DOCKET NO. _____

APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY FOR AUTHORITY TO CHANGE RATES	**§ § §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

DIRECT TESTIMONY
of
RICHARD R. SCHRUBBE

on behalf of

SOUTHWESTERN PUBLIC SERVICE COMPANY

(*Filename:* SchrubbeRRDirect.doc)

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
ADIT	Accumulated Deferred Income Taxes
Commission	Public Utility Commission of Texas
ERISA	Employee Retirement Income Security Act
EROA	Expected Return on Assets
FAS	Statement of Financial Accounting Standard
FERC	Federal Energy Regulatory Commission
GAAP	Generally Accepted Accounting Principles
HSA	Health Savings Account
IBNR	Incurred But Not Reported
IRC	Internal Revenue Code
LTD	Long-Term Disability
NCE	New Century Energies
O&M	Operation and Maintenance
PBGC	Pension Benefit Guaranty Corporation
PBO	Pension Benefit Obligation
PURA	Public Utility Regulatory Act
SPS	Southwestern Public Service Company, a New Mexico corporation
Test Year	April 1, 2018 through March 31, 2019
WACC	Weighted Average Cost of Capital
Xcel Energy	Xcel Energy Inc.
XES	Xcel Energy Services Inc.

LIST OF ATTACHMENTS

Attachment	Description
RRS-RR-1	Calculation of Deferred Pension and OPEB Balances (*Filename*: RRS-RR-1.xls)
RRS-RR-2	2018 Actuarial Report Excerpts (*Non-native format*)
RRS-RR-3	2019 Actuarial Report Excerpts (*Non-native format*)
RRS-RR-4	Calculation of Actuarially Determined Pension and Benefit Amounts (*Filename*: RRS-RR-4.xls)
RRS-RR-5	Calculation of Active Health and Welfare Amounts (*Filename*: RRS-RR-5.xlsx)
RRS-RR-6	Average Balances of Qualified and Non-Qualified Pension Fund Amounts (*Filename*: RRS-RR-6.xls)
RRS-RR-7	Development of Qualified Pension Asset Balance (*Filename*: RRS-RR-7.xlsx)

DIRECT TESTIMONY
OF
RICHARD R. SCHRUBBE

I. WITNESS IDENTIFICATION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Richard R. Schrubbe. My business address is 401 Nicollet Mall, Minneapolis, Minnesota 55401.

Q. On whose behalf are you testifying in this proceeding?

A. I am filing testimony on behalf of Southwestern Public Service Company, a New Mexico corporation ("SPS"), which is a wholly-owned electric utility subsidiary of Xcel Energy Inc. ("Xcel Energy").

Q. By whom are you employed and in what position?

A. I am employed by Xcel Energy Services Inc. ("XES"), the service company subsidiary of Xcel Energy, as Area Vice-President of Financial Analysis and Planning.

Q. Please briefly outline your responsibilities as Area Vice-President of Financial Analysis and Planning.

A. My responsibilities include the oversight and management of the Business Area Finance group, which includes Energy Supply, Transmission, Distribution, Gas Engineering & Operations, and Corporate Services. Within that group, I oversee budget planning, reporting, and analysis. I am also responsible for 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 for Xcel Energy and its subsidiaries. I am also responsible for coordinating the benefits operation and maintenance ("O&M") and capital budgeting and forecasting processes, as well as the monthly analysis of actual results against these budgets and forecasts.

Q. Please describe your educational background.

A. I received a Bachelor of Science degree, with a major in finance, from Marquette University in 1996.

Q. Please describe your professional experience.

A. From 2000 to 2005, I was employed by the DoALL Company, first as a Staff Accountant, later as Assistant Controller, and then as Corporate Controller. From 2005 to 2007, I was employed by Wilsons Leather as a Financial Analyst. In 2007, I joined XES as a Consultant. I became the Manager of Corporate Accounting in 2010 and the Director of Corporate and Benefits Accounting in 2013. Additionally, in 2014, I was assigned responsibilities associated with the oversight of the administration of XES, including accounting, billing, allocations, policies and procedures, service agreements, internal audits, external audits, and external reporting to state and federal regulatory agencies. In 2016, I was promoted to my current position.

Q. Have you testified or filed testimony previously before any regulatory authorities?

A. Yes. I submitted pre-filed direct testimony on SPS's behalf to the Public Utility Commission of Texas ("Commission") in Docket Nos. 43695, 45524, and 47527 on pension and other post-employment benefit expenses, active health care expenses, and the proper treatment of a prepaid pension asset, among other issues.

I have also testified before the New Mexico Public Regulation Commission, the Colorado Public Utilities Commission, and the Minnesota Public Utilities Commission on pension and benefit issues.

II. ASSIGNMENT AND SUMMARY OF TESTIMONY

Q. What is your assignment in this proceeding?

A. My testimony addresses five topics related to SPS's employee pensions and other non-cash benefits:

1. I support SPS's request to recover its reasonable and necessary expenses for qualified pension calculated under Statement of Financial Accounting Standard ("FAS") 87,[1] retiree medical costs calculated under FAS 106, and self-insured long-term disability ("LTD") costs calculated under FAS 112;

2. I support SPS's request to recover its active health and welfare costs, which include costs incurred for active health care, miscellaneous benefits, life insurance, and third-party-insured LTD benefits;

3. I support SPS's request to recover the reasonable and necessary costs incurred for workers' compensation benefits;

4. I support SPS's request to recover other reasonable and necessary benefits, such as the 401(k) match, certain benefit-related consulting costs, and deferred compensation;

5. I support the amount of pension and other post-employment benefit ("OPEB") expense to be used as the baseline on a going-forward basis for purposes of the tracker established under section 36.065 of the Public Utility Regulatory Act ("PURA"), and I quantify the current deferred balance to be amortized;[2] and

6. I quantify SPS's prepaid pension asset and support the request to continue including that prepaid pension asset in rate base and to earn a return on it at SPS's Weighted Average Cost of Capital ("WACC").

In addition, I sponsor or co-sponsor the following schedules in SPS's Rate Filing Package: Schedules B-2, B-2.1, G-2.0, G-2.1, G-2.2 and G-2.3.

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[1] In 2009, FAS 87 was renamed Accounting Standards Codification 715-30, but for the sake of convenience I will refer to it in this testimony as "FAS 87." I will also refer to the other accounting standards by their former FAS designations.

[2] PURA is codified in Title II of the Texas Utilities Code. *See* Tex. Utils. Code Ann. §§ 11.001-66.016.

Schedule B-2 lists the monthly balance of each accumulated provision account (i.e., injuries and damages, property insurance, etc.), the amount accrued each month, and the amount charged off each month during the Test Year. In addition, Schedule B-2 provides the same information on an annual basis for the prior three years. Schedule B-2.1 provides the information requested on Schedule B-2 on a Texas retail basis only. I co-sponsor these schedules with SPS witness Arthur P. Freitas.

The G-2 series of schedules provides general employee benefit information with specific information on pension expense provided in Schedule G-2.1, postretirement benefits other than pension expense provided in Schedule G-2.2, and administration fees provided in Schedule G-2.3. I co-sponsor Schedule G-2 with SPS witness Michael T. Knoll. The Rate Filing Package requires that each of these schedules be updated 45 days after the initial filing.

Q. Please summarize your testimony and recommendations.

A. I support SPS's request for recovery of pension and other post-employment and retirement benefits expense. I recommend that SPS be authorized to recover $10,211,527 of pension and other post-employment benefits expense. That amount is composed of $9,815,224 of qualified pension expense, $(31,271) of FAS 106 retiree medical expense, and $14,192 of FAS 112 self-insured LTD expense. SPS is not requesting recovery of non-qualified pension expense.

I also support SPS's request to recover its reasonable and necessary active health and welfare costs, and I recommend that SPS be authorized to recover $15,958,584 for active health and welfare costs. That amount is composed of

$14,455,628 of active health care costs, $609,712 of third-party-insured LTD costs, $152,145 of life insurance costs, and $741,099 of miscellaneous benefit costs.

I further support SPS's request to recover third-party-insured workers' compensation costs, and I recommend that SPS be authorized to recover $811,724 of third-party-insured workers' compensation costs. I also recommend that SPS be authorized to recover $3,437,221 of other pension and benefit-related costs, which include 401(k) matching expense, consulting expense, and deferred compensation.

I next support SPS's request to establish a baseline for pension and OPEB expense on a going-forward basis under PURA § 36.065, and I recommend that the Commission set that baseline at $9,815,224 for qualified pension and $(31,271) for OPEB (both total company). For prior periods, the amount to be amortized as a result of the pension and OPEB baseline deferrals is $1,574,975.

Finally, I recommend that SPS continue to be allowed to include its prepaid pension asset in rate base in accordance with the standard ratemaking treatment of prepayments and Commission precedent. Customers earn a return on the prepaid pension asset in the form of reduced annual pension cost, and therefore it is appropriate for SPS to earn a return on the asset as well. SPS's thirteen-month average net prepaid pension asset balance as of March 31, 2019 was $153,177,668. SPS requests that it be allowed to include the prepaid pension asset in rate base and to earn a return on that asset at SPS's WACC, consistent with Commission precedent.

Q. Is any other SPS witness addressing compensation or benefit issues?

A. Yes. Mr. Knoll discusses the cash compensation paid by SPS and the overall reasonableness of Xcel Energy's Total Rewards Package, which consists of both the cash and non-cash components of the compensation and benefits offered to SPS and XES employees.

Q. Were Attachments RRS-RR-1 and RRS-RR-4 through RRS-RR-7 prepared by you or under your direct supervision and control?

A. Yes.

Q. Are Attachments RRS-RR-2 and RRS-RR-3 true and correct copies of the documents that you have represented them to be?

A. Yes.

III. PENSION AND BENEFITS OVERVIEW

Q. Please summarize the pension and other benefits that SPS offers to its eligible employees.

A. In addition to the cash compensation discussed by Mr. Knoll, SPS offers the following non-cash benefits to its employees:

- Pension and other post-employment and retirement benefits, which include:
  - a defined-benefit qualified pension plan that provides eligible employees with a defined benefit amount upon retirement;
  - a non-qualified pension restoration benefit that allows SPS to attract and retain employees who would otherwise be disadvantaged by the restrictions imposed under the qualified pension plan;
  - a retiree medical plan available to certain retired employees; and
  - LTD benefits;
- Active health and welfare benefits, which include medical, dental, pharmaceutical, vision, life insurance, and other miscellaneous benefits;
- Workers' compensation benefits, including both self-insured and third-party-insured benefits; and
- Other types of benefits, including a 401(k) defined contribution plan and certain types of deferred compensation.

As I mentioned previously, SPS is not requesting recovery of its non-qualified pension expense in this case.

Q. What is the requested amount for each of the elements of non-cash compensation offered by SPS?

A. Table RRS-RR-1 sets forth the total company amounts of the pension and benefit costs that SPS seeks to recover in rates. Column B represents the per book amount for each element of expense during the Test Year, which is the twelve-month period from April 1, 2018 through March 31, 2019. Column C shows the known and measurable adjustments to the Test Year amounts. Column D contains the total company amounts for the Test Year for each element of expense that is included in the cost of service in this case.

Table RRS-RR-1

A	B	C	D
Benefit	**Test Year (12 months ended March 31, 2019)**	**Known and Measurable Adjustment**	**Test Year Amount (Total Company)**
Qualified Pension	$10,989,781	$(1,174,557)	$9,815,224
Non-Qualified Pension	$470,671	$(57,290)	$413,381
Remove Non-Qualified Pension	-	$(413,381)	$(413,381)
FAS 106 Retiree Medical	$(122,475)	$91,204	$(31,271)
FAS 112 Long-Term Disability (Self-Insured)	$3,071	$11,121	$14,192
Active Health Care[3]	$14,590,175	4(134,546)	$14,455,628
Long-Term Disability (Third-Party-Insured)	$609,712	-	$609,712
Life Insurance	$152,145	-	$152,145
Miscellaneous Benefit Programs and Costs	$741,099	-	$741,099
401(k) Match	$3,105,887	$92,250	$3,198,137
Miscellaneous Retirement-Related Costs	$239,084	-	$239,084
Workers Compensation (Third-Party-Insured)	$811,724	-	$811,724
Total Pension and Benefits Expense	**$31,590,875**	**$(1,585,199)**	**$30,005,676**

[3] The per book amount for active health care in the cost of service is $14,590,175. That amount is an estimate, and it must be adjusted to reflect health care claims that were incurred near the end of the Test Year but not reported until after the Test Year. After adding the IBNR amount, which is $(465,387), and the known and measurable adjustment of $330,841 that is discussed on page 34 of my testimony, the Test Year amount is $14,455,628.

Q. Is SPS seeking to recover any other amounts related to pension and benefits?

A. Yes. SPS also seeks Commission approval to continue including a prepaid pension asset in rate base and to earn a return on that asset at SPS's WACC, consistent with the Commission's treatment of SPS's prepaid pension asset in Docket No. 43695.

III. RECOVERY OF PENSION AND OTHER POST-EMPLOYMENT BENEFITS EXPENSE

Q. What topic do you discuss in this section of your testimony?

A. I discuss the amounts requested for pension and other post-employment benefit expenses, which include qualified pension expense, FAS 106 retiree medical expense, and FAS 112 LTD benefits.

Q. Are the pension and other post-employment and retirement benefit amounts that SPS seeks to include in the cost of service determined by actuarial studies or similar studies prepared in accordance with Generally Accepted Accounting Principles ("GAAP")?

A. Yes. SPS's pension and other post-employment and retirement benefit expense amounts are calculated in accordance with actuarial standards, and the results are set forth in actuarial studies that are attached to my testimony as Attachment RRS-RR-2 and Attachment RRS-RR-3.

A. Qualified Pension Expense

Q. How are qualified pension costs determined?

A. Pension costs are determined under FAS 87, Employers' Accounting for Pensions.

Q. Please describe SPS's qualified pension plan and the nature of the costs of the plan.

A. The qualified pension plan is a traditional defined benefit pension plan, which promises bargaining employees monthly pension annuity payments based upon their level of pay and years of service. It promises non-bargaining employees a choice of either a lump sum payout or a monthly pension annuity based upon their level of pay and years of service. Under a defined benefit pension plan, the promised pensions are a commitment by SPS.

