403)$ | $(3,403)$ | $(3,403)$ | $(3,403)$ | $(3,403)$ |  |
| 34 Asset gain previously amortized |  | 1,910 | 2,038 | 2,154 | 2,259 | 2,354 | 2,440 | 2,519 | 2,592 | 2,659 | 2,720 |  |
| 35 Asset gain remaining to amortize |  | $(1,493)$ | $(1,365)$ | $(1,249)$ | $(1,144)$ | $(1,049)$ | (963) | (884) | (811) | (744) | (683) |  |
| 36 Asset gain amortization ${ }^{6}$ |  | (128) | (116) | (105) | (95) | (86) | (79) | (73) | (67) | (61) | (56) | $(2,776)$ |
| 37 Liability loss $^{7}$ <br> 38 Liability loss previously amortized | 17,295 | $\begin{array}{r} 17,295 \\ (11,146) \\ \hline \end{array}$ | $\begin{gathered} 17,295 \\ (11,674) \\ \hline \end{gathered}$ | $\begin{gathered} 17,295 \\ (12,152) \\ \hline \end{gathered}$ | $\begin{gathered} 17,295 \\ (12,583) \\ \hline \end{gathered}$ | $\begin{gathered} 17,295 \\ (12,973) \\ \hline \end{gathered}$ | $\begin{gathered} 17,295 \\ (13,328) \\ \hline \end{gathered}$ | $\begin{gathered} 17,295 \\ (13,653) \\ \hline \end{gathered}$ | $\begin{gathered} 17,295 \\ (13,952) \\ \hline \end{gathered}$ | $\begin{gathered} 17,295 \\ (14,226) \\ \hline \end{gathered}$ | $\begin{gathered} 17,295 \\ (14,478) \end{gathered}$ |  |
| 39 Liability loss to amortize |  | 6,149 | 5,621 | 5,143 | 4,712 | 4,322 | 3,967 | 3,642 | 3,343 | 3,069 | 2,817 |  |
| 40 Liability loss amortization ${ }^{6}$ |  | 528 | 478 | 431 | 390 | 355 | 325 | 299 | 274 | 252 | 231 | 14,709 |
| 2013 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 41 Asset loss (A) \& Phase-in amount (G-W) <br> 42 Asset loss previously amortized | 356 | $\begin{gathered} 349 \\ (176) \end{gathered}$ | $\begin{gathered} 349 \\ (191) \end{gathered}$ | $\begin{gathered} 349 \\ (204) \end{gathered}$ | $\begin{gathered} 349 \\ (216) \end{gathered}$ | $\begin{gathered} 349 \\ (227) \end{gathered}$ | $\begin{gathered} 349 \\ (237) \end{gathered}$ | $\begin{gathered} 349 \\ (246) \end{gathered}$ | $\begin{gathered} 349 \\ (254) \end{gathered}$ | $\begin{gathered} 349 \\ (262) \end{gathered}$ | $\begin{gathered} 349 \\ (269) \end{gathered}$ |  |
| 43 Asset loss remaining to amortize |  | 173 | 158 | 145 | 133 | 122 | 112 | 103 | 95 | 87 | 80 |  |
| 44 Asset loss amortization ${ }^{6}$ |  | 15 | 13 | 12 | 11 | 10 | 9 | 8 | 8 | 7 | 7 | 276 |
| 45 Liability gain $^{7}$ | $(4,553)$ | $(4,553)$ | $(4,553)$ | $(4,553)$ | $(4,553)$ | $(4,553)$ | $(4,553)$ | $(4,553)$ | $(4,553)$ | $(4,553)$ | $(4,553)$ |  |
| 46 Liability gain previously amortized |  | 2,760 | 2,914 | 3,053 | 3,179 | 3,293 | 3,396 | 3,491 | 3,578 | 3,658 | 3,731 |  |
| 47 Liability gain to amortize |  | $(1,793)$ | $(1,639)$ | $(1,500)$ | $(1,374)$ | $(1,260)$ | $(1,157)$ | $(1,062)$ | (975) | (895) | (822) |  |
| 48 Liability gain amortization ${ }^{6}$ |  | (154) | (139) | (126) | (114) | (103) | (95) | (87) | (80) | (73) | (67) | $(3,798)$ |
| 2014 Experience |  |  |  |  |  |  |  |  |  |  |  |  |
| 49 Asset loss (A) \& Phase-in amount (H-W) | 126 | 119 | 119 | 119 | 119 | 119 | 119 | 119 | 119 | 119 | 119 |  |
| 50 Asset loss previously amortized |  | (50) | (56) | (61) | (66) | (70) | (74) | (78) | (81) | (84) | (87) |  |
| 51 Asset loss remaining to amortize |  | 69 | 63 | 58 | 53 | 49 | 45 | 41 | 38 | 35 | 32 |  |
| 52 Asset loss amortization ${ }^{6}$ |  | 6 | 5 | 5 | , | 4 | 4 | 3 | 3 | 3 | 3 | 90 |
| 53 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 |  |
| 54 Liability loss previously amortized |  | $(7,323)$ | $(7,809)$ | $(8,249)$ | $(8,646)$ | $(9,005)$ | $(9,331)$ | $(9,631)$ | $(9,906)$ | $(10,159)$ | $(10,391)$ |  |
| 55 Liability loss to amortize |  | 5,662 | 5,176 | 4,736 | 4,339 | 3,980 | 3,654 | 3,354 | 3,079 | 2,826 | 2,594 |  |
| 56 Liability loss amortization ${ }^{6}$ |  | 486 | 440 | 397 | 359 | 326 | 300 | 275 | 253 | 232 | 213 | 10,604 |
| $5 \overline{5,6,7,9}$ See page 9 for footnotes. |  |  |  |  |  |  |  |  |  |  |  |  |

Xcel Energy Inc. - MN Electric Rate Case - Order Point 40
Exhibit___(RRS-1), Schedule 3 Approximate Pension Cost Attributable to 2008-2019 Gains and Losses - Illustrative ${ }^{5}$

XES ASC 715 (FAS 87)
Page 11 of 12 (\$ in 000s)
Section 2

## 2015 Experience

57 Asset loss (A) \& Phase-in amount (I-W)
58 Asset loss previously amortized
59 Asset loss remaining to amortize 60 Asset loss amortization ${ }^{6}$

## 61 Liability gain ${ }^{7}$

62 Liability gain previously amortized
63 Liability gain to amortize
64 Liability gain amortization

## 2016 Experience

65 Asset loss (A) \& Phase-in amount (J-W)
6 Asset loss previously amortized
67 Asset loss remaining to amortize
68 Asset loss amortization ${ }^{6}$
69 Liability loss $^{7}$
71 Liability loss to amortize
72 Liability loss amortization ${ }^{6}$

## 2017 Experience

73 Asset gain (A) \& Phase-in amount (K-W)
74 Asset gain previously amortized
75 Asset gain remaining to amortize
76 Asset gain amortization ${ }^{\circ}$
77 Liability loss ${ }^{7}$
78 Liability loss previously amortized
79 Liability loss to amortize
80 Liability loss amortization ${ }^{6}$

## 2018 Experience <br> 81 Asset loss (A) \& Phase-in amount (L-W)

82 Asset loss previously amortized
83 Asset loss remaining to amortize
44 Asset loss amortization
85 Liability gain ${ }^{7}$
86 Liability gain previously amortized
87 Liability gain to amortize
88 Liability gain amortization ${ }^{6}$

## 2019 Experience

89 Asset gain (A) \& Phase-in amount (M-W)
90 Asset gain previously amortized
91 Asset gain remaining to amortize
92 Asset gain amortization
93 Liability loss ${ }^{7}$
95 Liability loss to amortize ${ }^{6}$
96 Liability loss amortization ${ }^{6}$

## Total 2008-2019 Experience

97 Total 2008-2019 asset experience amortization
98 Total 2008-2019 liability experience amortization
99 Other impacts including corridor and net gain/loss position prior to $2008^{8}$
100 Total gain/loss amortization
Inside gain/loss recognition corridor (Yes/No)
5,6,7,8,9 See page 9 for footnotes.

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## Xcel Energy Inc. - MN Electric Rate Case - Order Point 40

Exhibit

## 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.
${ }^{7}$ 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.
$\qquad$

## SFAS 87 Amortization

Assumes no prior year gain or loss balance

$\qquad$

## 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 market-related 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 $\$ 200,000(\$ 1,000,000 \mathrm{x}$ $1 / 5$ ) 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 <br> Recognized | Year 1 <br> Amort | Year 2 <br> Amort | Year 3 <br> Amort | Year 4 <br> Amort | Year 5 <br> Amort | Year 6 <br> 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 marketrelated 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 marketrelated 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 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 marketrelated value). Asset gains and losses not yet reflected in marketrelated value are not required to be amortized under paragraphs 32 and 33 .

Schedule 6
XEPP Fund Analysis
(Amounts in Thousands)

| Year | Beginning of Year Market Value | Contributions | Earnings on Fund Investments | Pension Payments | $\begin{gathered} \text { Acquisitions/Tra } \\ \text { nsfers } \end{gathered}$ | 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\% |
| 1960 | 32,123 | 4,267 | 2,571 | $(1,359)$ | - |  | 37,602 | 7.65\% |
| 1961 | 37,602 | 4,716 | 4,121 | $(1,557)$ | - |  | 44,882 | 10.51\% |
| 1962 | 44,882 | 5,047 | $(4,158)$ | $(1,785)$ | - |  | 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\% |
| 1980 | 186,416 | 20,523 | 41,250 | $(11,590)$ | - |  | 236,599 | 21.59\% |
| 1981 | 236,599 | 23,131 | $(15,502)$ | $(12,705)$ | - |  | 231,523 | -6.41\% |
| 1982 | 231,523 | 27,270 | 59,048 | $(14,242)$ | - |  | 303,599 | 24.80\% |
| 1983 | 303,599 | 27,740 | 66,064 | $(5,743)$ | - |  | 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 | $(108,764)$ | - |  | 2,418,637 | 13.98\% |
| 2000 | 2,418,637 | - | 89,651 | $(135,462)$ | 38,412 |  | 2,411,238 | 6.90\% |
| 2001 | 2,411,238 | - | $(204,933)$ | $(115,459)$ | - |  | 2,090,846 | -8.31\% |
| 2002 | 2,090,846 | 912 | $(318,389)$ | $(155,606)$ | 157,157 | (994) | 1,773,926 | -10.90\% |
| 2003 | 1,773,926 | 1,712 | 372,354 | $(169,645)$ | - | $(9,546)$ | 1,968,801 | 22.61\% |
| 2004 | 1,968,801 | - | 179,697 | $(161,054)$ | - | $(27,627)$ | 1,959,817 | 9.34\% |
| 2005 | 1,959,817 | - | 160,630 | $(168,429)$ | - |  | 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 | $(69,515)$ | $(237,016)$ | $(2,444)$ |  | 1,373,982 | -4.51\% |
| 2019 | 1,373,982 | 90,188 | 284,993 | $(162,284)$ | 3,928 |  | 1,590,807 | 20.91\% |

EEI Pension and OPEB Survey 2019-20

| Company | Expected Discount Rate | Yield Curve / Model (Firm) | Yield Curve / Model (Specific) | Long-Run Expected Return | Expected <br> Return CY <br> (2019) | Expected Return $\mathrm{CY}+1$ (2020) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EEI-1 | 3.20\% | Willis Towers Watson | BOND:Link | 6.75\% | 19.00\% | 6.75\% |
| EEI-2 | 3.47\% | Willis Towers Watson | BOND:Link | 7.00\% | 23.64\% | 7.00\% |
| EEI-3 | 3.57\% | Willis Towers Watson | BOND:Link | 8.65\% |  | 8.60\% |
| EEI-4 |  | Willis Towers Watson | BOND:Link | 5.90\% | 15.00\% |  |
| EEI-5 | 3.30\% | Aon Hewitt | AA Above Median | 7.80\% | 22.77\% | 7.70\% |
| EEI-6 | 2.97\% | Citigroup | Discount Curve | 6.25\% |  | 6.25\% |
| EEI-7 | 3.46\% | Willis Towers Watson | Rate:Link | 6.00\% | 23.30\% | 5.70\% |
| EEI-8 | 3.43\% | Willis Towers Watson | BOND:Link | 5.90\% | 19.00\% | 5.90\% |
| EEI-9 | 3.47\% | Mercer | Bond Model | 7.25\% | 19.30\% | 6.88\% |
| EEI-10 | 3.31\% | Aon Hewitt | AA Only Above Median | 8.25\% | 13.00\% | 8.25\% |
| EEI-11 | 3.11\% | Aon Hewitt | AA Only Bond Universe | 6.00\% | 19.00\% | 6.00\% |
| EEI-12 | 3.66\% | Willis Towers Watson | BOND:Link | 7.25\% | 25.00\% | 7.25\% |
| EEI-13 | 3.27\% | Aon Hewitt | AA Above Median | 6.00\% |  | 5.25\% |
| EEI-14 | 3.42\% | Willis Towers Watson | BOND:Link | 7.12\% | 22.62\% | 6.88\% |
| EEI-15 | 3.50\% | Willis Towers Watson | BOND:Link | 7.60\% | 21.00\% | 7.60\% |
| EEI-16 | 3.50\% | Willis Towers Watson | BOND:Link | 7.00\% | 23.30\% | 7.00\% |
| EEI-17 | 3.20\% | Aon Hewitt | AA Above Median | 6.00\% | 20.00\% | 5.75\% |
| EEI-18 | 3.34\% | Aon Hewitt | AA Above Median | 7.50\% | 20.30\% | 7.50\% |
| EEI-19 | 3.25\% | Other | FTSE: Pension Discont | 7.90\% | 16.60\% | 7.90\% |
| EEI-20 | 3.39\% | Aon Hewitt | AA Above Median | 7.25\% |  | 7.00\% |
| EEI-21 | 3.42\% | Mercer | Proprietary | 7.20\% |  | 7.20\% |
| EEI-22 | 3.12\% | Aon Hewitt | AA-AAA Bond Universe | 5.64\% | 24.20\% | 5.22\% |
| EEI-23 | 3.60\% | Other | Bond model | 7.40\% | 18.00\% | 7.40\% |
| EEI-24 | 3.21\% | Willis Towers Watson | Rate:Link | 5.89\% | 19.40\% | 5.89\% |
| EEI-25 | 3.15\% | Fidelity | Bond Model | 7.85\% | 19.30\% | 7.85\% |
| EEI-26 | 3.50\% | Mercer | Bond Model | 7.25\% | 19.50\% | 6.75\% |
| EEI-27 | 3.37\% | Aon Hewitt | AA Above Median | 7.00\% | 20.00\% | 6.75\% |
| EEI-28 | 3.13\% | Aon Hewitt | AA Above Median | 6.30\% | 21.10\% | 5.90\% |
| EEI-29 | 3.43\% | Aon Hewitt | AA Above Median | 7.75\% | 21.40\% | 8.35\% |
| EEI-30 | 3.35\% | Other | Buck Standard Yield Curve | 7.00\% | 19.00\% | 7.00\% |
| EEI-31 | 3.61\% | Willis Towers Watson | BOND:Link | 7.25\% | 24.90\% | 7.25\% |
| EEI-32 | 3.25\% | Willis Towers Watson | BOND:Link | 6.00\% |  | 5.75\% |
| EEI-33 | 3.99\% |  |  | 6.25\% |  |  |
| EEI-34 | 3.22\% | Aon Hewitt | AA Only Bond Universe | 7.75\% | 19.00\% | 7.75\% |
| EEI-35 | 3.49\% | Willis Towers Watson | BOND:Link | 6.87\% | 21.01\% | 6.87\% |
| EEI-36 | 3.28\% | Aon Hewitt | AA Above Median | 7.30\% | 21.80\% | 7.10\% |
| EEI-37 | 3.34\% | Willis Towers Watson | Rate:Link | 7.30\% | 19.01\% | 7.30\% |
| EEI-38 | 3.32\% | Other | Proprietary | 7.50\% |  |  |
| EEI-39 | 3.30\% | Willis Towers Watson | Rate:Link | 6.25\% | 22.00\% | 5.75\% |
| EEI-40 | 3.46\% | Willis Towers Watson | BOND:Link | 6.75\% |  | 6.70\% |
| EEI-41 |  | Citigroup | Pension Discount |  |  |  |
| EEI-42 | 3.40\% | Aon Hewitt | AA Above Median | 6.50\% |  | 6.63\% |
| EEI-43 | 3.07\% | Other | Proprietary |  | 20.00\% | 7.25\% |
| EEI-44 | 3.43\% | Willis Towers Watson | BOND:Link | 7.00\% | 24.00\% | 7.00\% |
| 2019-20 Results |  |  |  |  |  |  |
| Average | 3.36\% |  |  | 6.94\% | 20.50\% | 6.87\% |
| Quartile 0\% (Min) | 2.97\% |  |  | 5.64\% | 13.00\% | 5.22\% |
| Quartile 25\% | 3.25\% |  |  | 6.25\% | 19.00\% | 6.19\% |
| Quartile 50\% (Median' | 3.36\% |  |  | 7.00\% | 20.00\% | 7.00\% |
| Quartile 75\% | 3.47\% |  |  | 7.38\% | 22.62\% | 7.33\% |
| Quartile 100\% (Max) | 3.99\% |  |  | 8.65\% | 25.00\% | 8.60\% |
| \# Responses | 42 | 43 | 43 | 42 | 33 | 40 |
| 2019 Median | 3.36\% |  |  | 7.00\% | 20.00\% | 7.00\% |
| 2018 Median | 4.35\% |  |  | 7.00\% | -4.40\% | 7.00\% |
| 2017 Median | 3.70\% |  |  | 7.25\% | 14.00\% | 7.10\% |
| 2016 Median | 4.20\% |  |  | 7.33\% | 7.50\% | 7.00\% |
| 2015 Median | 4.50\% |  |  | 7.05\% | 0.00\% | 7.00\% |
| 2014 Median | 4.11\% |  |  | 7.25\% | 7.50\% |  |
| 2013 Median | 4.94\% |  |  | 7.25\% | 9.88\% |  |
| 2012 Median | 4.10\% |  |  | 7.50\% | 12.30\% |  |
| 2011 Median | 4.82\% |  |  | 7.75\% | 3.50\% |  |
| 2010 Median | 5.40\% |  |  | 7.88\% | 8.75\% |  |
| 2009 Median | 5.75\% |  |  | 8.44\% | 17.00\% |  |