Q. Do accounting rules and laws determine the cost for SPS's pension plan?

A. Yes. As I noted earlier, SPS accounts for the cost of its pension plan under the rules set forth in FAS 87, which prescribes the rules that companies must follow in determining whether their pension costs comply with GAAP. However, FAS 87 does not dictate how a company must fund the plan. The funding of the plan is determined based upon prudent business practices, with constraints imposed by the requirements of the Pension Protection Act of 2006, the Employee Retirement Income Security Act ("ERISA"), and the Internal Revenue Code ("IRC"):

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

The minimum and maximum funding rules set forth under the Pension Protection Act, ERISA, and the IRC are different from the methodology used under FAS 87 to determine pension cost. Over the long run, the cumulative employer contributions made to a plan should equal the cumulative recognized pension expense calculated under FAS 87, but in the short and intermediate runs there can be significant differences.

Q. How is pension cost determined under FAS 87?

A. Under FAS 87, pension cost is composed of the following:

1. the value of pension benefits that employees will earn during the current year (service cost);

2. increases in the present value of the pension benefits that plan participants have earned in previous years (interest cost);

3. investment earnings on the pension plan assets that are expected to be earned during the year (expected return on assets ("EROA"));

4. recognition of costs (or income) resulting from experience that differs from the assumptions (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. 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 projected benefit obligation ("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 plan assets and the market-related value of plan assets. The market-related value of plan assets for SPS is a calculated value that recognizes changes in the fair value in a systematic and rational manner over five years.

Q. With regard to the fourth component, what are the unrecognized gains and losses?

A. Unrecognized gains and losses are the asset gains and losses or the liability gains and losses from prior periods. In effect, those asset or liability gains and losses arise when the experience in a prior period differed from what was expected.

Q. Please explain the distinction between asset gains and losses and liability gains and losses.

A. Asset gains and losses arise when the actual returns on the pension trust assets in prior years are greater than or lesser than the EROA. Suppose, for example, that the plan has an expected return of 7% on its pension trust assets, which total $1 billion. The EROA for that year would be $70 million. If the actual return in that year is 9%, the asset gain will be $20 million. Of course, the opposite can also occur. If the EROA is 7% and the actual return on the assets is 5%, the plan suffers a $20 million asset loss.

Liability gains and losses arise when the other components of pension cost differ from expectations. Those components include such things as the discount rate, the expected number of retirements, mortality rates, and wage increases. For example, if SPS assumes a 4% 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 5%; SPS will have a liability gain because the higher discount rate reduces the amount SPS 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. 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. Because gains and losses may reflect refinements in estimates as well as real changes in economic values, and because some gains in one period may be offset by losses in another or vice versa, FAS 87 does not require recognition of gains and losses as a component of net pension cost in the period in which they arise.

Q. Please describe what you mean by the term "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, the asset gains or losses are incorporated into the calculation of pension cost over a period of five years. Thus, 20% of a gain or loss is phased into the amortization pool during the first year after the gain or loss occurs, another 20% 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. Unlike asset gains or losses, liability gains and losses are not phased in, as I mentioned earlier. The portion of 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.

Q. Why does SPS phase-in asset gains and losses and then amortize them over the average years to retirement of active employees?

A. When SPS moved to FAS 87 accounting in 1987, it elected to phase-in asset gains and losses and to amortize these gains and losses over a period not to exceed the average remaining service life (average years to retirement) of employees. The purpose of the election was to reduce financial statement volatility in individual accounting periods by ensuring that gains and losses are spread out over time, and that they are not recognized in just the period that they occur. This phase-in and amortization approach reduces volatility in recognized cost by smoothing gains and losses over the longest allowed duration.

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, as evidenced by the dramatic difference between the EROA and the actual returns that SPS experienced on its pension fund assets in 2008. 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. How are unrecognized gains and losses amortized?

A. SPS aggregates its current year's gains or losses with the prior years' 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 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% corridor – that is, if it is more than 10% of the greater of the PBO or the market-related value of the trust assets – SPS must amortize that net gain or loss. 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 SPS's bargaining employees this is approximately 15 years, and for SPS's non-bargaining employees it is approximately 10 years.

Q. Returning to the five elements of FAS 87 pension cost, what is the fifth element – unrecognized prior service cost?

A. Unrecognized prior service cost results from pension plan amendments that 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 in the same manner as unrecognized gains and losses, with the exception of the 10% corridor.

Q. Please summarize the calculation that is required to be used under FAS 87 to quantify annual pension cost

A. Annual pension cost is quantified using the following calculation:

		Current service cost
	+	Interest cost
	-	EROA
	+/-	Loss (gain) due to difference between expected and actual experience of plan assets or liabilities from prior periods
	+/-	Amortization of unfunded prior service cost
	=	Annual pension cost

Q. Is the annual pension cost produced by this formula always a positive number?

A. No. In some years, the negative amounts in the calculation (i.e., the EROA and the gains resulting from the difference between expected and actual experience from prior periods) can be larger than the positive amounts. When that happens, the annual pension cost is actually negative. And if that occurs in a rate case test year, the annual pension cost included in the cost of service may be a negative number, which reduces the overall cost of service. But even when the annual pension cost is negative, shareholders are still providing the capital to fund the prepaid pension asset.

Q. What amount of expense did SPS incur during the Test Year for qualified pension expense?

A. SPS incurred $10,989,781 for qualified pension expense.

Q. Is SPS proposing to make any known and measurable changes to the qualified pension expense for events occurring after the end of the Test Year?

A. Yes. SPS is requesting a known and measurable adjustment of $(1,174,557) for qualified pension expense. This known and measurable is based on the 2019 calendar year qualified pension expense included in the Attachment RRS-RR-3 actuarial report.

Q. What amount of qualified pension expense is SPS requesting in the cost of service?

A. SPS is requesting approval of $9,815,224 of qualified pension expense. Mr. Freitas has included the qualified pension expense in his cost of service.

Q. Have you provided the numbers and assumptions that SPS used to determine its qualified pension expense amount in the cost of service?

A. Yes. Attachment RRS-RR-4 contains the calculation of the total company qualified pension expense amounts included in the cost of service.[4] Attachments RRS-RR-2 and RRS-RR-3 contain the source documents for those calculations.

B. <u>Retiree Medical Expense</u>

Q. How are retiree medical costs determined?

A. Retiree medical costs are determined under FAS 106, Employers' Accounting for Post-Retirement Benefits Other Than Pensions. The components and calculation are identical to FAS 87, with one exception: the pension asset gains and losses are phased into the loss amortization calculation by 20% each year, whereas retiree medical asset gains and losses are not.

Q. Please describe SPS's retiree medical plan and the plan expenses.

A. SPS's plan consists primarily of retiree medical benefits, but it also includes retiree life and dental insurance. SPS eliminated those benefits for all active non-

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[4] SPS's actuary, Willis Towers Watson, calculates the pension and benefit amounts on a total company basis. Thus, the amounts in Attachments RRS-RR-2 through RRS-RR-7 are presented on a total company basis.

bargaining employees more than ten years ago, and SPS bargaining employees hired on or after January 1, 2012 are no longer eligible to receive retiree medical benefits. Thus, the current expense for retiree medical benefits is a legacy of the prior programs.

Q. What amount of expense did SPS incur during the Test Year for retiree medical expense?

A. SPS incurred $(122,475) for retiree medical expense.

Q. Is SPS proposing to make any known and measurable changes to the retiree medical expense for events occurring after the end of the Test Year?

A. Yes. SPS is requesting a known and measurable adjustment of $91,204 for retiree medical expense. This known and measurable is based on the 2019 calendar year retiree medical expense include in the Attachment RRS-RR-3 actuarial report.

Q. What amount of retiree medical expense is SPS requesting in the cost of service?

A. SPS is requesting approval of $(31,271) in retiree medical expense. Mr. Freitas has included that amount of retiree medical credit in his cost of service.

Q. Have you provided the numbers and assumptions that SPS used to determine its retiree medical expense amounts?

A. Yes. Attachment RRS-RR-4 contains the calculations of the retiree medical expense amounts. Attachments RRS-RR-2 and RRS-RR-3 contain the source documents for those amounts.

C. Self-Insured Long-Term Disability

Q. Please describe LTD in more detail and explain how it is accounted for.

A. The LTD costs are attributable to benefits provided by SPS to former or inactive employees after employment but before retirement. The LTD plan provides employees with income protection by paying a portion of an employee's income while he or she is disabled by a covered physical or mental impairment.

SPS has two types of LTD – a self-insured benefit and a third-party-insured benefit. In a third-party-insured plan, which I will discuss in more detail later in this testimony, SPS purchases an insurance plan from an outside insurance provider that assumes the risk. In a self-insured plan, SPS provides the benefits to the covered individuals and therefore effectively acts as the insurer. For the self-insured piece, SPS is required to accrue for LTD costs under FAS 112, Employers' Accounting for Post-Employment Benefits. The FAS 112 accrual represents the expected disability benefit payments for employees that are not expected to return to work.

Q. Which groups of employees are covered under the self-insured plan and which groups are covered under the third-party-insured plan?

A. Within the LTD benefit, all employees disabled before January 1, 2008 are covered under the self-insured plan, and all employees disabled on and after January 1, 2008 are covered under a third-party-insured plan.

Q. What amount of expense did SPS incur during the Test Year for self-insured LTD expense?

A. SPS incurred $3,071 for self-insured LTD expense.

Q. Is SPS proposing to make any known and measurable changes to the self-insured LTD expense for events occurring after the end of the Test Year?

A. Yes. SPS is requesting a known and measurable adjustment of $11,121 for self-insured LTD expense. This known and measurable is based on the 2019 calendar year self-insured LTD expense included in the Attachment RRS-RR-3 actuarial report.

Q. What amount of self-insured LTD expense is SPS requesting in the cost of service?

A. SPS is requesting approval of $14,192 of self-insured LTD expense. Mr. Freitas has included that amount of self-insured LTD expense in the cost of service.

Q. Have you provided the numbers and assumptions that SPS used to determine its self-insured LTD benefits expense amounts in the Test Year?

A. Yes. Attachment RRS-RR-4 contains the calculations of the self-insured LTD benefits expense amounts. Attachments RRS-RR-2 and RRS-RR-3 contain the source documents for those calculations.

D. <u>Reasonableness of SPS's Pension and Other Post-Employment and Retirement Benefits Expense</u>

Q. Are the amounts of SPS's pension and other post-employment and retirement benefits expense reasonable?

A. Yes. SPS follows a well-established, objective, and verifiable process to determine the assumptions used within the actuarial calculations that yield the pension and other post-employment and retirement benefits expense amounts. The assumptions and the actuarially calculated total cost amounts are reflected in my Attachment RRS-RR-4. In addition, the reasonableness of Xcel Energy's Total Rewards Program design, which includes pension and other post-employment and retirement benefits, is discussed in the direct testimony of Mr. Knoll.

IV. HEALTH AND WELFARE COSTS

Q. What topics do you discuss in this section of your testimony?

A. I discuss four types of active health and welfare costs: (1) active health care costs; (2) third-party-insured LTD costs; (3) life insurance costs; and (4) miscellaneous benefit costs.

A. Active Health Care

Q. What types of costs are included in active health care?

A. Active health care costs are all costs associated with providing health care coverage to employees. Those costs include medical, pharmacy, dental and vision claims, administrative fees, employee withholdings, pharmacy rebates, Health Savings Account ("HSA") contributions, transitional reinsurance fees, trustee fees, and interest income.

Q. What amount of active health care expense is SPS seeking to include in the cost of service?

A. SPS is requesting approval of $14,455,628 for active health care expense. Mr. Freitas has included that amount of active health care expense in the cost of service.

Q. Does the Test Year amount match the per book amount of active health care costs?

A. No. The per book numbers for active health care amounts include estimates because there is generally an average lag of approximately 30 days between when health care is provided and when SPS receives a bill for that care.[5] Therefore, the

[5] The difference between the estimated amount and the actual amount is generally not material enough to restate SPS's GAAP books when the actual amount becomes known.

actual amount of active health care expense was not available at the time SPS recorded its per book amount at the end of March 2019. Because SPS needs to close its books before it receives all of those health care 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 by the end of the year, which is the Incurred But Not Reported ("IBNR") reserve. During the following year, SPS receives the actual amounts attributable to care provided in the last part of the prior year, and at that time it trues up the IBNR estimate to the actual incurred expense.

Q. Is SPS proposing to make any known and measurable changes to the active health care expense for events occurring after the end of the Test Year?

A. Yes. SPS is requesting an increase of $330,841 for active health care expense.

Q. Please discuss the process that SPS undertook to determine the Active Health Care amounts for 2019.

A. SPS first took the Test Year per book amounts after making the IBNR reserve adjustments described above and then applied three known and measurable adjustments to arrive at the 2019 active health care amount:

1. SPS applied a 5.50% increase to the 2018 incurred medical amount, which increased costs by $392,667.
2. SPS applied a 12.60% increase to the 2018 incurred pharmacy amount, which increased costs by $178,559.
3. SPS switched medical providers in 2019, which resulted in lower administrative fees. As a result, the Test Year medical administrative fees were reduced by $240,385.

The three adjustments result in a net increase of $330,841 to the overall amount.

Q. **What amount of active health care expense is SPS requesting in the cost of service?**

A. SPS is requesting approval of $14,455,628 of active health care expense. Mr. Freitas has included that amount of active health care expense in the cost of service.

B. <u>Third-Party-Insured Long-Term Disability</u>

Q. **Please describe the third-party-insured LTD costs that SPS incurs.**

A. As explained earlier, SPS offers long-term disability coverage that provides benefits to former or inactive employees after employment but before retirement. The LTD plan provides employees with income protection by paying a portion of an employee's income while he or she is disabled by a covered physical or mental impairment. In a third-party-insured plan, SPS purchases an insurance plan from an outside insurance provider that assumes the risk, and the cost of the third-party-insured piece is simply the cost of the insurance premium incurred each year along with any other miscellaneous costs.

Q. **What groups of employees are covered under the third-party-insured benefit?**

A. As noted earlier, all employees disabled on and after January 1, 2008 are covered under the third-party-insured plan.

Q. **What amount of third-party-insured LTD benefit expense is SPS seeking to recover?**

A. SPS is requesting approval of $609,712 of third-party-insured LTD expense for the Test Year. Mr. Freitas has included that amount of third-party-insured LTD benefits expense in the cost of service.

C. Life Insurance

Q. Please describe the life insurance cost that SPS incurs.

A. The life insurance category consists of life insurance premiums and offsetting employee life insurance withholdings. Life insurance is provided to non-bargaining employees at 100% of base pay and to SPS bargaining employees at 50% of base pay. Employees also have the option to purchase additional life insurance.

Q. What amount of expense did SPS incur during the Test Year for life insurance benefits?

A. SPS is requesting approval of $152,145 of life insurance expense for the Test Year. Mr. Freitas has included that amount of life insurance expense in the cost of service.