$\qquad$

## Xcel Energy Discount Rate Benchmarks

|  | December 31, 2018 <br> Bond Matching | December 31, 2019 <br> Bond Matching | Change From <br> December 31, 2018 |
| :--- | :---: | :---: | :---: |
| Xcel Energy Pension Plan | $4.31 \%$ | $3.48 \%$ | $(0.83 \%)$ |
| NCE Non-bargaining Plan | $4.25 \%$ | $3.39 \%$ | $(0.86 \%)$ |
| SPS Bargaining Plan | $4.37 \%$ | $3.58 \%$ | $(0.79 \%)$ |
| PSCo Bargaining Plan | $4.36 \%$ | $3.58 \%$ | $(0.78 \%)$ |
| All Pension Plans Combined | $4.31 \%$ | $3.49 \%$ | $(0.82 \%)$ |
| Nonqualified Pension | $4.26 \%$ | $3.33 \%$ | $(0.93 \%)$ |
| Post-Retirement Medical Plan | $4.32 \%$ | $3.47 \%$ | $(0.85 \%)$ |
| Workers Compensation and LTD 2 | $4.25 \%$ | $3.46 \%$ | $(0.79 \%)$ |
| Merrill Lynch Corporate (AA-AAA) <br> $15+$ Bond Index | $4.16 \%$ | $3.16 \%$ | $(1.00 \%)$ |
| $10-Y e a r ~ T r e a s u r i e s ~$ | $2.69 \%$ | $1.92 \%$ | $(0.77 \%)$ |
| $30-Y e a r$ Treasuries | $3.02 \%$ | $2.39 \%$ | $(0.63 \%)$ |

1 Based on Willis Towers Watson BOND:Link model. The December 31, 2019 results are based on the bond model parameters summarized in our December 18, 2019 memo.
2 Fiscal year 2020 budget estimates will use a discount rate of $3.46 \%$ until 2020 census data is available to determine actual discount rate for 2020 cost
$\qquad$
Xcel Energy Inc.
2020 Expected Return on Assets (EROA) Analysis ${ }^{1}$

| Asset Class | Goldman Sachs September 30, 2019 Strategic Assumptions |  | Target Asset Allocations |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10-Yr Arithmetic Returns | $\begin{aligned} & \hline 20-\mathrm{Yr} \text { Arithmetic } \\ & \text { Returns } \end{aligned}$ | XEPP | PSCO | SPS | NCE | MPT | VEBA (Includes EIS Allocation) |
| Liquidity Portfolio | 1.30\% | 1.50\% | 2.00\% | 2.00\% | 2.00\% | 2.00\% | 2.00\% | 4.10\% |
| Passive US All Cap Equity | 7.30\% | 7.60\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 6.50\% |
| US Equity - Large/mid Cap | 7.10\% | 7.30\% | 20.00\% | 18.50\% | 18.50\% | 20.00\% | 19.20\% | 2.20\% |
| US Equity - Small Cap | 8.40\% | 8.60\% | 2.00\% | 2.00\% | 2.00\% | 2.00\% | 2.10\% | 1.10\% |
| Non-US Equity - EAFE | 7.90\% | 8.10\% | 10.00\% | 9.50\% | 9.50\% | 10.00\% | 9.90\% | 0.00\% |
| Emerging Markets | 10.70\% | 10.90\% | 6.50\% | 6.00\% | 6.00\% | 6.50\% | 6.10\% | 0.00\% |
| Non-US Developed Equity | 7.90\% | 8.20\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 5.20\% |
| Core Fixed Income | 2.50\% | 2.80\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 60.80\% |
| Fixed Income - High Yield | 4.60\% | 4.90\% | 5.00\% | 4.50\% | 4.50\% | 5.00\% | 4.80\% | 6.10\% |
| Fixed Income - EM Debt | 5.00\% | 5.30\% | 9.00\% | 8.50\% | 8.50\% | 9.00\% | 8.80\% | 5.50\% |
| Hedge Fund of Funds | 4.30\% | 4.60\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 8.50\% |
| Hedge Funds - Equity Long/Short | 5.30\% | 5.50\% | 2.00\% | 2.00\% | 2.00\% | 2.00\% | 2.00\% | 0.00\% |
| Hedge Funds - Global Macro | 4.00\% | 4.30\% | 0.20\% | 0.20\% | 0.20\% | 0.20\% | 0.20\% | 0.00\% |
| Hedge Funds - Tactical Trading | 3.70\% | 3.90\% | 0.50\% | 0.50\% | 0.50\% | 0.50\% | 0.50\% | 0.00\% |
| Hedge Funds - Event Driven | 4.10\% | 4.40\% | 0.80\% | 0.80\% | 0.80\% | 0.80\% | 0.70\% | 0.00\% |
| Private Equity | 10.90\% | 11.10\% | 5.50\% | 5.00\% | 5.00\% | 5.50\% | 5.40\% | 0.00\% |
| Private Credit | 6.90\% | 7.20\% | 3.00\% | 2.50\% | 2.50\% | 3.00\% | 2.80\% | 0.00\% |
| Real Estate | 7.30\% | 7.60\% | 5.50\% | 5.00\% | 5.00\% | 5.50\% | 5.40\% | 0.00\% |
| Immunizing Portfolio | 6.20\% | 6.40\% | 28.00\% | 33.00\% | 33.00\% | 28.00\% | 30.10\% | 0.00\% |
| Total |  |  | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
|  |  |  | XEPP | PSCO | SPS | NCE | MPT | VEBA |
| Expected Geometric Portfolio Returns (before administrative expenses) |  |  |  |  |  |  |  |  |
| Goldman Sachs - 10-year - active (net of in | estment manageme | ees) | 6.40\% | 6.30\% | 6.30\% | 6.40\% | 6.36\% | 3.60\% |
| Goldman Sachs - 20-year - active (net of in | stment manageme | ees) | 6.60\% | 6.50\% | 6.50\% | 6.60\% | 6.56\% | 3.80\% |
| Expected 2020 Administrative Expenses ${ }^{4}$ |  |  | -0.26\% | -0.49\% | -0.23\% | -0.55\% | -0.35\% | -0.08\% |
| 2020 EROA Assumption Selected by Xcel Energy ${ }^{5}$ |  |  | 7.10\% | 6.50\% | 6.75\% | 6.90\% | 6.87\% | 4.50\% |
| 2019 EROA Assumption |  |  | 7.10\% | 6.50\% | 6.75\% | 6.90\% | 6.87\% | 5.30\% |

${ }^{1}$ All returns are net of investment expenses
${ }^{2}$ 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 2020 administrative fee details exhibit for more information.
${ }^{3}$ See Xcel Energy assumption memo for more information on the assumption selection process and additional information considered.
Hedge Funds rounded down to 2\% from 2.065\% to equal 100\% total

| Asset Allocation Summary |  |  |
| :---: | :---: | :---: |
| Asset Class | MPT | VEBA |
| Domestic \& International Equitty Securities | 37.30\% | 15.00\% |
| Short to Intermediate Fixed Income Securities | 13.60\% | 72.40\% |
| Alternative Investements | 17.00\% | 8.50\% |
| Long Duration Fixed Income Securities | 30.10\% | 0.00\% |
| Cash | 2.00\% | 4.10\% |
| Total | 100.00\% | 100.00\% |

[^14]| 2021 | Service Cost | Interest Cost | Expected Return on Assets | XCEL ENERGY INC. - Qualified Pension Plans Cost by Legal Entity ( $\$$ in Thousands) |  |  |  | Aggregate Cost Compensation Method | Aggregate Cost 20-year Amortization Method | January 1 <br> Prepaid <br> (Accrued) | EXHIBIT I <br> Page 2 of 6 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amortizations |  | Net Cost | Settlement Charge ${ }^{1}$ |  |  |  |  |  |
|  |  |  |  | Prior Service Cost | $\begin{gathered} \text { Net } \\ \text { (Gain)/Loss } \end{gathered}$ |  |  |  |  |  | Contribution | PBO |
| Xcel Energy Pension Plan (XEPP) |  |  |  |  |  |  |  |  |  |  |  |  |
| Discontinued Operations ${ }^{2}$ | - | 2,463 | $(4,537)$ | - | 3,104 | 1,030 | - | N/A | N/A | 37,893 | 2,779 | 73,318 |
| Xcel Energy Nuclear | 5,665 | 3,545 | $(6,531)$ | (214) | 571 | 3,036 | - | 3,087 | 2,971 | $(6,870)$ | 4,004 | 105,646 |
| NSP - MN | 20,575 | 26,937 | $(49,572)$ | 179 | 28,265 | 26,384 | - | 23,151 | 22,277 | 328,001 | 30,753 | 811,493 |
| NSP - WI | 4,592 | 4,739 | $(8,729)$ | (24) | 4,207 | 4,785 | - | N/A | N/A | 45,654 | 5,367 | 141,618 |
| Xcel Services ${ }^{3}$ | 23,365 | 22,124 | $(40,747)$ | (985) | 13,087 | 16,844 | - | N/A | N/A | 105,435 | 25,079 | 661,735 |
| XEPC (former EMI) |  | 16 | (29) |  | 5 | (8) | - | N/A | N/A | 12 | 18 | 470 |
| Mankato Energy Center ${ }^{4}$ | - | - | - | - | - | - | - | N/A | N/A | - | - | - |
| Total XEPP | 54,197 | 59,824 | (110,145) | $(1,044)$ | 49,239 | 52,071 | - | 26,238 | 25,248 | 510,125 | 68,000 | 1,794,280 |


| 2022 | Service Cost | Interest Cost | Expected Return on Assets | Amortizations |  | Net Cost | Settlement Charge ${ }^{1}$ | Aggregate Cost Compensation Method | Aggregate Cost 20-year Amortization Method | January 1 Prepaid (Accrued) | Contribution | PBO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Prior Service } \\ \text { Cost } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Net } \\ \text { (Gain)/Loss } \\ \hline \end{gathered}$ |  |  |  |  |  |  |  |
| Xcel Energy Pension Plan (XEPP) |  |  |  |  |  |  |  |  |  |  |  |  |
| Discontinued Operations ${ }^{2}$ | - | 2,383 | $(4,567)$ | - | 2,883 | 699 | - | N/A | N/A | 39,642 | 1,932 | 70,883 |
| Xcel Energy Nuclear | 5,494 | 3,608 | $(6,914)$ | (214) | 308 | 2,282 | - | 2,652 | 2,698 | $(5,902)$ | 2,934 | 107,670 |
| NSP - MN | 20,074 | 26,034 | $(49,854)$ | 179 | 25,102 | 21,535 | - | 18,908 | 19,239 | 332,370 | 21,382 | 784,681 |
| NSP - WI | 4,511 | 4,699 | $(9,003)$ | (24) | 3,685 | 3,868 | - | N/A | N/A | 46,236 | 3,829 | 140,527 |
| Xcel Services ${ }^{3}$ | 23,071 | 21,969 | $(42,090)$ | (985) | 11,176 | 13,141 | - | N/A | N/A | 113,670 | 17,910 | 657,261 |
| XEPC (former EMI) | - | 16 | (30) | - | 5 | (9) | - | N/A | N/A | 38 | 13 | 462 |
| Mankato Energy Center ${ }^{4}$ | - | - | ( | - | - | - | - | N/A | N/A | - | - | - |
| Total XEPP | 53,150 | 58,709 | $(112,458)$ | $(1,044)$ | 43,159 | 41,516 | - | 21,560 | 21,937 | 526,054 | 48,000 | 1,761,484 |


| 2023 | Service Cost | Interest Cost | Expected Return on Assets | Amortizations |  | Net Cost | Settlement Charge ${ }^{1}$ | Aggregate Cost Compensation Method | Aggregate Cost 20-year Amortization Method | January 1 <br> Prepaid <br> (Accrued) | Contribution | PBO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Prior Service Cost | Net (Gain)/Loss |  |  |  |  |  |  |  |
| Xcel Energy Pension Plan (XEPP) |  |  |  |  |  |  |  |  |  |  |  |  |
| Discontinued Operations ${ }^{2}$ | - | 2,309 | $(4,622)$ | - | 2,743 | 430 | - | N/A | N/A | 40,875 | 2,785 | 68,753 |
| Xcel Energy Nuclear | 5,341 | 3,653 | $(7,313)$ | (214) | 148 | 1,615 | - | 2,415 | 2,555 | $(5,250)$ | 4,422 | 109,183 |
| NSP - MN | 19,098 | 25,156 | $(50,358)$ | 179 | 22,919 | 16,994 | - | 16,447 | 17,399 | 332,217 | 30,712 | 758,202 |
| NSP - WI | 4,270 | 4,654 | $(9,317)$ | (24) | 3,326 | 2,909 | - | N/A | N/A | 46,197 | 5,638 | 139,191 |
| Xcel Services ${ }^{3}$ | 22,792 | 21,799 | $(43,642)$ | (985) | 9,934 | 9,898 | - | N/A | N/A | 118,439 | 26,425 | 652,391 |
| XEPC (former EMI) | - | 15 | (31) | ( | 5 | (11) | - | N/A | N/A | 60 | 18 | 455 |
| Mankato Energy Center ${ }^{4}$ | - | - | ( | - | - | (1) | - | N/A | N/A | - | - | - |
| Total XEPP | 51,501 | 57,586 | $(115,283)$ | $(1,044)$ | 39,075 | 31,835 | - | 18,862 | 19,954 | 532,538 | 70,000 | 1,728,175 |

$\qquad$

[^15]$\qquad$

| 2021 | Service Cost | Interest Cost | XCEL ENERGY INC. - Postretirement Benefits U.S. GAAP Cost Estimates by Legal Entity (\$ in Thousands) |  |  | $\begin{array}{ll}\text { Net Cost } & \begin{array}{r}\text { January } \\ \text { (Accrued) }\end{array} \\ \text { (Prepaid }\end{array}$ |  | Contribution | EXHIBIT III <br> Page 2 of 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | Expected Return | Prior Service Cost | $\begin{array}{r} \text { Net } \\ \text { (Gain)/Loss } \end{array}$ |  |  |  |  |
| Discontinued Operations ${ }^{1}$ | - | 228 | (79) | (111) | 55 | 93 | $(3,777)$ | 603 |  |
| Xcel Energy Nuclear | 14 | 34 | - | 95 | (9) | 134 | $(1,029)$ | 23 |  |
| NSP - MN ${ }^{2}$ | 130 | 2,310 | (120) | $(3,014)$ | 1,237 | 543 | $(38,472)$ | 6,433 |  |
| NSP - WI | 33 | 407 | (15) | (337) | 235 | 323 | $(5,949)$ | 1,068 |  |
| PSCo | 100 | 12,162 | $(16,881)$ | $(3,762)$ | 1,518 | $(6,863)$ | 61,847 | - |  |
| SPS ${ }^{3}$ | 972 | 1,435 | $(1,852)$ | (425) | (401) | (271) | $(12,573)$ | - |  |
| Xcel Services ${ }^{3}$ | 53 | 947 | (39) | (365) | 563 | 1,159 | $(11,802)$ | 1,553 |  |
| XEPC (former EMI) | - | 1 | - | - | (3) | (2) | (110) | 2 |  |
| Total Xcel Energy | 1,302 | 17,524 | $(18,986)$ | $(7,919)$ | 3,195 | $(4,884)$ | $(11,865)$ | 9,682 |  |