D. Miscellaneous Benefits

Q. What types of miscellaneous benefit programs does SPS offer to its employees?

A. The types of costs included in the miscellaneous benefit programs and costs category are:

- Tuition reimbursement,
- Employee Assistance Program costs,
- Wellness program costs,
- Costs incurred by the HR Service Center to answer employee retirement or benefit questions,
- Health and welfare plan actuarial and audit fees,
- Administrative fees for short-term and long-term disability plans, and

- Administrative fees for employee flexible spending and HSAs.

Q. What amount of expense did SPS incur during the Test Year for miscellaneous benefits?

A. SPS incurred $741,099 of miscellaneous benefit expense for the Test Year. Mr. Freitas has included that amount of miscellaneous benefits expense in the cost of service.

E. <u>Reasonableness of Health and Welfare Costs</u>

Q. Are the amounts of SPS's health and welfare expense reasonable?

A. Yes. It is appropriate for the cost of service to include these benefits because they reflect a reasonable and necessary level of expense. As Mr. Knoll explains in more detail, Xcel Energy's compensation plans and benefits are required for Xcel Energy and its subsidiaries to attract, retain, and motivate employees needed to perform the work necessary to provide quality services for SPS customers. Without these benefits, SPS and XES would have to pay significantly higher current compensation to attract employees.

V. <u>WORKERS' COMPENSATION COSTS</u>

Q. Is SPS seeking recovery of the costs associated with workers' compensation benefits?

A. Yes. SPS is seeking recovery of third-party-insured workers' compensation benefits.

Q. Please briefly describe SPS's third-party-insured workers' compensation program.

A. For employees who are injured on or after August 1, 2001, all workers compensation benefits are covered under an insured program. The only cost to Xcel Energy for this benefit cost is the insurance premium. In a third-party-insured plan, SPS purchases an insurance plan from an outside insurance provider that assumes the risk, and the cost of the third-party-insured piece is simply the cost of the insurance premium incurred each year along with any other miscellaneous costs.

Q. How are third-party-insured workers' compensation amounts determined?

A. The costs are calculated by actuaries of the vendor from whom SPS purchases the insurance. The actuaries presumably base the costs on company-specific historical loss data and payroll to determine exposure related to the policy period.

Q. What amount of expense is SPS seeking to recover for third-party-insured workers' compensation benefits?

A. SPS is requesting approval of $811,724 of third-party-insured workers' compensation expense. Mr. Freitas has included that amount of third-party-insured workers' compensation expense in the cost of service.

Q. Is it reasonable for the cost of service to include third-party-insured workers' compensation costs incurred by SPS?

A. Yes. It is appropriate for the cost of service to include these benefits because they reflect a reasonable and necessary level of expense. Xcel Energy's workers' compensation plans and benefits are required for Xcel Energy and its subsidiaries to attract, retain, and motivate employees needed to perform the work necessary to provide quality services for SPS customers. Without these benefits, SPS and XES would have to pay significantly higher current compensation to attract employees.

VI. OTHER BENEFIT COSTS

Q. Is SPS seeking recovery of any retirement benefits in addition to the ones discussed earlier?

A. Yes. SPS is seeking recovery of 401(k) match costs and miscellaneous retirement-related costs.

A. 401(k) Match

Q. Please briefly describe SPS's 401(k) match plan.

A. SPS's retirement income plan is based on a combination of a defined benefit pension plan and a 401(k) plan, which is a defined contribution plan. Unlike some defined benefit pension plans, SPS's defined benefit pension plan is not intended to provide an employee's total retirement income. Rather, the defined benefit pension plan and 401(k) plan are designed so that the two plans in combination provide retirement income to SPS and XES employees.

Q. How are the 401(k) match costs determined?

A. The 401(k) plan is a defined contribution plan to which employees must contribute in order to obtain employer matching. It is based on the amount that employees contribute as a percentage of their salary with a maximum match of 4%. For the majority of SPS's workforce, the employee must contribute 8% of eligible income for SPS to contribute the maximum company match of 4% of eligible income. The remaining employees, who are in the Traditional Plan, receive a maximum match of $1,400.

Q. What amount of expense did SPS incur during the Test Year for 401(k) match benefits?

A. SPS incurred $3,105,887 for 401(k) benefits.

Q. Is SPS proposing to make any known and measurable changes to the 401(k) expense for events occurring after the end of the Test Year?

A. Yes. SPS is requesting a known and measurable adjustment of $92,250 for 401(k) benefit expense. Because the 401(k) match is based on the amount that employees contribute as a percentage of their salary, escalation factors of 3% and 2.8% have been applied to non-bargaining and bargaining employees, respectively. For justification of the merit increase, please refer to Mr. Knoll's direct testimony.

Q. What is the amount of 401(k) Match expense included in the cost of service?

A. After including the known and measurable adjustment mentioned above, the 401(k) Match expense requested by SPS is $3,198,137. Mr. Freitas has included the 401(k) Match expense in the cost of service.

B. Miscellaneous Retirement-Related Costs

Q. What costs are included in miscellaneous retirement-related costs?

A. This category includes costs such as 401(k) plan administration fees, compensation consulting and survey costs, retirement plan actuarial and audit fees, and a small amount for the deferred compensation plan.

Q. What amount of expense did SPS incur during the Test Year for miscellaneous retirement-related costs?

A. SPS incurred $239,084 for miscellaneous retirement-related costs. Mr. Freitas has included the miscellaneous retirement-related expense in the cost of service.

C. Reasonableness of Other Benefit Costs

Q. Is it reasonable for the cost of service to include the 401(k) match and miscellaneous retirement-related costs incurred by SPS?

A. Yes. It is appropriate for the cost of service to include these benefits because they reflect a reasonable and necessary level of expense. Xcel Energy's compensation plans and benefits are required for Xcel Energy and its subsidiaries to attract, retain, and motivate employees needed to perform the work necessary to provide quality services for SPS customers. Without these benefits, SPS and XES would have to pay significantly higher current compensation to attract employees.

VII. PENSION AND OPEB RESERVE ACCOUNT

Q. Does SPS defer pension and OPEB expense amounts that differ from the levels of pension and OPEB amounts included in base rates?

A. Yes. PURA § 36.065(b) allows a utility to establish a reserve account to record the difference between the annual amount of pension and OPEB expense approved in the utility's last general rate case and the annual amount of pension and OPEB expense that the utility actually incurs. If the amount of pension and OPEB expense in the utility's approved rates is greater than the actual expense, the utility will have a surplus in its reserve account. If the amount of pension and OPEB expense in the utility's approved rates is less than the actual expense, the utility will have a shortage in its reserve account.

Q How is the reserve account treated for ratemaking purposes?

A. PURA § 36.065 states that if a reserve account for pension and OPEB expense is established, the Commission:

> at a subsequent general rate proceeding shall:
>
> (1) review the amounts recorded to the reserve account to determine whether the amounts are reasonable expenses;
>
> (2) determine whether the reserve account has a surplus or shortage under Subsection (c); and
>
> (3) subtract any surplus from or add any shortage to the electric utility's rate base with the surplus or shortage amortized over a reasonable time.

Q. Did the Commission establish baselines for the pension and OPEB tracker in SPS's last rate case?

A. Yes. In Docket No. 47527, the parties agreed to a baseline amount of $13,378,566 (total company) for qualified pension expense, with a Texas retail amount of $7,830,475. The parties agreed to a OPEB expense baseline of $(351,985) (total company), with the Texas retail amount being $(206,017).[6]

Q. What is the total amount of pension and OPEB costs related to the tracker that SPS is requesting to recover in this case?

A. As noted earlier in my testimony, SPS is proposing to amortize the pension and OPEB regulatory liability balance of $1,574,975 for the Texas retail jurisdiction. That amount is the net of two balances:

- The first amount represents the unamortized balance of the pension and OPEB amounts deferred from prior cases, which is $(276,798) as of March 31, 2019. That amount reflects accruals in excess of the agreed-upon baselines set in Docket Nos. 38147, 40824 and 42004.

- The second amount represents the total deferrals for July 1, 2017 through March 31, 2019, which total $1,851,773.

Mr. Freitas has reflected the $1,574,975 of net deferred pension and OPEB expense in the cost of service study he presents. The deferred amounts appear under FERC Account 92603. See Attachment RRS-RR-1 for a summary of how this amount was calculated.

Q. How did SPS calculate the unamortized balance of the pension and OPEB amounts deferred from prior cases?

A. SPS calculated the unamortized balance of pension and OPEB amounts deferred from prior cases by the following steps:

- In Docket No. 47527, the parties agreed that SPS would be allowed to recover a deferred pension and OPEB expense balance of $(664,316) over a period of 24 months beginning on February 1, 2018, which yields a monthly amount of $76,730. ($(664,316) / 24 = $(27,680)).

[6] Docket No. 45524, *Application of Southwestern Public Service Company for Authority to Change Rates*, Unopposed Stipulation at 6 and Attachment D.

- As of March 31, 2019, ten months worth of amortized costs will remain unrecovered.
- Multiplying 10 months by $(27,679.83) per month equals an unamortized balance of $(276,798). The calculation appears on my Attachment RRS-RR-5.

Q. How did SPS calculate the deferral amount to be amortized?

A. For the period from July 1, 2017 through January 22, 2018, SPS compared the actual amounts of pension and OPEB expense to the baseline expense amounts set in Docket No. 45524. For the period from January 23, 2018 to March 31, 2019, SPS compared the actual amounts of pension and OPEB expense to the baseline amounts established in Docket No. 47527.

Q. What is the total of the deferral amounts that SPS is asking to recover?

A. The table below shows the unamortized amounts for prior periods and the amount of deferrals requested in this case:

Table RRS-RR-2

Pension and OPEB Deferrals	
Pension and OPEB expense deferred from prior cases	$(276,798)
Pension and OPEB expense deferred from July 1, 2017 to March 31, 2019	1,851,773
Total Net Pension and OPEB Deferrals	**1,574,975**

Q. How does SPS propose to treat the amount in the reserve account?

A. SPS proposes to amortize the accrued amount over a one-year period and to reimburse the full amount to customers over that period. I have supplied the accrued balance excess amount to Mr. Freitas, and he has reflected it in the cost of service calculation.

Q. Are the amounts of pension and OPEB expense recorded in the reserve account reasonable?

A. Yes. The pension and OPEB expense amounts are reasonable for the reasons discussed earlier in connection with the forward-looking pension and OPEB expense. SPS's pension plans are administered prudently and in accordance with GAAP, and the amounts contributed are consistent with the actuarial projections that are based on third-party projections and assumptions.

VIII. <u>SPS'S PREPAID PENSION ASSET</u>

Q. What topic do you discuss in this section of your testimony?

A. I describe SPS's prepaid pension asset and explain that it should be included in rate base. It should also earn a return at SPS's WACC.

Q. Has the Commission addressed this issue in prior cases?

A. Yes. As I noted earlier, in Docket No. 43695, the Commission approved SPS's request to include the prepaid pension asset in rate base and to earn a return on that asset at SPS's WACC.

Q. What is a prepaid pension asset?

A. A prepaid pension asset represents the difference between: (1) the cumulative actuarially determined net periodic pension cost calculated in accordance with FAS 87; and (2) the cumulative cash amounts contributed to the pension trust fund.

Q. Please provide an example of how the difference arises.

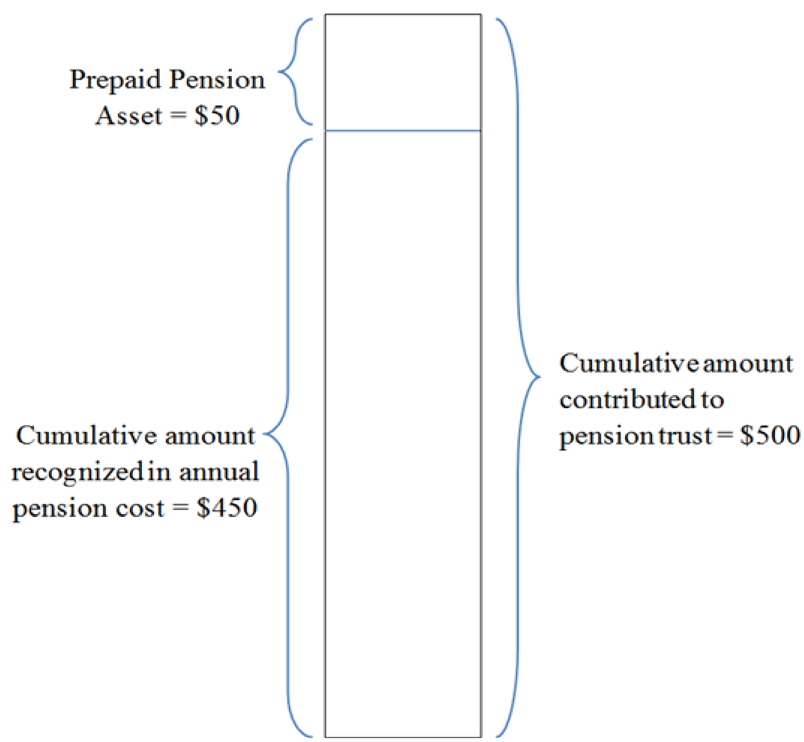
A. Suppose that the pension plan has been in existence for five years, and that the cash contribution to the pension trust for each of five years has been $100 million, whereas the pension cost calculated in accordance with FAS 87 has been $90 million in each of those five years. Table RRS-RR-3 shows how the excess of cash contributions each year creates a cumulative prepaid pension asset:

Table RRS-RR-3 (amounts in millions)

Year	Pension Contribution	Pension Cost	Cumulative Prepaid Pension Asset
1	$100	$90	$10
2	$100	$90	$20
3	$100	$90	$30
4	$100	$90	$40
5	$100	$90	$50
Total	**$500**	**$450**	**$50**

At the end of the five year period, the utility has cumulative cash contributions of $500 million and cumulative pension cost of $450 million, which produces a prepaid pension asset of $50 million, as shown in Figure RRS-1:

Figure RRS-RR-1



Q. Why are the contributions and cost different in any given year?

A. As I explained earlier in my discussion of qualified pension expense, the cost calculation is governed by FAS 87, but the contributions are driven by federal law requirements under ERISA, the IRC, and the Pension Protection Act. Although the cost 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 O&M expense?

A. No. Federal law prohibits the withdrawal of any amounts from the pension trust fund except for the payment of benefits and plan expenses. After the contributions are made, they are essentially locked away.

Q. Does SPS currently have a prepaid pension asset?

A. Yes. The thirteen-month average of the net prepaid pension asset balance as of March 31, 2019 was $153,177,668.[7]

Q. Is SPS seeking to include that prepaid pension asset in rate base?

A. Yes. SPS is requesting Commission approval to include the prepaid pension asset in rate base and to earn a return on that portion of the rate base at the WACC that SPS has proposed in this case, which is 7.68%.

[7] The net prepaid pension asset that appears in the cost of service is $153,177,668. That is the net of the prepaid qualified pension asset of $153,633,570 and the non-qualified pension unfunded liability of $455,903.

Q. Do you recommend that the Commission include the prepaid pension asset in rate base?

A. Yes. The standard ratemaking practice is for prepayments to earn a return at the utility's WACC. For example, Texas retail customers effectively earn a return on the Accumulated Deferred Income Tax ("ADIT") balance included in the cost of service at SPS's WACC because that ADIT balance is removed from rate base, meaning customers are not paying a return on the portion of rate base equal to the ADIT balance. Moreover, it is reasonable and equitable to include the prepaid pension asset in rate base and for SPS to earn a return on it because customers are also earning a return on the prepaid pension asset.

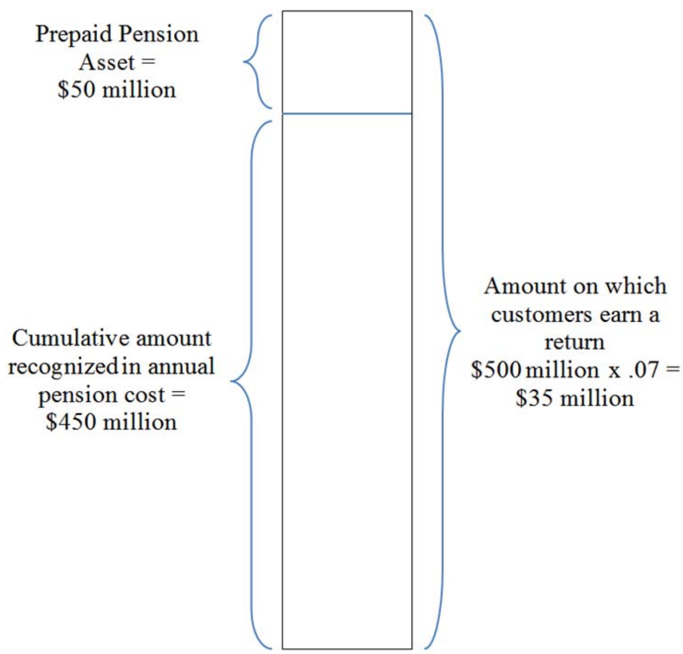
Q. Please explain what you mean when you state that customers are also earning a return on the prepaid pension asset.

A. As I explained in a prior section of my testimony, one of the components of the annual pension expense calculation is the return that the pension trusts are expected to earn on the assets in the trust. Suppose, for example, that a pension trust has assets of $500 million and is expected to earn a return of 7% in the current year. Under those assumptions, $35 million would be included in the annual pension cost calculation as the EROA. As I explained in a prior section, the EROA is subtracted from the service cost and other elements of the annual pension cost. Therefore, in this example, the return on the pension trusts would reduce annual pension cost by $35 million.

Q. Does the pension trust fund balance that is multiplied by the EROA include the prepaid pension asset?

A. Yes. As shown in Figure RRS-RR-2, 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 RRS-RR-2[8]



That means all of the assets in the pension trust, including the assets that comprise the prepaid pension asset, are used and useful to SPS's Texas retail customers.

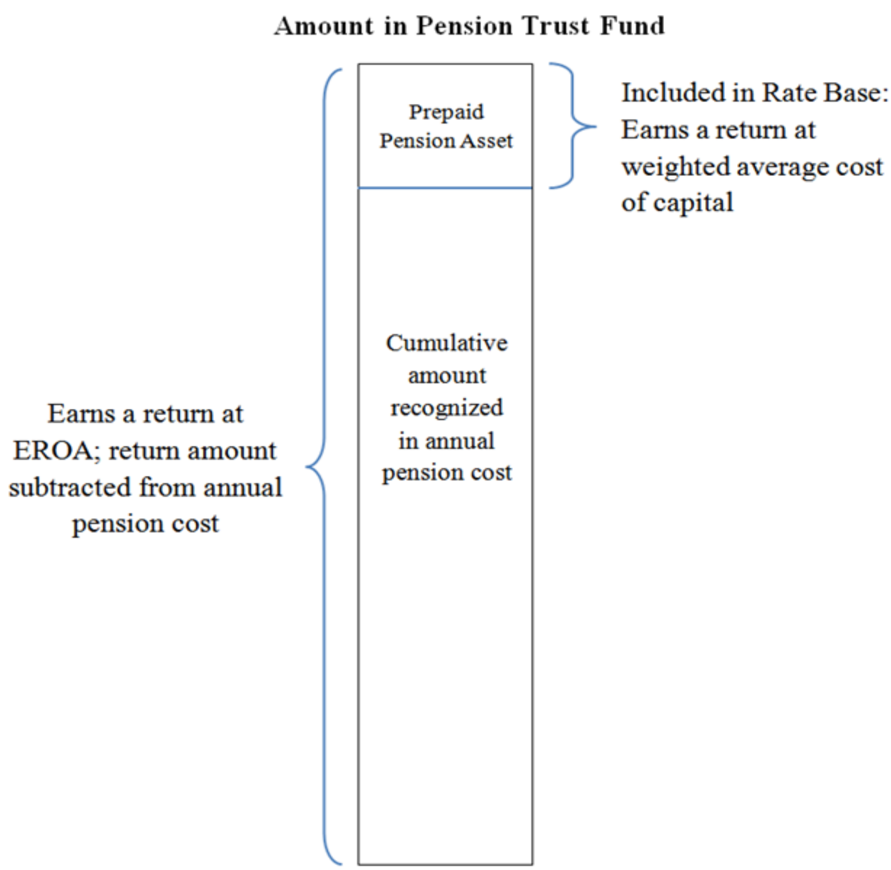
Q. Does the fact that customers are receiving a return on the prepaid pension asset portion of the trust funds justify including the prepaid pension asset in rate base and allowing SPS to earn a return on it?

A. Yes. As demonstrated in Figure RRS-RR-3 (next page), including the prepaid pension asset in rate base provides a return to the utility, and that return offsets the

[8] The amounts in this figure are just examples that have been simplified for ease of understanding.

reduction in the revenue requirement that results from the earnings on the prepaid pension asset included in the annual pension cost. With an exception I will discuss below, the return on the prepaid pension asset portion of rate base is simply the mirror image of the return that customers receive as a result of earnings on the prepaid pension asset.

Figure RRS-RR-3



Thus, if customers receive the benefit of the earnings on the prepaid pension asset, it is appropriate for SPS to receive a return on the prepaid pension asset portion of rate base. Conversely, if SPS does not receive a return on the prepaid pension asset portion of rate base, customers should not receive the benefit of the earnings on the prepaid pension asset.

Q. Please turn now from the hypothetical examples you have been discussing to SPS's actual prepaid pension asset. How much are SPS's Texas retail customers saving in annual pension cost as a result of the prepaid pension asset?

A. As Table RRS-RR-4 shows, SPS's customers are saving $10,410,771 in annual pension costs as a result of the prepaid pension asset.

Table RRS-RR-4

Pension Plan	Date	Prepaid Pension Asset 13-Month Average	EROA	Cost Reduction from Prepaid Pension Asset
NCE Non-Bargaining	3/31/2018 to 3/31/2019	$27,003,044	6.90%	$1,863,210
SPS Bargaining	3/31/2018 to 3/31/2019	$126,630,526	6.75%	$8,547,561
Total		**$153,633,570**		**$10,410,771**

Q. Please explain SPS's request regarding its prepaid pension asset.

A. SPS is requesting that the prepaid pension asset of $153,633,570 be included in rate base to provide a corresponding return to shareholders. Otherwise, the qualified prepaid pension asset is solely generating a return for customers through lower pension expense. The prepaid pension asset represents assets that are delivering a direct benefit to customers because the investment income on those assets lowers the pension expense under FAS 87. It is therefore appropriate to include the prepaid pension asset in rate base. The calculation to support the prepaid pension asset thirteen-month average can be found in my Attachment RRS-RR-6, and the cumulative qualified prepaid pension asset balance since the adoption of FAS 87 can be found in my Attachment RRS-RR-7.

Q. Is SPS's requested WACC on the prepaid pension asset in this case higher than the EROA on the prepaid pension asset?

A. Yes. In this case, SPS's requested WACC is 7.68% and the weighted average of the 2019 forecasted EROA for the SPS Bargaining Plan and the New Century Energies ("NCE")[9] Non-Bargaining Plan 2019 is 6.78%.[10]

Q. Why should SPS be allowed a return on the prepaid pension asset based on the WACC if the ratepayers are only receiving a reduction in cost based on the lower EROA on the prepaid pension asset?

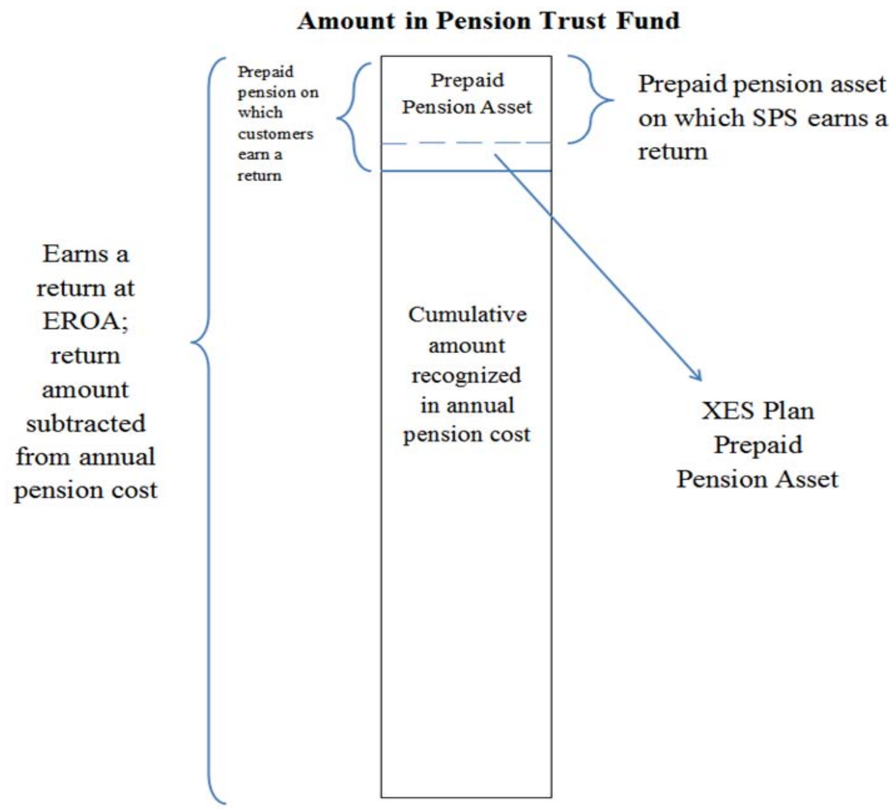
A. There are two reasons. First, although the simplified example in Figure RRS-RR-3 shows an equivalent prepaid pension asset balance on which customers and the utility are earning a return, the amounts are not equal insofar as SPS is concerned. SPS's annual pension cost includes costs for three different pension plans – the SPS Bargaining Plan, the NCE Non-Bargaining Plan, and the XES Plan. All three of those plans have prepaid pension assets, and customers earn a return on all three plans. However, SPS does not include the XES Plan portion of the prepaid pension asset in rate base because that asset belongs to XES, not to SPS. Therefore, SPS's customers are receiving a return on the XES Plan portion of the prepaid pension asset, but they do not pay a return on that asset. To reflect SPS's actual circumstances, it is necessary to modify the figure

[9] NCE refers to New Century Energies, Inc., which merged with Northern States Power Company in 2000 to create Xcel Energy.

[10] The EROA for the SPS Bargaining Plan is 6.75%, and the EROA for the NCE Non-Bargaining Plan is 6.90%. The weighted average of those amounts is 6.78%.

as reflected in Figure RRS-RR-4 to show the actual amount on which SPS earns a return as part of rate base:

Figure RRS-RR-4



As this figure shows, customers earn a return on a larger prepaid pension asset balance than SPS does.

Q. What was SPS's portion of the 13-month average of the XES Plan prepaid pension asset as of March 31, 2019?

A. The Texas retail portion of the 13-month average XES Plan prepaid pension asset was approximately $17.0 million as of March 31, 2019. With an EROA of 7.10% for the XES Plan, SPS's Texas customers receive $1.2 million of return on an asset on which they pay no return. That reduces annual pension expense by an equal amount.

Q. Does the prepaid pension asset benefit customers in any other way?

A. Yes. The contributions that helped create the prepaid pension asset allow the Company to avoid incurring Pension Benefit Guaranty Corporation ("PBGC") premiums that would otherwise be included within the annual pension cost charged to customers.

Q. Please explain what the PBGC is.

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 defined-benefit plans, such as Public Service.

Q. What are the variable-rate premiums applicable to underfunded plans?

A. For 2018, the PBGC variable-rate premium for a single-employer plan such as that of SPS was $38 per $1,000 of unfunded vested benefit.

Q. Do SPS and its customers avoid the payment of PBGC premiums because of the contributions that helped create the prepaid pension asset?

A. Yes. Texas customers received the benefit of reduced PBGC premiums in the Test Year, and SPS projects that it will have additional PBGC savings in the future. The PBGC premiums would have been $1.6 million higher in 2018 in the absence of the prepaid pension asset. This additional cost would be passed on to customers as increased qualified pension expense.

Q. Can you demonstrate mathematically that SPS's customers are better off as a result of the prepaid pension asset?

A. Yes. Multiplying the SPS prepaid pension asset of $153,633,570 by the 7.68% percent WACC requested by SPS results in a return to SPS of $11,799,058 on the prepaid pension asset. Table RRS-RR-7, however, shows that Texas customers receive $11,617,907 of benefit as a result of the return on the prepaid pension assets (which includes the XES Plan portion of the prepaid asset), and they avoid paying $1,568,032 in PBGC premiums as a result of the prepaid pension asset. Thus, even with the SPS prepaid pension asset included in rate base and earning a return at the WACC, SPS's customers realize a net benefit of $1.4 million as a result of the prepaid pension asset.