$\qquad$

|  | Amortizations |  |  |  |  |  | January 1 Prepaid (Accrued) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2022 | Service Cost | Interest Cost | Expected Return on Assets | Prior Service Cost | $\begin{array}{r} \text { Net } \\ \text { (Gain)/Loss } \end{array}$ | Net Cost |  | Contribution |
| Discontinued Operations ${ }^{1}$ | - | 215 | (82) | (88) | 54 | 99 | $(3,267)$ | 600 |
| Xcel Energy Nuclear | 12 | 35 | - | 95 | (9) | 133 | $(1,140)$ | 26 |
| NSP - MN ${ }^{2}$ | 123 | 2,176 | (125) | $(3,014)$ | 1,212 | 372 | $(32,582)$ | 6,074 |
| NSP - WI | 31 | 386 | (16) | (337) | 231 | 295 | $(5,204)$ | 997 |
| PSCo | (29) | 11,613 | $(16,385)$ | $(2,316)$ | 1,483 | $(5,634)$ | 68,710 | - |
| SPS ${ }^{3}$ | 943 | 1,417 | $(1,803)$ | (425) | (393) | (261) | $(12,302)$ | - |
| Xcel Services ${ }^{3}$ | 49 | 927 | (41) | (278) | 552 | 1,209 | $(11,408)$ | 1,553 |
| XEPC (former EMI) | - | 1 | - | - | (3) | (2) | (106) | 2 |
| Total Xcel Energy | 1,129 | 16,770 | $(18,452)$ | $(6,363)$ | 3,127 | $(3,789)$ | 2,701 | 9,252 |


| 2023 | Service Cost | Interest Cost | Amortizations |  |  | Net Cost January 1 Prepaid <br> (Accrued) |  | Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Expected Return on Assets | Prior Service Cost | $\begin{array}{r} \text { Net } \\ \text { (Gain)/Loss } \end{array}$ |  |  |  |
| Discontinued Operations ${ }^{1}$ | - | 202 | (86) | (10) | 53 | 159 | $(2,766)$ | 583 |
| Xcel Energy Nuclear | 11 | 35 | - | 20 | (8) | 58 | $(1,247)$ | 29 |
| NSP - MN ${ }^{2}$ | 117 | 2,048 | (131) | (606) | 1,189 | 2,617 | $(26,880)$ | 5,814 |
| NSP - WI | 30 | 367 | (17) | (70) | 226 | 536 | $(4,502)$ | 936 |
| PSCo | (124) | 11,060 | $(15,893)$ | (31) | 1,450 | $(3,538)$ | 74,344 | - |
| SPS ${ }^{3}$ | 925 | 1,399 | $(1,756)$ | (84) | (385) | 99 | $(12,041)$ | 99 |
| Xcel Services ${ }^{3}$ | 46 | 907 | (42) | (33) | 542 | 1,420 | $(11,064)$ | 1,551 |
| XEPC (former EMI) | - | 1 | - | - | (3) | (2) | (102) | 2 |
| Total Xcel Energy | 1,005 | 16,019 | $(17,925)$ | (814) | 3,064 | 1,349 | 15,742 | 9,014 |

$\qquad$
${ }^{1}$ Includes NRG, BMG, Viking, Natrogas, Cheyenne, Quixx and UE.
${ }^{2}$ Includes Eloigne and Seren.
${ }^{3}$ Includes Executive Life Insurance benefits.
Assumptions

| Discount Rate | $3.47 \%$ |  |
| :--- | ---: | ---: |
| Expected Return on Assets | $4.50 \%$ |  |
| Medical Trend | Pre-65 | Post-65 |
| $\quad$ Initial (2020) | $6.00 \%$ | $5.10 \%$ |
| $\quad$ Ultimate | $4.50 \%$ | $4.50 \%$ |
| $\quad$ Year Ultimate Reached | 2023 | 2023 |

## Year Ultimate Reached

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-2019 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-2019 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 May 15, 2020 letter for additional information on data, assumptions, methods, and plan provisions
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$\qquad$

## Xcel Energy Inc. - LTD and Workers' Compensation

Benefit Cost Estimates by Legal Entity
(\$ in Thousands)

| Fiscal Year Ending | $\underline{2019}$ | $\underline{2020}$ | $\underline{2021}$ | $\underline{2022}$ | $\underline{2023}$ | $\underline{2024}$ | $\underline{2025}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. GAAP | Actual | Actual | Budget | Budget | Budget | Budget | Budget |
| Discount Rate- Workers' Compensation | 4.25\% | 3.41\% | 3.41\% | 3.41\% | 3.41\% | 3.41\% | 3.41\% |
| Formor ANS Wharkorc' Compancation ${ }^{1}$ |  |  |  |  |  |  |  |
| MN/SD | (1.517) | 707 | 210 | 197 | 182 | 171 | 159 |
| MIWI | (22) | (46) | 2 | 2 | 3 | 2 | 3 |
| Subtotal | $(1,539)$ | 661 | 212 | 199 | 185 | 173 | 162 |
| $\frac{\text { Former NCE - Workers' Compensation }}{}{ }^{1}$ | (250) | 95 | 40 | 39 | 37 | 36 | 34 |
| $\frac{\text { Deductible States - Workers' Compensation }}{\text { Deductible States - SPS (KS, OK, NM, and } T X)}$ | - | - | - | - | - | - | - |
| Total Xcel Energy Workers' Compensation | $(1,789)$ | 756 | 252 | 238 | 222 | 209 | 196 |
| Discount Rate - LTD Income | 4.25\% | 3.41\% | 3.41\% | 3.41\% | 3.41\% | 3.41\% | 3.41\% |
| LTD Income |  |  |  |  |  |  |  |
| Discontinued Operations - Cheyenne | 11 | (27) | 3 | 1 | 2 | 2 | - |
| Discontinued Onerations ${ }^{2}$ | 89 | 93 | 19 | 17 | 17 | 15 | 14 |
| NSP-MN | (153) | 516 | 177 | 166 | 156 | 146 | 137 |
| NSP-WI | (16) | (54) | 36 | 33 | 31 | 29 | 28 |
| PSCo | 70 | 177 | 25 | 21 | 16 | 14 | 11 |
| SPS | (76) | 79 | 9 | 6 | 4 | 2 | 1 |
| Ufility Enaineering | (3) | (3) | 1 | 1 | 1 | 2 | - |
| Xcel Services | 3 | 93 | 6 | 6 | 4 | 4 | 3 |
| XEPC | - | - | - | - | - | - | - |
| Total Xcel Energy LTD Income | (75) | 874 | 276 | 251 | 231 | 214 | 194 |
| Total Xcel Energy U.S. GAAP | $(1,864)$ | 1,630 | 528 | 489 | 453 | 423 | 390 |

1 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.
2 Includes NRG, BMG, Viking and Natrogas.
See Mav 152020 letter for additional information on data assumptions methods and plan provisions