Table RRS-RR-7

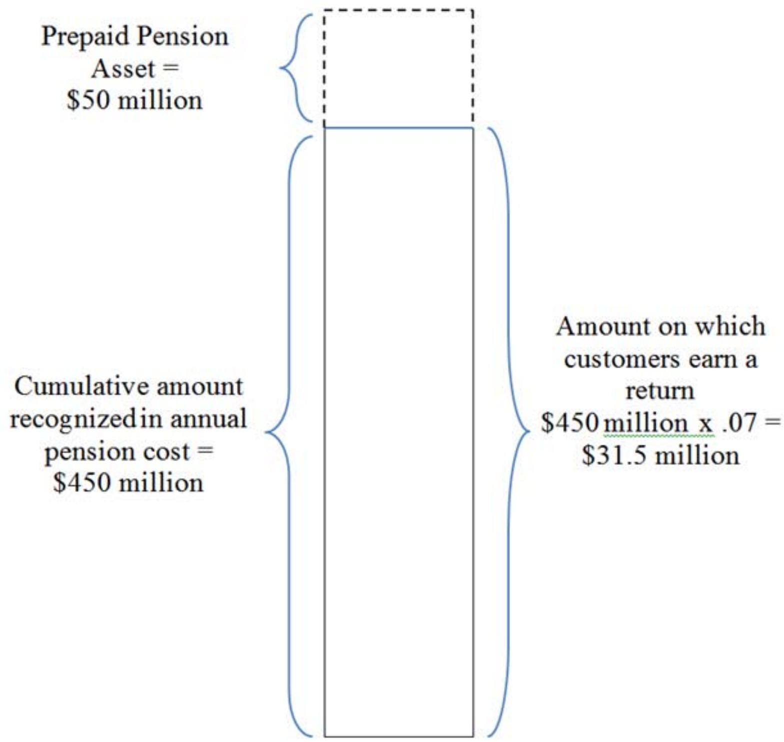
SPS Prepaid pension asset balance (excluding the XES prepaid pension asset)		$153,633,570	
Weighted average EROA for SPS Bargaining and NCE Non-Bargaining plans	x	6.776%	
Initial return benefit to customers	=		$10,410,771
Balance of XES prepaid pension asset		$17,001,917	
EROA for XES prepaid pension asset	x	7.10%	
Return on XES prepaid pension asset	=		$1,207,136
Avoided PBGC Premiums			$1,568,032
Total Pension Benefit			$13,185,939
Return on prepaid pension asset at WACC	-		$11,799,058
Net benefit to SPS customers from prepaid pension asset	=		$1,386,881

Q. Thus far you have been discussing the justification of including the SPS prepaid pension asset in rate base. Is including the SPS prepaid pension asset in rate base the only way of dealing with the prepaid pension asset issue?

A. No. Another solution would be to exclude the earnings on the assets represented by the SPS prepaid pension asset from the calculation of annual pension cost for regulatory purposes. The basic point is that customers should not be earning a return on the prepaid pension assets without providing a corresponding return. It would be inequitable to deny SPS a return on the SPS prepaid pension asset while providing to customers all the benefits arising from the existence of these assets. The entire prepaid pension asset produces investment income to offset pension expenses, regardless of when the amounts were contributed or realized. Thus, if the SPS prepaid pension asset is excluded from rate base, the earnings on the prepaid pension assets should be excluded from the calculation of annual pension cost, as depicted on Figure RRS-RR-5 (on the next page):[11]

[11] The ADIT, FAS 106, and FAS 112 balances would have to be adjusted as well.

Figure RRS-RR-5[12]



Q. Do you recommend that the Commission exclude the return on the SPS prepaid pension asset from rate base and from the calculation of annual pension cost?

A. No. As I explained earlier, SPS's customers are actually better off as a result of the prepaid pension asset because they receive a return on the Texas retail portion of the XES prepaid pension asset but do not pay a return on it because that prepaid pension asset is not included in the amount requested in rates. In addition, the customers receive a benefit from the avoidance of incremental PBGC premiums as a result of the prepaid pension asset. When all of those

[12] Again, these numbers are merely illustrative, but they demonstrate that customers are worse off if the prepaid pension asset is excluded from the calculation of annual pension cost. In the example in Figure RRS-RR-5, customers get credit for $35 million in earnings, whereas without the $50 million prepaid pension asset, they get credit for only $31.5 million in earnings.

factors are considered, SPS's customers are better off if the prepaid pension asset is included in both rate base and the calculation of annual pension cost, even after the return on the prepaid pension asset is grossed up for taxes.

Q. How would it affect SPS's annual pension cost if the earnings on the pension trust assets were excluded from the cost of service?

A. SPS's annual pension cost would increase by more than $10.4 million if the earnings on the SPS pension trust assets were excluded from the cost of service. Because pension costs are passed through to customers on a dollar-for-dollar basis, SPS's revenue requirement would increase by the same amount.

Q. Does this conclude your pre-filed direct testimony?

A. Yes.

AFFIDAVIT

STATE OF MINNESOTA)
)
COUNTY OF HENNEPIN)

RICHARD R. SCHRUBBE, first being sworn on his oath, states:

I am the witness identified in the preceding testimony. I have read the testimony and the accompanying attachment(s) and am familiar with the contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.

RICHARD R. SCHRUBBE

Subscribed and sworn to before me this 6 day of August, 2019 by RICHARD R. SCHRUBBE.

AMY JO LARKIN
Notary Public
State of Minnesota
My Commission Expires
January 31, 2023

Amy Jo Larkin
Notary Public, State of Minnesota

My Commission Expires: 1/31/2023

Southwestern Public Service Company

Calculation of Deferred Pension and OPEB Balances

	Deferrals from 7/1/2017 - 3/31/19		
	Current Year Deferrals	Prior Year Deferral True-ups	Total
Jul 2017	$ (107,688)	$ -	$ (107,688)
Aug 2017	(107,688)	-	(107,688)
Sept 2017	(107,688)	-	(107,688)
Oct 2017	(107,688)	-	(107,688)
Nov 2017	(107,688)	-	(107,688)
Dec 2017	1,413,894	-	1,413,894
Jan 2018	(176,847)	9,066	(167,782)
Feb 2018	(176,847)	-	(176,847)
Mar 2018	(176,847)	(222,641)	(399,489)
Apr 2018	(176,847)	-	(176,847)
May 2018	(176,847)	-	(176,847)
Jun 2018	(176,847)	-	(176,847)
Jul 2018	(176,847)	-	(176,847)
Aug 2018	(176,847)	-	(176,847)
Sept 2018	898,635	-	898,635
Oct 2018	(176,847)	-	(176,847)
Nov 2018	(176,847)	-	(176,847)
Dec 2018	607,603	1,945,320	2,552,923
Jan 2019	(152,757)	-	(152,757)
Feb 2019	(152,757)	-	(152,757)
Mar 2019	(152,757)	(34,920.61)	(187,677)
	$ 154,949	**$ 1,696,824**	**$ 1,851,773**

	Amortization
Amount to be amortized	**$ (664,316)**
Jul 2017	$ (76,730)
Aug 2017	(76,730)
Sept 2017	(76,730)
Oct 2017	(76,730)
Nov 2017	(76,730)
Dec 2017	(76,730)
Jan 2018	(76,730)
Feb 2018	(76,730)
Mar 2018	(76,730)
Apr 2018	(76,730)
May 2018	(76,730)
Jun 2018	(76,730)
Jul 2018	(76,730)
Aug 2018	-
Sept 2018	-
Oct 2018	-
Nov 2018	-
Dec 2018	1,301,971
Jan 2019	27,680
Feb 2019	27,680
Mar 2019	27,680
Unamortized Amount as of 3/31/19	**$ (276,798)**
Total Net Pension and OPEB Deferrals Balance as of March 31, 2019	**$ 1,574,975**

Notes:

Per Docket No. 45524 the pension and OPEB tracker balance was set at $(664,316) as of June 30, 2017. This is the balance that will be amortized over a 24-month period starting February 1, 2018. If the entire amount has not been amortized at the time the rates set in SPS's next base rate go into effect, the Docket No. 47527 Stipulation [Section 2(E)(i)] provides that the remaining unamortized amount can be included in a subsequent base rate case and is deemed reasonable and necessary.

Unamortized Balance - May 31, 2017	$ (664,316)
14 Months of Amortization (Feb-Mar)	387,518
Unamortized Balance - June 30, 2017	**$ (276,798)**

WillisTowersWatson

May 18, 2018

Mr. Richard R. Schrubbe
AVP, Financial Analysis & Planning
Xcel Energy Inc.
401 Nicollet Mall
3rd Floor
Minneapolis, Minnesota 55401

2018 VALUATION RESULTS AND 2019-2023 CONTRIBUTION AND COST ESTIMATES

Dear Rick:

This letter summarizes the results of the 2018 plan year IRS funding valuations for Xcel Energy's qualified pension plans. Also included are final 2018 costs and updated 2019-2023 cost estimates for the Long-Term Disability (LTD) and Workers' Compensation plans. The results for these plans have been updated from the February 9, 2018, results to reflect 2018 census data for both plans. The 2020-2023 cost estimates for the PSCo Bargaining Plan have been updated to reflect the 5% cash balance plan for new hires, and the savings are projected to begin in 2020 when the new hires become participants in the plan. Costs for all other plans are unchanged from February 9, 2018.

Attached to this letter are updated PBGC variable rate premium and PBO funded status forecasts followed by benefit cost exhibits. Also included is an exhibit that provides plan specific details of the cost reconciliations for the qualified pension plans.

PENSION PLAN FUNDING

Summary of Key Results

The key results for each plan are provided in the following table:

($ in Millions)	Xcel Energy Pension Plan	NCE Nonbargaining Plan	SPS Bargaining Plan	PSCo Bargaining Plan
Effective Interest Rate	5.52%	5.44%	5.68%	5.65%
Contributions for the 2018 Plan Year (as of January 1, 2018)				
Minimum Required Contribution Before Funding Balance	$ 67.6	$ 12.8	$ 10.8	$ 18.6
Minimum Required Contribution After Funding Balance	$ 0.0	$ 1.4	$ 0.0	$ 0.0
PBGC Premiums				
PBGC Variable Rate Premiums	$ 0.0	$ 0.9	$ 0.0	$ 3.5

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Funded Status

A plan's funded status is measured by comparing the present value of plan benefits to the value of plan assets. The following table summarizes the 2018 plan year funded percentages:

Minimum Funding and Benefit Restrictions - 2018 ($ in Thousands)	Xcel Energy Pension Plan	NCE Nonbargaining Plan	SPS Bargaining Plan	PSCo Bargaining Plan
1. Effective Interest Rate	5.52%	5.44%	5.68%	5.65%
2. Target Liability as of January 1	$1,552,878	$247,394	$310,436	$887,694
3. Actuarial Value of Assets as of January 1	$1,595,413	$242,395	$346,874	$891,871
4. Funding Balance as of January 1	$191,657	$11,435	$60,204	$101,952
5. Funded Percentage before funding balance reduction from plan assets [(3) / (2)]	102.7%	98.0%	111.7%	100.5%
6. Funded Percentage with funding balance reduction from plan assets (FTAP) [((3) – (4)) / (2)]	90.4%	93.4%	92.3%	89.0%
7. Preliminary Adjusted Funding Target Attainment Percentage (AFTAP)[1]	102.7%	93.4%	111.7%	100.5%

[1] If Actuarial Value of Assets/Target Liability >= 100%, the AFTAP matches line 5; otherwise it matches line 6.

Benefit Restrictions

Based on the 2018 funding results, benefit restrictions are not expected to apply for the 2018 plan year since the preliminary AFTAP for each plan exceeds 80.0%. We will provide our certification of the funded status for the plans prior to the September 30, 2018 deadline.

Funding Balances

The following summarizes the funding balance activity for the Xcel Energy pension plans.

($ in Millions)	Xcel Energy Pension Plan	NCE Nonbargaining Plan	SPS Bargaining Plan	PSCo Bargaining Plan
Funding Balances at January 1, 2017	$ 148.5	$ 12.5	$ 57.4	$ 93.2
Funding Balances used for the 2017 plan year	(65.3)	(8.6)	(4.8)	(12.0)
Excess contributions elected to be added to funding balance	95.5	7.0	0.0	7.8
Investment experience adjustments	13.0	0.5	7.6	13.0
Amount of funding balance forfeited for AFTAP purposes	0.0	0.0	0.0	0.0
Funding Balances at January 1, 2018	$ 191.7	$ 11.4	$ 60.2	$ 102.0

PBGC Premiums

The PBGC variable rate premium amounts are based on the Standard Premium Funding Target for the PSCo Bargaining Plan and the NCE Nonbargaining Plan. The Alternative Premium Funding Target is used for the Xcel Energy Pension Plan and the SPS Bargaining Plan. The PSCo Bargaining Plan and the NCE Nonbargaining Plan are above the per-participant cap and the variable rate premium is limited to $523 per participant. The Xcel Energy Pension Plan and the SPS Bargaining Plan do not have an unfunded vested liability; therefore the variable rate premium is $0 for these plans.

The NCE Nonbargaining Plan and PSCo Bargaining Plan can eliminate variable rate premiums with September 15, 2018 contributions of $24.0 million and $129.1 million, respectively.

ERISA 4010 Funded Status

An ERISA 4010 filing is required if any 4010 Funding Target Attainment Percentage (4010 FTAP) for a plan within the controlled group of the plan sponsor is less than 80%. For this purpose, the target liability is calculated using interest rates that ignore the MAP-21/HATFA/BBA interest rate corridors and plan assets are reduced by the amount of the prefunding balance and funding standard carryover balance. This determination is done as of the valuation date for the plan year ending within the information year ending December 31, 2018 (i.e., the 2018 plan year). The valuation date for the 2018 plan year is January 1, 2018. The January 1, 2018 4010 FTAPs for all Xcel Energy pension plans are as follows:

4010 FTAP – 2018 ($ in Thousands)	Xcel Energy Pension Plan	NCE Nonbargaining Plan	SPS Bargaining Plan	PSCo Bargaining Plan
1. Effective Interest Rate	3.84%	3.73%	4.02%	3.99%
2. Target Liability as of January 1	$1,768,124	$278,408	$372,530	$1,056,005
3. Actuarial Value of Assets as of January 1	$1,595,413	$242,395	$346,874	$891,871
4. Funding Balance as of January 1	$191,657	$11,435	$60,204	$101,952
5. Funded Percentage with funding balance reduction from plan assets (4010 FTAP) [((3) – (4)) / (2)]	79.4%	83.0%	77.0%	74.8%

Based on the results above, a filing will be required for the 2018 information (fiscal) year unless additional contributions for the 2017 plan year are made on or before September 15, 2018. Alternatively, funding balances may be forfeited such that the 4010 FTAP for each plan is above 80%. More specifically, Xcel Energy can avoid an ERISA 4010 filing with contributions and/or funding balance forfeitures by September 15, 2018 of $11.2 million, $11.8 million, and $57.2 million to the Xcel Energy Pension Plan, SPS Bargaining Plan, and PSCo Bargaining Plan respectively. If no action is taken and a 4010 filing is required for the 2018 information year, the submission deadline will be April 15, 2019.

LONG-TERM DISABILITY AND WORKERS' COMPENSATION RESULTS

The combined 2018 cost/(income) for the Workers' Compensation plan and the Long-Term Disability plan is $0.6 million, a $0.6 million decrease from our February estimate of $1.2 million. The final discount rate used for these plans is 3.51%, which is the same as the estimated rate used for the February results.

The actual 2018 cost/(income) for the Long-Term Disability plan is $(0.2) million, which is a decrease of $0.6 million compared to the 2018 estimated cost/(income) for the plan provided in February. The cost for the plan decreased due to census data changes, which included fewer participants receiving payments from the plan than expected. The actual 2018 cost/(income) for the Workers' Compensation plan is $0.8 million, which is the same as the estimated 2018 cost/(income) for the plan provided in February.

RESULTS EXHIBITS

Pension contribution and PBGC variable rate premium forecasts are attached to the end of this letter. The planned funding schedule provided by Xcel Energy is assumed to sufficiently cover all minimum required contributions. Contribution and PBGC premium forecasts include estimates of the new IRS prescribed mortality tables starting in 2019. Benefit cost forecasts for all plans except the PSCo Bargaining Plan and LTD and Workers' Compensation plans have not been updated from the forecasts provided on February 9, 2018. Estimates of 2019-2023 benefit costs summarized by legal entity are also presented in the attached exhibits as follows:

- Exhibit I: Benefit Cost Estimates – Qualified Pension Plans
- Exhibit II: Benefit Cost Estimates – Nonqualified Pension Plans
- Exhibit III: Benefit Cost Estimates – Retiree Medical and Life Insurance Plan
- Exhibit IV: Liabilities – LTD and Workers' Compensation
- Exhibit V: Claims and Expenses – LTD and Workers' Compensation
- Exhibit VI: Benefit Cost Estimates – LTD and Workers' Compensation
- Exhibit VII: Benefit Cost Reconciliation Details – Qualified Pension Plans

Plans Valued

The attached exhibits include estimates for the following employee benefit plans maintained by Xcel Energy Inc. (Xcel Energy):

- Xcel Energy Pension Plan
- Xcel Energy Inc. Nonbargaining Pension Plan (South) [NCE Nonbargaining Plan]
- New Century Energies Inc. Retirement Plan for SPS Bargaining Unit Employees and Former Nonbargaining Unit Employees [SPS Bargaining Plan]
- New Century Energies Inc. Retirement Plan for PSCo Bargaining Unit Employees and Former Nonbargaining Unit Employees [PSCo Bargaining Plan]
- Xcel Energy Nonqualified Defined Benefit Plan
- Xcel Energy SERP
- SPS SERP
- Employment Agreements
- Fort St. Vrain Nuclear Operations Personnel Plan
- NMC SERP Part A
- Xcel Energy Retiree Medical and Life Insurance Plan (including Executive Life Insurance)
- Xcel Energy Workers' Compensation
- Xcel Energy Long-Term Disability (LTD) Income

FORECAST RESULTS

Forecast results are based on the information summarized below.

The following provides a reconciliation of actual 2018 costs to 2019 estimated costs, prior to regulatory effects and potential settlement charges:

Reconciliation of Benefit Costs (prior to regulatory effects and potential settlement charges)

($ in Millions)	Qualified Pension[1]	Nonqualified Pension	Retiree Medical	Workers' Compen-sation	Long Term Disability	Total
Final 2018	$116.3	$4.3	($5.0)	$0.8	($0.2)	$116.2
Historical asset performance	1.1	0.0	0.0	0.0	0.0	1.1
Expected liability, asset, and loss amortization changes	(14.4)	0.0	(0.2)	(0.4)	0.5	(14.5)
Initial 2019 Estimate	$103.0	$4.3	($5.2)	$0.4	$0.3	$102.8

[1] Qualified Pension Plan costs reflect the assumption that NSP-MN and Xcel Energy Nuclear costs are determined under the Aggregate Cost Compensation Method. No additional regulatory deferrals have been reflected. See Exhibit VII for additional details.

DATA, ASSUMPTIONS, METHODS AND PLAN PROVISIONS

The 2018 benefit costs, 2018 funding results and estimated 2019-2023 costs reflect the following data, assumptions, methods and plan provisions:

Data

For the qualified and nonqualified pension plans and the retiree medical plan, the 2018 benefit cost results and results for 2019-2023 are based on participant data as of January 1, 2017, projected to the end of the year based on status, compensation and benefit changes through November 30, 2017, and known retirements for December 2017. Actual new entrants through November 30, 2017, and expected new entrants through December 31, 2017, are included. See our February 9, 2018, letter for more details. For the Workers' Compensation and Long-Term Disability plans, the 2018 benefit cost results and estimated costs for 2019-2023 are based on participant data as of January 1, 2018. The 2018 pension funding results are based on data as of January 1, 2018.

Economic Assumptions

The key assumptions used to determine the actual 2018 and estimated 2019 - 2023 benefit cost results are provided below. The assumptions used to calculate the cost under the aggregate cost method are the same as used to prepare the ASC 715 results, except as noted. Actual asset returns net of administrative expenses are assumed to equal the expected return on assets assumptions throughout the forecast period.

	May 18, 2018 results
Benefit Cost	
Discount Rate – ASC 715:	
■ Xcel Energy Pension Plan	3.60%
■ NCE Nonbargaining Pension Plan	3.52%
■ SPS Bargaining Pension Plan	3.71%
■ PSCo Bargaining Pension Plan	3.68%
■ Nonqualified Pension Plan	3.49%
■ Retiree Medical and Life Insurance Plan	3.62%
■ Workers' Compensation and LTD	3.51%
Expected Return on Assets Assumption – Pension:	
■ Xcel Energy Pension Plan	7.10%
■ NCE Nonbargaining Pension Plan	6.90%
■ SPS Bargaining Pension Plan	6.75%
■ PSCo Bargaining Pension Plan	6.50%
■ Weighted Average Expected Return	6.87%
Expected Return on Assets Assumption – VEBA (Bargaining/Nonbargaining)	5.80%
Discount Rate – Aggregate Cost	7.10%
Salary Scale[1]	3.75%
Initial Medical Trend:	
■ Pre-Medicare	7.00%
■ Post-Medicare	5.50%
Ultimate Medical Trend	4.50%
Year Ultimate Trend is Reached	2023

[1] Career average of age-graded table (nonbargaining) and service-graded table (bargaining)

- The interest rate for converting lump sums to annuities and annuities to lump sums was updated from 4.00% to 3.50% in all years. The pre-PPA lump sum conversion interest rate was updated from 3.00% to 3.75%.
- The interest crediting rate for the 5% cash balance formula was updated from 3.00% to 2.75%. The interest crediting rate for the Retirement Spending Account was updated from 1.75% to 2.50%.
- The HRA trend assumption remains at 2.0%.
- The medical trend assumption was updated to an initial rate of 7.0% in 2018 for pre-65 claims costs and an initial rate of 5.5% in 2018 for post-65 claims costs, with both pre-65 and post-65 claims costs grading to an ultimate rate of 4.5% in 2023. The previous medical trend assumption was an initial rate of 5.0% in 2018 grading to an ultimate rate of 4.5% in 2019, for both pre-65 and post-65 claims costs.

We have assumed Xcel Energy continues to use the 24-month average of the three-segment interest rates as of September in the year prior to the valuation date with applicable interest rate stabilization corridors. The underlying three-segment rates from early May 2018 were assumed to remain constant throughout the forecast period. This methodology produces the following effective interest rates:

	Year					
	2018	2019	2020	2021	2022	2023
Xcel Energy Pension Plan	5.52%	5.36%	5.22%	4.83%	4.45%	4.20%
NCE Nonbargaining Plan	5.44%	5.27%	5.14%	4.74%	4.36%	4.11%
SPS Bargaining Plan	5.68%	5.51%	5.38%	4.97%	4.58%	4.31%
PSCo Bargaining Plan	5.65%	5.49%	5.35%	4.95%	4.56%	4.30%

Demographic Assumptions

- Active participant counts are assumed to remain level throughout the forecast period.
- For the accounting benefit cost valuations, the mortality assumption is the RP-2014 tables (blue collar for bargaining participants and white collar for nonbargaining participants, as adjusted for 2014 Xcel Energy mortality study) projected with generational mortality improvements using an adjusted SOA MP-2016 methodology.
- For the accounting benefit cost valuations, the mortality assumption for converting lump sums to annuities or annuities to lump sums is the 2018 IRS mortality tables projected to the commencement date using the SOA MP-2017 methodology.
- Per guidance from Xcel Energy, adoption of the new 2018 IRS prescribed mortality tables has been delayed until 2019 for IRS funding and PBGC premium valuations.

Pension Contributions

The forecasts reflect actual 2018 contributions of $150 million made on January 2, 2018, and planned contributions provided by Xcel Energy for 2019 through 2023. The table below summarizes the amounts assigned to each plan over the forecast period:

	Year					
	2018	2019	2020	2021	2022	2023
Xcel Energy Pension Plan	$ 120.0	$ 95.0	$ 95.0	$ 80.0	$ 45.0	$ 65.0
NCE Nonbargaining Plan	10.0	20.0	20.0	15.0	15.0	10.0
SPS Bargaining Plan	5.0	15.0	10.0	10.0	7.0	9.0
PSCo Bargaining Plan	15.0	20.0	25.0	45.0	83.0	66.0
Total Contribution	**$ 150.0**	**$ 150.0**	**$ 150.0**	**$ 150.0**	**$ 150.0**	**$ 150.0**

- Contributions in 2019 and beyond are assumed to be paid on January 15 and assigned to the prior plan year.

PBGC Premiums

- The PBGC Variable Rate Premium estimates reflect the increase in premium rates under The Bipartisan Budget Act of 2015, actual January 1, 2018, asset values, and demographic experience.
- The estimates assumes the NCE Nonbargaing Plan and PSCo Bargaining Plan use the Standard Premium Funding Target. The Xcel Energy Pension Plan and SPS Bargaining Plan are assumed to use the Alternative Premium Funding Target.
- The PSCo Bargaining Plan is at the per-participant variable rate premium cap in 2018 and is expected to remain at the cap for 2019. The NCE Nonbargaining Plan is at the per-participant variable rate premium cap in 2018.

Retiree Medical and Life Insurance Plan – Effects of Health Care Reform

- The effective date of the legislative excise tax ("Cadillac Tax") has been delayed from 2020 to 2022.
- Otherwise, our estimates continue to assume the same effects as noted in our 2018 ASC 715 cost report dated April 30, 2018.

Plan Changes

- Effective January 1, 2018 for non-bargaining participants, annual $1,400 Retirement Contributions to the Retirement Savings Account will cease; interest will continue to accrue on the balance as of December 31, 2017.
- Effective December 31, 2022, non-bargaining participants who have not met the plans' Early Retirement definition or Normal Retirement definition will no longer be eligible for the Social Security Supplement.
- Certain nonbargaining participants received a one-time addition to their qualified basic pension benefit as of December 31, 2017.
- Effective February 22, 2018, employees hired into the PSCo Bargaining Plan are assumed to receive a 5% Cash Balance benefit. Due to the one year participation requirement, results are not impacted until 2020.

ACTUARIAL CERTIFICATION

As requested by Xcel Energy Inc., this report provides results of the actuarial valuations of the Xcel Energy Inc. employee benefit plans indicated above. This report should not be used for other purposes, distributed to others outside Xcel Energy Inc. or relied upon by any other person without prior written consent from Willis Towers Watson. Except where we expressly agree in writing, this report should not be disclosed or provided to any third party, other than as provided below. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by us for any consequences arising from any third party relying on this report or any advice relating to its contents.

Xcel Energy Inc. may make a copy of this report available to auditors or appropriate governmental agencies of the plan or the plan sponsor, but we make no representation as to the suitability of this report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the auditors in this regard. Xcel Energy Inc. should draw the provisions of this paragraph to the attention of the auditors or appropriate governmental agencies when providing this report to them.

In preparing this valuation, we have relied upon information and data provided to us by Xcel Energy Inc. and other persons or organizations designated by Xcel Energy Inc. An audit of the financial and participant data provided was not performed, but we have checked the data for reasonableness as appropriate based on the purpose of the valuation. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by Xcel Energy Inc., may produce materially different results that could require that a revised report be issued.

This valuation reflects our understanding of the relevant provisions of the Pension Protection Act of 2006. The IRS has yet to issue final guidance with respect to certain aspects of this law. It is possible that such guidance may conflict with our understanding of the law and could therefore affect results shown in this report.

The results summarized in this report involve actuarial calculations that require assumptions about future events. We believe the assumptions and methods used in this report are reasonable and appropriate for the purposes for which they have been used. In our opinion, all methods, assumptions and calculations are in accordance with requirements of the Internal Revenue Code and ERISA, and the applicable financial accounting standards, including ASC 712 and 715 and the procedures followed and presentation of results are in conformity with generally accepted actuarial principles and practices.

Assumptions for determining benefit cost results were selected by Xcel Energy Inc. Xcel Energy Inc. uses the standards set out in ASC 715 to calculate pension cost for each plan in total; pension cost for the subsidiaries is calculated based on plan assets allocated to each subsidiary in proportion to the PBO for each subsidiary. Beginning in fiscal 2010, Discontinued Operations is allocated assets in proportion to its PBO, similar to nondiscontinued operations. The gain/(loss) amortization is allocated to each subsidiary in proportion to the gain/(loss) balance for each subsidiary (excluding deferred asset gains and losses). This methodology is consistent with former NSP's methodology since 1998 and has been applied to the former NCE pension plans since January 1, 2001. A similar methodology is used for the ASC 715 costs for the Retiree Medical and Life Plan, except separate asset accounts are used for each subsidiary.

Except as otherwise provided herein, the results presented are based on the data, assumptions, methods and plan provisions outlined in the actuarial valuation reports to determine accounting requirements for the plan for the plan year beginning January 1, 2018 dated April 30, 2018. Therefore, the descriptions of the data, assumptions, methods, plan provisions and limitations of the valuation and its use should be considered part of this letter report.

The undersigned consultants with actuarial credentials meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. Our objectivity is not impaired by any relationship between the Xcel Energy Inc. and our employer, Towers Watson Delaware Inc., a subsidiary of Willis Towers Watson PLC.