Schedule 10

## Actuarial Costs

 2021 Test YearDocket No. E002/GR-20-723
Exhibit___(RRS-1), Schedule 10
Page 1 of 1

## NSPM

Total Cost from Actuarial Report
5 Year Average Discount Rate Adjustment Adjusted Total Cost
Percent to NSPM Electric O\&M
Amount to NSPM Electric O\&M
Percent to State of Minnesota
Amount to State of Minnesota

| Qualified <br> Pension (1) | Retiree Medical <br> (2) | FAS 112 Long- <br> Term Disability | FAS 112 <br> Workers <br> Compensation |
| :---: | :---: | :---: | :---: |
| $23,151,000$ | 543,000 | 177,000 | 210,000 |
| - | $(438,000)$ | - |  |
| $23,151,000$ | 105,000 | 177,000 |  |
| $54.65 \%$ | $54.65 \%$ | $54.65 \%$ | $50.51 \%$ |
| $12,651,329$ | 57,383 | 96,725 | 106,071 |
| $87.08 \%$ | $87.08 \%$ | $87.08 \%$ | $87.08 \%$ |
| $11,016,145$ | 49,966 | 84,223 | 92,362 |
|  |  |  |  |
|  |  |  |  |
| $3,087,000$ | 134,000 |  |  |
| - | 3,000 |  |  |
| $3,087,000$ | 137,000 |  |  |
| $87.84 \%$ | $87.84 \%$ |  |  |
| $2,711,608$ | 120,341 |  |  |
| $87.08 \%$ | $87.08 \%$ |  |  |
| $2,361,132$ | 104,787 |  |  |
|  |  |  |  |

## Xcel Energy Services

Total Cost from Actuarial Report
5 Year Average Discount Rate Adjustment
SERP Adjustment
Adjusted Total Cost
Percent to NSPM Electric O\&M
Amount to NSPM Electric O\&M
Percent to State of Minnesota
Amount to State of Minnesota

Net Regulatory Adjustments (Cap \& 10-20 year)

| $(504,607)$ | - | - |  |
| :---: | :---: | :---: | :---: |

Affiliate Charges
260
2
Total NSPM Electric O\&M, State of Minnesota
16,491,010 373,314
85,576
92,362
(1) Total cost amounts are from the $5 / 15 / 2020$ 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 filing.
(2) Calculated using the 5 year average discount rate

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

Schedule A

NSPM Plan
XES Plan
Extend ACM amortization 10 to 20 years
Cap XES Plan
Total Pension Expense for Ratemaking

| $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $21,935,926$ | $18,972,305$ | $16,229,267$ | $18,389,047$ | $17,824,711$ | $\mathbf{1 5 , 1 7 1 , 0 7 2}$ |
| $6,682,265$ | $7,062,295$ | $7,471,627$ | $11,694,048$ | $10,909,060$ | $4,946,575$ |
| $(6,390,596)$ | $(4,504,585)$ | $(2,791,625)$ | $(3,140,138)$ | $(2,653,639)$ | $(2,064,975)$ |
| $(1,304,253)$ | $(1,684,283)$ | $(2,093,615)$ | $(5,711,893)$ | $(5,531,048)$ | 431,437 |
| $20,923,341$ | $19,845,733$ | $18,815,654$ | $21,231,064$ | $20,549,084$ | $18,484,109$ |

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

Schedule B

Discount Rate Assumption
Total Cost Amount

| 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 4.15\% |
| 26,989,000 | 29,148,000 | 27,013,000 | 49,566,000 | 45,358,000 | 21,759,000 |
| $(821,051)$ | (1,356,060) | 269,080 | $(380,752)$ | $(873,228)$ | 279,040 |
| 26,167,949 | 27,791,940 | 27,282,080 | 49,185,248 | 44,484,772 | 22,038,040 |
| 29.17\% | 29.15\% | 31.45\% | 27.31\% | 28.85\% | 25.94\% |
| 7,633,036 | 8,101,904 | 8,580,923 | 13,430,238 | 12,833,560 | 5,716,668 |
| 87.54\% | 87.17\% | 87.07\% | 87.07\% | 87.07\% | 86.53\% |
| 6,682,265 | 7,062,295 | 7,471,627 | 11,694,048 | 10,909,060 | 4,946,575 |
| 5,378,012 | 5,378,012 | 5,378,012 | 5,378,012 | 5,378,012 | 5,378,012 |
| 1,304,253 | 1,684,283 | 2,093,615 | 6,316,036 | 5,531,048 | $(431,437)$ |
|  |  |  | 604,143 |  |  |
| $(1,304,253)$ | $(1,684,283)$ | $(2,093,615)$ | $(5,711,893)$ | $(5,531,048)$ | 431,437 |
| $(2,358,610)$ | $(4,042,893)$ | $(6,136,508)$ | $(11,848,401)$ | $(17,379,449)$ | $(16,948,012)$ |

Amount Used/Amortized to Satisfy the Deferral *

| - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: |

[^16]| MN |
| :--- |
| Total Cos |

Percent to electric O\&M
Amount o electric O\&M Amount to electric © \&M
Percent to ostate of MN
Amount to state of MN

Nuclear
Total Cost
Percent to electric O\&M
Amount to electric $0 \& M$ Amount to electric oem
Percent to state of MN Percent to state of
Amount to state of MN

TOTAL
TOAL Amount to e ecctric O\&M
Percent to state of MN Percent to state of MN
TOTAL Amount to state of $M N$ Cumulative Amount of Expense Defer

| 2014 |  |  | 2015 |  |  | 2016 |  |  | 2017 |  |  | 2018 |  |  | 2019 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { Qualified } \\ \text { Pension w/ } \\ 20 \mathrm{Yr} \\ \text { Amortization } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Change } \\ \text { (Adjustment) } \end{gathered}$ | $\begin{gathered} \hline \text { Qualified } \\ \text { Pension w/ } \\ 10 \text { Yr } \\ \text { Amortization } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Qualified } \\ \text { Pension w/ } \\ 20 \text { Yr } \\ \text { Amortization } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Change } \\ \text { (Adjustment) } \end{gathered}$ |  | $\begin{array}{\|c} \hline \begin{array}{c} \text { Qualified } \\ \text { Pension w/ } \\ \text { no } \\ \text { Nmo } \\ \text { Amorization } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { Change } \\ \text { (Adjustment) } \end{gathered}$ | Qualified Pension $\mathrm{w} /$ 10 Yr Amortization | $\begin{gathered} \text { Qualified } \\ \text { Pension w/ } \\ 20 \mathrm{Yr} \\ \text { Amortization } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Change } \\ \text { (Adjustment) } \end{gathered}$ | $\begin{gathered} \text { Qualified } \\ \text { Pension w/ } 10 \\ \text { Yr Amortization } \end{gathered}$ | $\begin{gathered} \text { Qualified } \\ \text { Pension w/ } \\ \text { Yr Amortization } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Change } \\ \text { (Adjustment) } \end{gathered}$ | $\begin{gathered} \text { Qualified } \\ \text { Pension w/ } \\ \text { Yr Amortization } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Qualified } \\ \text { Pension w/ } \\ \text { Yr Amortization } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Change } \\ \text { (Adjustment) } \end{gathered}$ |
| 35,485,000 | 25,147,000 | (0,338,000) | 31,064,000 | 23,689,000 | 375,000) | 30,831,000 | 25,528,000 | (5,303,000) | 31,554,000 | 26,166,000 | 388,000) | 30,891,000 | 26,292,000 | (4,599,000) | 30,873,000 | 27,312,000 | (3,561,000) |
| 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\% |
| 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) |
| 87.5440\% | 87.5440\% | ${ }_{(57560740 \%}^{\text {849 }}$ | 87.1683\% | 87.5382.457 | $\frac{87.1683 \%}{(3,901,679)}$ | $\frac{87.07 \%}{13,698,636}$ | $\xrightarrow{\text { 11,342.,440 }}$ | (2,356,196) | $\frac{87.07 \%}{15.644,691}$ | 87.07\% | ${ }_{(2,671.408)}^{\text {80, }}$ | 87.07\% 14.914.705 | 12,694,07\% | (2,270.47\%) | 14,802,209 | ${ }_{13,094.871}$ | ${ }_{(1,707.339)}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | $(442,000)$ |
| 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\% |
| ${ }^{3,254,081}$ | 2,300,161 | (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 | 171,859 | (413,314) |
| 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\% |
| 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) |
| 25,057,029 | 17,757,161 | (7,299,868) | 21,765,132 | 16,597,448 | (5,167,684) | 638,792 | 15,432,700 | 206,091) | 119,229 | 17,512,881 | (3,606, 348) | 20,471,107 | , 423,488 | (3,047,619) | 20,691,819 | 18,305,364 | (2,386,455) |
| $\xrightarrow{\text { 81,935,926 }}$ | ${ }^{15,545,329}$ | (6,390,596) | 8,97268305 | 14,4677.721 | $\frac{87.1683 \%}{(4,504,585)}$ | $\frac{86,07 \%}{16,29,267}$ | ${ }_{13,437,643}$ | ${ }_{(2,791,625)}$ | $\frac{87.07 \%}{18,389047}$ | 15,2488,908 | ${ }_{(3,140,138)}$ | 17,824,7711 | 15,1717.072 | (2,653,639) | 86.53\% | 5,839,449 | (2,064,995) |
| ferred |  | (13,703,716) |  |  | $(18,208,301)$ |  |  | (20,999,926) |  |  | $\underline{(24,140,064)}$ |  |  | $\underline{(26,793,703)}$ |  |  | (28,858,678) |

# Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota 

| 2014 | XCEL ENERGY INC. - Qualified Pension Plans Cost Estimates by Legal Entity (\$ in Thousands) |  |  |  |  |  |  |  | EXHIBIT I Page 1 of 6 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Service Cost Interest Cost |  | Expected Return on Assets | Amortizations |  | Net Cost |  | Aggregate Cost 20-year Amortization Method | January 1 <br> Prepaid (Accrued) | Contribution |  |
|  |  |  | Prior Service Cost | $\begin{gathered} \text { Net } \\ \text { (Gain)/Loss } \end{gathered}$ | Aggregate Cost Compensation Method |  |  |  |  |  |
| Xcel Energy Pension Plan (XEPP) |  |  |  |  |  |  |  |  |  |  |  |
| Discontinued Operations ${ }^{\text {' }}$ | - | 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 | $(5,460)$ | 54 | 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 |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ Includes Eloigne |  |  |  |  |  |  |  |  |  |  |  |
| Assumptions |  |  |  |  |  |  |  |  |  |  |  |
| Discount Rate - U.S. GAAP |  |  |  |  |  |  |  |  |  |  |  |
| XEPP | 4.74\% |  |  |  |  |  |  |  |  |  |  |
| NCE | 4.32\% |  |  |  |  |  |  |  |  |  |  |
| SPS | 5.00\% |  |  |  |  |  |  |  |  |  |  |
| PSCo | 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\% |  |  |  |  |  |  |  |  |  |  |
| PSCo | 6.75\% |  |  |  |  |  |  |  |  |  |  |
| Assumed Mortality Table $\quad$ Bargaining Participants $\quad 2000$ 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. |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

## Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota

## Qualified Pension Actuarial Reports

| 2015 | Service Cost |  | Expected Return on Assets | XCEL ENERGY INC. - Qualified Pension Plans Benefit Cost Estimates by Legal Entity (\$ in Thousands) <br> Amortizations |  |  | Aggregate Cost Compensation Method | Aggregate Cost 20-year Amortization Method | January 1 (Accrued) ${ }^{1}$ (Accrued) ${ }^{1}$ | Contribution | EXHIBIT I <br> Page 1 of 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Interest Cost |  | Prior Service Cost | $\begin{gathered} \text { Net } \\ \text { (Gain)/Loss } \end{gathered}$ | Net Cost |  |  |  |  | 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 | 2,40, | $(3,648)$ | 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) |  |  | (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 |  |  |  |  |  |  |  |  |  |  |  |
| Discontinued Operations - Cheyenne |  | 158 | (250) | - | 188 | 96 | N/A | N/A | 1,499 | 203 | 4,261 |
| 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 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 |  |  |  |  |  |  |  |  |  |  |  |
| 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 <br> ${ }^{2}$ Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ Includes Eloigne |  |  |  |  |  |  |  |  |  |  |  |
| Assumptions |  |  |  |  |  |  |  |  |  |  |  |
| Discount Rate - ASC 715 |  |  |  |  |  |  |  |  |  |  |  |
| XEPP | 4.09\% |  |  |  |  |  |  |  |  |  |  |
| NCE | 3.84\% |  |  |  |  |  |  |  |  |  |  |
| SPS | 4.21\% |  |  |  |  |  |  |  |  |  |  |
| PSCo | 4.15\% |  |  |  |  |  |  |  |  |  |  |
| Discount Rate - Aggregate Normal Cost | 7.25\% |  |  |  |  |  |  |  |  |  |  |
| Expected Return on Assets |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NCE | 7.10\% |  |  |  |  |  |  |  |  |  |  |
| SPS | 7.25\% |  |  |  |  |  |  |  |  |  |  |
| PSCo | 6.75\% |  |  |  |  |  |  |  |  |  |  |
| Assumed Mortality Table |  |  |  |  |  |  |  |  |  |  |  |
| Bargaining Participants Non-bargaining Participants | RP-2014 Blue RP-2014 White | Collar projected Collar, as adjus | with generation ed for 2014 Xcel | al mortality impro el Energy mortal | ovements using lity study, project | adjusted SOA with generation | MP-2014 methodo nal mortality impro | ements using an adjusted | SOA MP-2104 | ethodology |  |
| See May 7, 2015 letter for additional information on data, assumptions, methods and plan provisions. <br> Contributions already made are allocated in accordance with the January 15, 2015 contribution directives provided by Xcel Energy on January 12, 2015. |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota

Qualified Pension Actuarial Reports


## Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota

Qualified Pension Actuarial Reports


## Annual Qualified Pension Compliance Filing for NSPM Electric State of Minnesota

Qualified Pension Actuarial Reports


# Non Public Document - Contains Trade Secret Data <br> $\square$ Public Document - Trade Secret Data Excised X 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: $\quad$ 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
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 <br> $\square$ Public Document - Trade Secret Data Excised X 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


## Schedule 14

2021 Test Year Active Health Care O\&M Costs by Category

| Allocation Percentages |  |  |
| :--- | ---: | ---: |
| Company | MN Electric <br> O\&M | MN Electric <br> O\&M <br> State of MN |
| NSPM | $54.65 \%$ | $87.08 \%$ |
| Nuclear | $87.84 \%$ | $87.08 \%$ |
| XES | $25.85 \%$ | $87.08 \%$ |

Misc Benefit Programs \& Costs
Adoption Assistance
Communications, Printing \& Postage
Ergonomists for field workers
Return to Work (STD/LTD)
Financial Planning
Cobra Admin Fees
H\&W Audit Fees
Flex Spending - Admin Fees (HCRA, DCRA, TRA)
Bus Pass Subsidy
Employee Assistance Program
Tuition Reimbursement Program
STD and LTD admin fees
Wellness Clinics / Programs
WTW H\&W admin fees payable from VEBA trust
WTW H\&W admin fees not payable from VEBA trust Total Misc Benefit Programs \& Costs
Active Health Care
VEBA Paid Claims MEDICAL
VEBA Paid Claims PHARMACY
VEBA Paid Claims DENTAL
VEBA Paid Claims VISION
HSA Funding
Employee Withholdings
Pharmacy Rebates
Administration Fees
Opt-out Funding, Affordable Care Act

## Total Active Health Care

Life, LTD \& Business Travel Ins
Life Insurance
Life insurance withholdings
Business Travel Insurance
LTD insurance premiums
otal Life, LTD \& Business Travel Ins
Total
Affiliate Charges
Grand Total


|  | XES |  |
| :---: | :---: | :---: |
| Total Cost | MN Electric <br> O\&M | MN Electric <br> O\&M <br> State of MN |


| Totals |  |
| :---: | :---: |
| MN Electric |  |
| MN Electric | O\&M |
| O\&M | State of MN |


| 2,409 | 1,316 | 1,146 | 955 | 839 | 730 | 4,325 | 1,118 | 973 | 3,273 | 2,850 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 33,672 | 18,401 | 16,022 | 13,345 | 11,722 | 10,207 | 509,121 | 131,604 | 114,594 | 161,727 | 140,823 |
| 60,590 | 33,111 | 28,831 | 24,013 | 21,093 | 18,367 | 108,805 | 28,125 | 24,490 | 82,329 | 71,688 |
| 12,000 | 6,558 | 5,710 |  | 0 | 0 |  | 0 | 0 | 6,558 | 5,710 |
| 26477 | 14,469 | 12,599 | 49322 | 43,324 | 37,725 | 393,487 | 101,713 | 88,567 | 159,506 | 138,890 |
|  | 0 | 0 |  | 0 | 0 | 22,345 | 5,776 | 5,029 | 5,776 | 5,029 |
| 12,461 | 6,810 | 5,929 | 4,938 | 4,338 | 3,777 | 22,377 | 5,784 | 5,037 | 16,931 | 14,743 |
| 16,453 | 8,991 | 7,829 | 6,521 | 5,728 | 4,988 | 29,546 | 7,637 | 6,650 | 22,356 | 19,467 |
| 6,631 | 3,624 | 3,155 | 2,628 | 2,308 | 2,010 | 11,908 | 3,078 | 2,680 | 9,010 | 7,846 |
| 90,000 | 49,182 | 42,825 |  | 0 | 0 | 600,000 | 155,095 | 135,049 | 204,278 | 177,875 |
|  | - | - |  | - | - |  | - | - | - | - |
| 231,873 | 126,712 | 110,334 | 91,896 | 80,721 | 70,288 | 416,394 | 107,635 | 93,723 | 315,067 | 274,345 |
| 93,660 | 51,182 | 44,567 |  |  |  | 121,260 | 31,345 | 27,293 | 82,527 | 71,861 |
| 151,986 | 83,056 | 72,321 | 60,235 | 52,910 | 46,072 | 272,933 | 70,551 | 61,432 | 206,517 | 179,825 |
| 169,530 | 92,643 | 80,669 | 67,188 | 59,018 | 51,390 | 304,438 | 78,695 | 68,524 | 230,356 | 200,582 |
| 119,566 | 65,339 | 56,894 | 47,386 | 41,624 | 36,244 | 214,714 | 55,502 | 48,328 | 162,465 | 141,466 |
| 1,027,308 | 561,393 | 488,833 | 368,427 | 323,625 | 281,796 | 3,031,653 | 783,658 | 682,370 | 1,668,676 | 1,453,000 |
| 29,077,656 | 15,890,069 | 13,836,278 | 9,911,527 | 8,706,243 | 7,580,961 | 43,821,139 | 11,327,417 | 9,863,348 | 35,923,729 | 31,280,587 |
| 7,596,855 | 4,151,454 | 3,614,879 | 1,776,012 | 1,560,041 | 1,358,406 | 9,785,870 | 2,529,570 | 2,202,623 | 8,241,065 | 7,175,907 |
| 1,852,126 | 1,012,131 | 881,313 | 796,512 | 699,653 | 609,223 | 3,092,636 | 799,422 | 696,097 | 2,511,206 | 2,186,633 |
|  |  |  |  |  |  |  |  |  |  |  |
| 29,744 | 16,254 | 14,153 | 55,523 | 48,771 | 42,467 | 236,199 | 61,056 | 53,164 | 126,081 | 109,785 |
| $(3,065,138)$ | $(1,675,006)$ | $(1,458,512)$ | $(1,377,888)$ | $(1,210,331)$ | $(1,053,896)$ | $(6,161,988)$ | $(1,592,825)$ | $(1,386,952)$ | $(4,478,162)$ | $(3,899,360)$ |
| $(1,904,926)$ | $(1,040,985)$ | $(906,438)$ | $(681,992)$ | $(599,059)$ | $(521,630)$ | $(3,217,292)$ | $(831,644)$ | $(724,154)$ | (2,471,688) | $(2,152,223)$ |
| 1,104,581 | 603,620 | 525,603 | 410,930 | 360,959 | 314,305 | 1,934,315 | 500,005 | 435,379 | 1,464,585 | 1,275,287 |
| 5,000 | 2,732 | 2,379 | 0 | 0 | 0 | 60,000 | 15,510 | 13,505 | 18,242 | 15,884 |
| 34,695,898 | 18,960,271 | 16,509,656 | 10,890,624 | 9,566,277 | 8,329,836 | 49,550,879 | 12,808,509 | 11,153,009 | 41,335,057 | 35,992,501 |
|  |  |  | 10,890,624 |  |  | 49,550,879 |  |  |  |  |
| 2,409,115 | 1,316,509 | 1,146,351 | 952,066 | 836,290 | 728,200 | 3,023,025 | 781,428 | 680,429 | 2,934,228 | 2,554,979 |
| $(1,888,894)$ | (1,032,224) | $(898,809)$ | $(778,005)$ | $(683,396)$ | $(595,067)$ | $(2,517,297)$ | $(650,701)$ | $(566,598)$ | $(2,366,322)$ | (2,060,474) |
| 18,276 | 9,987 | 8,697 | 7,243 | 6,362 | 5,540 | 32,820 | 8,484 | 7,387 | 24,834 | 21,624 |
| 1,890,001 | 1,032,829 | 899,336 | 138,076 | 121,285 | 105,609 | 2,248,323 | 581,174 | 506,057 | 1,735,288 | 1,511,002 |
| 2,428,498 | 1,327,101 | 1,155,574 | 319,381 | 280,542 | 244,282 | 2,786,872 | 720,384 | 627,275 | 2,328,028 | 2,027,130 |
| 38,151,704 | 20,848,765 | 18,154,062 | 11,578,432 | 10,170,444 | 8,855,914 | 55,369,404 | 14,312,552 | 12,462,654 | 45,331,761 | 39,472,631 |
|  | 502 | 437 |  |  |  |  |  |  | 457 | 437 |
|  | ,349,267 |  |  |  | , | 369,404 |  |  | ,32,218 |  |

## 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 5\% and 6.5\% in 2020

1. Pricewaterhouse Coopers medical cost trend: Behind the numbers 2021 (June 2020)

- Expected medical and Rx cost increase 6\%
https://www.pwc.com/us/en/industries/health-industries/assets/pwc-hri-behind-the-numbers-2020.pdf


## 2. Aon Carrier Trend Report

- Expected medical cost increase 6.5\%


## https://healthresources.aon.com/reports-2/2020-global-medical-trend-rates-report

## 3. Willis Towers Watson Best Practices in Health Care Employer Survey

- Expected medical and pharmacy cost increase 5\%
https://www.willistowerswatson.com/en-US/Insights/2020/03/2019-best-practices-in-health-care-employer-surveyreport


## 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 $5.0 \%$ and $6.5 \%$ as documented in the trend surveys outlined above


[^0]:    ${ }^{1}$ 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]:    ${ }^{2}$ 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.

[^2]:    ${ }^{3}$ 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.

[^3]:    ${ }^{4}$ As of December 31, 2018, the NSPM Plan owned 52 percent of the total XEPP plan assets.

[^4]:    ${ }^{5}$ The amounts in this figure are merely illustrative, as are the amounts in Table 10.

[^5]:    ${ }^{6}$ NSPM does not include the XES prepaid pension asset in rate base because the asset belongs to XES, not to NSPM.

[^6]:    ${ }^{7}$ 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.

[^7]:    ${ }^{8}$ 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

[^8]:    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.

[^9]:    ${ }^{14}$ As I have explained, a prepayment such as a prepaid pension asset reflects capital provided by the Company for the benefit of ratepayers.

[^10]:    ${ }^{15}$ 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.

[^11]:    ${ }^{16}$ 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.

[^12]:    ${ }^{20}$ New Mexico Attorney General v. New Mexico Public Regulation Comm'n, 2015-NMSC-032 at ब 21.

[^13]:    ${ }^{21}$ Application of Soutbwestern Public Service Company for Authority to Change Rates, Docket No. 43695,

[^14]:    2/3/2020
    EROA Analysis Template_vF.xlsx

[^15]:    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.
    ${ }^{2}$ Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS
    ${ }^{3}$ Includes Eloigne
    ${ }^{4}$ Assumes sale is completed in 2020 and all benefits are paid out in 2020
    Assumptions
    Discount Rate - U.S. GAAP
    XEPP $\quad 3.48 \%$
    $\begin{array}{ll}\text { NCE } & 3.48 \% \\ \text { SPS } & 3.39 \% \\ \text { PSC } & 3.58 \%\end{array}$
    PSCO $\quad 3.58 \%$
    $\begin{array}{ll}\text { Discount Rate - Aggregate Normal Cost } & 7.10 \% \\ \text { Salary Scale } & 3.75 \%\end{array}$
    Expected Return on Assets
    3.75\%
    $\begin{array}{ll}\text { XEPP } & 7.10 \% \\ \\ \text { Xected Return on Assets }\end{array}$
    NCE
    PSCo
    $6.90 \%$
    Assumed Mortality Table
    Bargaining Participants
    Non-bargaining Participants
    6.50\%

    Pil-2012 Blue Collar, as adjusted for 2019 Xcel Energy mortaity study, projected with generational mortaity improvements using an adjusted SOA MP-2019 methodology See May 2020 letter for adarional information on data, assumptions, methods, and plan provisions.
    Contributions are allocated based on PBO for each legal entity.
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[^16]:    * 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.