NEXT STEPS

If you have any questions or would like to discuss, please contact Mark at 952-842-6445, Ross at 952-842-6397 or Kristoff at 952-842-6359.

Sincerely,

Mark A. Afdahl, FSA, EA
Director, Retirement

Ross H. Athman, FSA, EA
Director, Retirement

Kristoff M. Hendrickson, FSA, EA
Director, Retirement

cc:
Todd Degrugillier — Xcel Energy Inc.
Darla Figoli — Xcel Energy Inc.
Levi Glines — Xcel Energy Inc.
Kris Lindemann — Xcel Energy Inc.
Ruth Lowenthal — Xcel Energy Inc.
Garrett Mikrut — Xcel Energy Inc.
Jill Reed — Xcel Energy Inc.
Debbie Robin — Xcel Energy Inc.
Jeff Savage — Xcel Energy Inc.
Brian Van Abel — Xcel Energy Inc.
Greg Zick — Xcel Energy Inc.
Mark Bilderback — Willis Towers Watson
Beth Fernandez — Willis Towers Watson
Scott Lund — Willis Towers Watson
Nick Principe — Willis Towers Watson
Jim Shaddy — Willis Towers Watson
Tyler Tanck — Willis Towers Watson

Estimated Cash Flow ($ in Millions) and Estimated PBO Funded Status at January 1

Calendar Year	2018	2019	2020	2021	2022	2023
Xcel Energy Pension Plan	**80%**	**85%**	**89%**	**94%**	**99%**	**102%**
Contributions	$120.0	$95.0	$95.0	$80.0	$45.0	$65.0
PBGC Variable Premiums	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
NCE Nonbargaining Plan	**82%**	**85%**	**92%**	**100%**	**106%**	**114%**
Contributions	$10.0	$20.0	$20.0	$15.0	$15.0	$10.0
PBGC Variable Premiums	$0.9	$0.3	$0.0	$0.0	$0.0	$0.0
SPS Bargaining Plan	**85%**	**86%**	**90%**	**93%**	**97%**	**100%**
Contributions	$5.0	$15.0	$10.0	$10.0	$7.0	$9.0
PBGC Variable Premiums	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
PSCo Bargaining Plan	**81%**	**81%**	**82%**	**84%**	**88%**	**95%**
Contributions	$15.0	$20.0	$25.0	$45.0	$83.0	$66.0
PBGC Variable Premiums	$3.5	$3.6	$3.4	$1.8	$0.0	$0.0
Total	**81%**	**84%**	**87%**	**91%**	**96%**	**100%**
Contributions	$150.0	$150.0	$150.0	$150.0	$150.0	$150.0
PBGC Variable Premiums	$4.4	$3.9	$3.4	$1.8	$0.0	$0.0

- Based on January 1, 2018 asset values and expected returns for the forecast period.
- Assumes contributions are assigned to the prior plan year.
- Assumes funding balance used to satisfy quarterly requirements and any remaining minimum requirements
- See May 18, 2018 letter for additional information on data, assumptions, methods and plan provisions
- Funded status equals fair value of assets divided by PBO and does not include receivable contributions made in January of each year and assigned to the prior plan year

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

2018	Service Cost	Interest Cost	Expected Return on Assets	Amortizations: Prior Service Cost	Amortizations: Net (Gain)/Loss	Net Cost	Settlement Charge [1]	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued)	Contribution	PBO
Xcel Energy Pension Plan (XEPP)												
Discontinued Operations[2]	-	2,736	(4,539)	-	3,615	1,812	-	N/A	N/A	35,418	4,864	78,815
Xcel Energy Nuclear	6,284	3,738	(6,200)	(214)	1,129	4,737	-	3,574	3,042	(9,131)	6,524	107,357
NSP - MN	21,644	31,479	(51,967)	100	37,329	38,585	-	30,891	26,292	342,488	56,623	927,782
NSP - WI	4,777	5,442	(9,025)	(30)	5,673	6,837	-	N/A	N/A	48,153	9,597	156,748
Xcel Services[3]	22,849	23,771	(39,361)	(985)	17,078	23,352	-	N/A	N/A	87,739	42,356	690,963
XEPC (former EMI)	-	21	(34)	-	2	(11)	-	N/A	N/A	(101)	36	584
Total XEPP	55,554	67,187	(111,126)	(1,129)	64,826	75,312	-	34,465	29,334	504,566	120,000	1,962,249
NCE Non-Bargaining Pension Plan												
Discontinued Operations - Cheyenne	-	133	(218)	-	177	92	-	N/A	N/A	1,675	137	3,931
PSCo	4,297	6,958	(11,341)	(165)	4,403	4,152	-	N/A	N/A	18,891	6,830	206,586
SPS	2,656	3,045	(4,957)	(137)	3,386	3,993	-	N/A	N/A	27,599	3,033	91,051
Total NCE	6,953	10,136	(16,516)	(302)	7,966	8,237	-	N/A	N/A	48,165	10,000	301,568
SPS Bargaining Plan												
SPS	7,062	15,365	(23,370)	-	10,682	9,739	-	N/A	N/A	125,403	5,000	424,828
Total SPS	7,062	15,365	(23,370)	-	10,682	9,739	-	N/A	N/A	125,403	5,000	424,828
PSCo Bargaining Plan												
Discontinued Operations - Cheyenne	-	404	(571)	-	469	302	-	N/A	N/A	6,370	150	11,411
PSCo	24,788	40,296	(57,179)	(3,212)	26,855	31,548	-	N/A	N/A	259,393	14,850	1,127,594
Total PSCo	24,788	40,700	(57,750)	(3,212)	27,324	31,850	-	N/A	N/A	265,763	15,000	1,139,005
Total Xcel Energy	94,357	133,388	(208,762)	(4,643)	110,798	125,138	-	34,465	29,334	943,897	150,000	3,827,650

[1] Settlement accounting may be required if lump sum benefit payments exceed the sum of service cost and interest on a plan by plan basis. No settlements have been estimated at this time.
[2] Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS
[3] Includes Eloigne

Assumptions

Discount Rate - U.S. GAAP	
XEPP	3.60%
NCE	3.52%
SPS	3.71%
PSCo	3.68%
Discount Rate - Aggregate Normal Cost	7.10%
Salary Scale	3.75%
Expected Return on Assets	
XEPP	7.10%
NCE	6.90%
SPS	6.75%
PSCo	6.50%
Assumed Mortality Table	
Bargaining Participants	RP-2014 Blue Collar projected with generational mortality improvements using an adjusted SOA MP-2016 methodology
Non-bargaining Participants	RP-2014 White Collar, as adjusted for 2014 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 methodology

See May 18, 2018 letter for additional information on data, assumptions, methods, and plan provisions.
Contributions already made are allocated in accordance with the January 2, 2018 contribution directives provided by Xcel Energy on January 3, 2018.

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

EXHIBIT II
Page 1 of 6

2018	Service Cost	Interest Cost	Expected Return on Assets	Amortizations: Prior Service Cost	Amortizations: Net (Gain)/Loss	Settlement Charge[1]	Net Cost	January 1 Prepaid (Accrued)	Expected Benefit Payments
Discontinued Operations[2]	-	27	-	-	(51)	-	(24)	(1,320)	92
Xcel Energy Nuclear	93	25	-	-	16	-	134	(565)	32
NSP - MN	25	145	-	-	415	-	585	(568)	791
NSP - WI	17	20	-	-	16	-	53	(459)	59
PSCo[3]	42	111	-	-	352	-	505	(21)	435
SPS	21	58	-	-	133	-	212	(495)	235
Xcel Services[4]	800	813	-	227	1,032	-	2,872	(14,395)	3,245
XEPC (former EMI)	-	-	-	-	(3)	-	(3)	(30)	-
Total Xcel Energy	998	1,199	-	227	1,910	-	4,334	(17,853)	4,889

[1] Settlement accounting may be required if lump sum benefit payments exceed the sum of service cost and interest cost. No settlements have been estimated at this time.
[2] Includes NRG, BMG, Viking, Natrogas, Quixx, Seren and UE
[3] Includes Fort St. Vrain
[4] Includes Eloigne

Assumptions

Discount Rate	3.49%
Salary Scale (career average)	3.75%
Assumed Mortality Table	RP-2014 White Collar, as adjusted for 2014 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 methodology

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

XCEL ENERGY INC. - Postretirement Benefits
U.S. GAAP Cost Estimates by Legal Entity
($ in Thousands)

EXHIBIT III
Page 1 of 6

2018	Service Cost	Interest Cost	Expected Return on Assets	Amortizations: Prior Service Cost	Amortizations: Net (Gain)/Loss	Net Cost	January 1 Prepaid (Accrued)	Contribution
Discontinued Operations[1]	-	308	(99)	(104)	162	267	(4,618)	721
Xcel Energy Nuclear	19	34	-	49	(11)	91	(731)	16
NSP - MN[2]	151	3,040	(382)	(3,085)	2,392	2,116	(51,603)	7,915
NSP - WI	37	568	(63)	(351)	554	745	(6,516)	1,347
PSCo	609	14,994	(22,699)	(6,178)	4,083	(9,191)	33,489	-
SPS[3]	1,118	1,641	(2,460)	(404)	(453)	(558)	(13,779)	-
Xcel Services[3]	62	1,077	(44)	(557)	989	1,527	(13,142)	1,654
XEPC (former EMI)	-	1	-	1	(5)	(3)	(120)	6
Total Xcel Energy	1,996	21,663	(25,747)	(10,629)	7,711	(5,006)	(57,020)	11,659

[1]Includes NRG, BMG, Viking, Natrogas, Cheyenne, Quixx and UE.
[2]Includes Eloigne and Seren.
[3]Includes Executive Life Insurance benefits.

Assumptions

Discount Rate	3.62%	
Expected Return on Assets	5.80%	
Medical Trend	Pre-65	Post-65
Initial (2018)	7.00%	5.50%
Ultimate	4.50%	4.50%
Year Ultimate Reached	2023	2023

Assumed Mortality Table
Bargaining: RPH-2014 Blue Collar headcount-weighted table adjusted for Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 methodology.
Non-bargaining: RPH-2014 White Collar headcount-weighted table adjusted for Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 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 18, 2018 letter for additional information on data, assumptions, methods and plan provisions.

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

Exhibit VI

Fiscal Year Ending **U.S. GAAP**	2017 Actual	2018 Actual	2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget
Discount Rate- Workers' Compensation	3.96%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%
Former NSP - Workers' Compensation [1]							
MN/SD	509	339	291	272	253	236	221
MI/WI	12	(53)	4	4	4	4	3
Subtotal	521	286	295	276	257	240	224
Former NCE - Workers' Compensation [1]							
Colorado - PSCo	162	555	58	55	54	51	49
Deductible States - Workers' Compensation							
Deductible States - SPS (KS, OK, NM, and TX)	-	(3)	-	-	-	-	-
Total Xcel Energy Workers' Compensation	**683**	**838**	**353**	**331**	**311**	**291**	**273**
Discount Rate - LTD Income	3.96%	3.51%	3.51%	3.51%	3.51%	3.51%	3.51%
LTD Income							
Discontinued Operations - Cheyenne	14	(21)	2	2	2	1	2
Discontinued Operations [2]	78	89	19	18	17	16	14
NSP-MN	120	(22)	214	202	191	179	168
NSP-WI	207	(258)	43	42	39	37	34
PSCo	26	(117)	41	31	25	19	15
SPS	78	(7)	19	14	10	7	4
Utility Engineering	4	(3)	1	2	1	1	-
Xcel Services	17	91	9	7	5	4	4
XEPC	5	3	-	-	-	-	-
Total Xcel Energy LTD Income	**549**	**(245)**	**348**	**318**	**290**	**264**	**241**
Total Xcel Energy U.S. GAAP	**1,232**	**593**	**701**	**649**	**601**	**555**	**514**

[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.*

The results above are based on the data, assumptions, methods, and plan provisions described in our May 18, 2018 letter.

5/18/2018
http://natct.internal.towerswatson.com/clients/609084A/XcelRETActuarial-2018/Documents/Projections/May/Projections - 05182018 to Xcel.xlsx\ASC 712 Cost

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February 8, 2019

Mr. Richard R. Schrubbe
AVP, Financial Analysis and Planning
Xcel Energy Inc.
401 Nicollet Mall
3rd Floor
Minneapolis, MN 55401

Subject: **2019 Benefit Costs and 2020–2024 Benefit Cost Estimates**

Dear Rick:

Attached are 2019 costs and 2020-2024 budget estimates based on the final year-end 2018 asset values and disclosure assumptions described in our January 25, 2019 letter. Workers Compensation and Long-Term Disability results are preliminary and will be finalized in May.

SUMMARY OF KEY RESULTS

The key changes from our forecast originally provided on May 18, 2018 are as follows:

- Benefit Costs reflect final 2019 assumptions:
  - Discount rates increased approximately 0.70%, on average, from the 3.63% average assumption used in the May 18, 2018 estimates to 4.32% at December 31, 2018.
- Actual 2018 pension asset returns were (4.67%) compared to an expected return of 6.87% and actual retiree medical asset returns were (2.77%) compared to an expected return of 5.80%.
- Participant data has been updated to reflect known status and pay changes through November 30, 2018 and expected December 2018 retirements.

Benefit Cost Results (prior to regulatory deferrals)

Cost/(Income) ($ in Millions)	2018 Actual	2019 Cost May 18, 2018 Estimate	2019 Cost February 8, 2019[1]
Qualified Pension Plans[2]	$116.3	$103.0	$107.0
Nonqualified Pension Plans	4.3	4.3	3.6
Retiree Medical & Life Insurance Plan	(5.0)	(5.2)	(2.0)
Workers' Compensation	0.8	0.4	(0.4)
Long-Term Disability	(0.2)	0.3	(0.1)
Total	$116.2	$102.8	$108.1
XEPP and NCE Settlement Charges[3]	$90.7	$0.0	$0.0
Discount Rate	*3.49%-3.71%*	*3.49%-3.71%*	*4.25%-4.37%*

[1] Workers Compensation and Long-Term Disability costs are preliminary, final results will be provided in May.
[2] Qualified Pension Plan costs reflect the assumption that NSP-MN and Xcel Energy Nuclear costs are determined under the Aggregate Cost Compensation Method. No additional regulatory deferrals have been reflected. See Exhibit VII for additional details.
[3] Results for the Xcel Energy Pension Plan reflect a 2018 settlement charge of $82,853,000 and results for the NCE Non-Bargaining Pension Plan reflect a 2018 settlement charge of $7,852,000. Please see 2018 Settlement Charge exhibit dated January 22, 2019 for additional information. Settlement accounting may be required in 2019 if lump sum benefit payments exceed the sum of service cost and interest cost. No settlements have been estimated for 2019 or beyond at this time.

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The following provides a reconciliation of cost (prior to regulatory deferrals) between the estimated 2019 cost provided in our May 18, 2018 letter, the 2019 budget estimates provided in our December 19, 2018 PTAC presentation and the 2019 costs provided in this letter ($ in millions):

	Qualified Pension[1]	Non-qualified Pension	Retiree Medical	Workers' Compen-sation	Long Term Disability	Total
Initial 2019 Estimate (May 18, 2018)	**$103.0**	**$4.3**	**($5.2)**	**$0.4**	**$0.3**	**$102.8**
Estimated demographic experience[2]	6.3	(0.7)	(1.4)	0.0	0.0	4.2
Updated demographic assumptions[3]	1.1	0.1	0.1	(0.1)	0.0	1.2
Updated retiree claims and participant contributions[4]	0.0	0.0	(1.6)	0.0	0.0	(1.6)
Discount rates[5]	(11.6)	(0.2)	(0.9)	(0.6)	(0.7)	(14.0)
2018 asset performance[6]	9.7	0.0	4.5	0.0	0.0	14.2
Expected rate of return assumption update[7]	0.0	0.0	2.0	0.0	0.0	2.0
Reduced loss amortization from 2018 settlement charge	(2.9)	0.0	0.0	0.0	0.0	(2.9)
Updated 2019 Estimate (December 19, 2018)	**$105.6**	**$3.5**	**($2.5)**	**($0.3)**	**($0.4)**	**$105.9**
Reflect final 2018 settlement charges	0.2	0.0	0.0	0.0	0.0	0.2
Final demographic experience[8]	(1.1)	0.0	(0.2)	(0.2)	0.1	(1.4)
Final discount rates	2.3	0.1	0.2	0.1	0.2	2.9
Final 2018 asset returns[9]	0.0	0.0	0.5	0.0	0.0	0.5
2019 Costs (February 8, 2019)	**$107.0**	**$3.6**	**($2.0)**	**($0.4)**	**($0.1)**	**$108.1**

1 Qualified Pension results reflect the assumption that NSP-MN costs and Xcel Energy Nuclear costs are determined under the Aggregate Cost Compensation Method. No additional regulatory deferrals have been reflected.

2 Estimated impact of updated participant status and compensation data through September 30, 2018 with additional adjustments for expected retirements and lump sum payments through December 2018. Primary drivers of cost include more retirements than expected, larger than expected lump sum payments, fewer deaths than expected and compensation rates approximately 0.4% larger than expected.

3 Update retirement rates to reflect recent plan changes and benefits offered to new hires and change to middle-of-year decrements.

4 Per capita claims cost increased 1.9% (0.3% pre-65, 2.2% post-65) versus expected increase (7.0% pre-65, 5.5% post-65). Expected Medicare Part D reimbursement for eligible retirees decreased 3.0% versus expected increase of 5.5%.

5 December 31, 2018 discount rates assumed to be equal to the discount rates from Willis Towers Watson BOND:Link model results as of October 31, 2018. Bond model excludes collateralized bonds.

6 Estimate assumes year-end asset values are equal to October 31, 2018 values with adjustments for two months of estimated disbursements (estimated 2018 return of -4.2% for pension and -1.6% for VEBA).

7 Decrease VEBA expected return on assets assumption from 5.80% to 5.30%.

8 Impact of updated participant status and compensation data through November 30, 2018 and benefit payment experience.

9 Reflects true-up of December 28, 2018 lump sums payments from XEPP and NCE.

Results Exhibits

Benefit cost results are summarized by legal entity and presented in the attached exhibits as follows:

- Exhibit I: Benefit Cost Estimates – Qualified Pension Plans
- Exhibit II: Benefit Cost Estimates – Nonqualified Pension Plans
- Exhibit III: Benefit Cost Estimates – Retiree Medical and Life Insurance Plan
- Exhibit IV: Liabilities – LTD and Workers Compensation
- Exhibit V: Claims and Expenses – LTD and Workers Compensation
- Exhibit VI: Benefit Cost Estimates – LTD and Workers Compensation
- Exhibit VII: Benefit Cost Reconciliation Details – Qualified Pension Plans

Plans Valued

The attached exhibits include results for the following employee benefit plans maintained by Xcel Energy Inc. (Xcel Energy):

- Xcel Energy Pension Plan
- Xcel Energy Inc. Nonbargaining Pension Plan (South) [NCE Nonbargaining Plan]
- New Century Energies Inc. Retirement Plan for SPS Bargaining Unit Employees and Former Nonbargaining Unit Employees [SPS Bargaining Plan]
- New Century Energies Inc. Retirement Plan for PSCo Bargaining Unit Employees and Former Nonbargaining Unit Employees [PSCo Bargaining Plan]
- Xcel Energy Nonqualified Defined Benefit Plan, including:
  - Xcel Energy SERP
  - SPS SERP
  - Employment Agreements
  - Fort St. Vrain Nuclear Operations Personnel Plan
  - NMC SERP Part A
- Xcel Energy Retiree Medical and Life Insurance Plan (including Executive Life Insurance)
- Xcel Energy Workers' Compensation
- Xcel Energy Long-Term Disability (LTD) Income

DATA, ASSUMPTIONS, METHODS AND PLAN PROVISIONS

The fiscal 2019 costs and estimated 2020-2024 costs reflect the following data, assumptions, methods and plan provisions:

Data

Results for 2019-2024 are based on participant data as of January 1, 2018 projected to the end of the year based on status, compensation and benefit changes through November 30, 2018 and known retirements for December 2018. Actual new entrants through November 30, 2018 and expected new entrants through December 31, 2018 are included.

Economic Assumptions

The key assumptions used to determine the actual 2019 and estimated 2020 - 2024 benefit cost results are provided below. The assumptions used to calculate the cost under the aggregate funding method are the same as used to prepare the ASC 715 results, except as noted. Actual asset returns are assumed to equal the expected return on assets assumptions throughout the forecast period. The following primary economic assumptions were used to prepare the results:

	2018 Cost and 2019 Estimate (May 18, 2018)	2019 Estimate (December 19, 2018)	2019 Cost
Benefit Cost			
Discount Rate – ASC 715			
– Xcel Energy Pension Plan	3.60%	4.52%	4.31%
– NCE Nonbargaining Pension Plan	3.52%	4.46%	4.25%
– SPS Bargaining Pension Plan	3.71%	4.58%	4.37%
– PSCo Bargaining Pension Plan	3.68%	4.56%	4.36%
– Nonqualified Pension Plan	3.49%	4.47%	4.26%
– Retiree Medical and Life Insurance Plan	3.62%	4.53%	4.32%
– Workers Compensation and LTD	3.51%	4.45%	4.23%
Expected Return on Assets Assumption – Pension			
– Xcel Energy Pension Plan	7.10%	7.10%	7.10%
– NCE Nonbargaining Pension Plan	6.90%	6.90%	6.90%
– SPS Bargaining Pension Plan	6.75%	6.75%	6.75%
– PSCo Bargaining Pension Plan	6.50%	6.50%	6.50%
– *Weighted Average Expected Return*	6.87%	6.87%	6.87%
Expected Return on Assets Assumption – VEBA	5.80%	5.30%	5.30%
Discount Rate – Aggregate Cost	7.10%	7.10%	7.10%
Salary Scale[1]	3.75%	3.75%	3.75%
Initial Medical Trend			
- Pre-Medicare	7.00%	6.50%	6.50%
- Post-Medicare	5.50%	5.30%	5.30%
Ultimate Medical Trend	4.50%	4.50%	4.50%
Year Ultimate Trend is Reached	2023	2023	2023

[1] Career average of age-graded table (nonbargaining) and service-graded table (bargaining)

- The interest rate for converting lump sums to annuities and annuities to lump sums was updated from 3.50% to 4.10% in all years. The pre-PPA lump sum conversion interest rate was updated from 2.75% to 3.10%.
- The interest crediting rate for the 5% cash balance formula was updated from 2.75% to 3.10%. The interest crediting rate for the Retirement Spending Account was updated from 2.50% to 3.60%.
- The HRA trend assumption remains at 2.0%.
- For additional assumption details, see our December 31, 2018 disclosure results provided January 25, 2019.

Pension Contributions

The forecasts reflect actual 2019 contributions of $150 million made on January 2, 2019. At this time, the contribution forecasts have not been updated and reflect the planned contributions provided by Xcel Energy for 2020 through 2024. Contribution forecasts will be updated in the spring when final 2019 funding results and census data are available.The table below summarizes the amounts assigned to each plan over the forecast period:

	Year					
	2019	2020	2021	2022	2023	2024
Xcel Energy Pension Plan	$ 90.0	$ 85.0	$ 68.0	$ 48.0	$ 45.0	$ 60.0
NCE Nonbargaining Plan	5.0	15.0	12.0	12.0	10.0	5.0
SPS Bargaining Plan	15.0	10.0	10.0	5.0	10.0	0.0
PSCo Bargaining Plan	40.0	40.0	35.0	35.0	35.0	35.0
Total Contribution	**$ 150.0**	**$ 150.0**	**$ 125.0**	**$ 100.0**	**$ 100.0**	**$ 100.0**

- Contributions in 2020 and beyond are assumed to be paid on January 15th and assigned to the prior plan year.

Demographic Assumptions

- Participant counts from January 1, 2018 were adjusted for actual new entrant counts through November 30, 2018, expected new entrants through December 31, 2018 and terminations/retirements as described above under Data. No additional changes in headcount levels are assumed.

Retiree Medical and Life Insurance Plan – Effects of Health Care Reform

- Our estimates continue to assume the same effects as noted in our 2018 ASC 715 cost report dated April 30, 2018.

Plan Changes

Effective February 22, 2018, employees hired or rehired into the PSCo Bargaining Plan receive a 5% Cash Balance benefit. Due to the one year participation requirement, new hires are not included until 2020. Rehired employees and transfers participate immediately. All other plan provisions remain the same as provided in our 2018 benefit cost reports dated April 30, 2018.

Willis Towers Watson

Mr. Richard R. Schrubbe
February 8, 2019

ACTUARIAL CERTIFICATION

As requested by Xcel Energy Inc., this report provides results of the actuarial valuations of the Xcel Energy Inc. employee benefit plans indicated above. This report should not be used for other purposes, distributed to others outside Xcel Energy Inc. or relied upon by any other person without prior written consent from Willis Towers Watson US LLC. Except where we expressly agree in writing, this report should not be disclosed or provided to any third party, other than as provided below. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by us for any consequences arising from any third party relying on this report or any advice relating to its contents.

Xcel Energy Inc. may make a copy of this report available to auditors or appropriate governmental agencies of the plan or the plan sponsor, but we make no representation as to the suitability of this report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the auditors in this regard. Xcel Energy Inc. should draw the provisions of this paragraph to the attention of the auditors or appropriate governmental agencies when providing this report to them.

In preparing this valuation, we have relied upon information and data provided to us by Xcel Energy Inc. and other persons or organizations designated by Xcel Energy Inc. An audit of the financial and participant data provided was not performed, but we have checked the data for reasonableness as appropriate based on the purpose of the valuation. The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies, as corrected by Xcel Energy Inc., may produce materially different results that could require that a revised report be issued.

This valuation reflects our understanding of the relevant provisions of the Pension Protection Act of 2006. The IRS has yet to issue final guidance with respect to certain aspects of this law. It is possible that such guidance may conflict with our understanding of the law and could therefore affect results shown in this report.

The results summarized in this report involve actuarial calculations that require assumptions about future events. We believe the assumptions and methods used in this report are reasonable and appropriate for the purposes for which they have been used. In our opinion, all methods, assumptions and calculations are in accordance with requirements of the Internal Revenue Code and ERISA, and the applicable financial accounting standards, including ASC 712 and 715 and the procedures followed and presentation of results are in conformity with generally accepted actuarial principles and practices.

Assumptions for determining benefit cost results were selected by Xcel Energy Inc. Xcel Energy Inc. uses the standards set out in ASC 715 to calculate pension cost for each plan in total; pension cost for the subsidiaries is calculated based on plan assets allocated to each subsidiary in proportion to the PBO for each subsidiary. Beginning in fiscal 2010, Discontinued Operations is allocated assets in proportion to its PBO, similar to nondiscontinued operations. The gain/(loss) amortization is allocated to each subsidiary in proportion to the gain/(loss) balance for each subsidiary (excluding deferred asset gains and losses). This methodology is consistent with former NSP's methodology since 1998 and has been applied to the former NCE pension plans since January 1, 2001. A similar methodology is used for the ASC 715 costs for the Retiree Medical and Life Plan, except separate asset accounts are used for each subsidiary.

Except as otherwise provided herein, the results presented are based on the data, assumptions, methods and plan provisions outlined in the actuarial valuation reports to determine accounting requirements for the plan for the plan year ending December 31, 2018 and beginning January 1, 2019 to be delivered in the next few weeks. Therefore, the descriptions of the data, assumptions, methods, plan provisions and limitations of the valuation and its use should be considered part of this letter report.

The undersigned consultants with actuarial credentials meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. Our objectivity is not impaired by any relationship between the Xcel Energy Inc. and our employer, Willis Towers Watson US LLC.

NEXT STEPS

If you have any questions or would like to discuss, please contact Mark at 952-842-6445, Kristoff at 952-842-6359 or Ross at 952-842-6397.

Sincerely,

Mark Afdahl

Mark Afdahl, FSA
Director, Retirement

Kristoff Hendrickson

Kristoff Hendrickson, FSA
Director, Retirement

Ross H. Athman

Ross Athman, FSA
Director, Retirement

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

EXHIBIT I
Page 1 of 6

2019	Service Cost	Interest Cost	Expected Return on Assets	Amortizations: Prior Service Cost	Amortizations: Net (Gain)/Loss	Net Cost	Settlement Charge [1]	Aggregate Cost Compensation Method	Aggregate Cost 20-year Amortization Method	January 1 Prepaid (Accrued)	Contribution	PBO
Xcel Energy Pension Plan (XEPP)												
Discontinued Operations[2]	-	3,051	(4,468)	-	3,050	1,633	-	N/A	N/A	33,632	3,785	73,890
Xcel Energy Nuclear	5,834	4,153	(6,079)	(214)	630	4,324	-	3,843	3,399	(8,658)	5,052	100,213
NSP - MN	19,598	32,928	(48,176)	100	29,580	34,030	-	30,940	27,362	313,067	41,669	806,830
NSP - WI	4,433	5,709	(8,356)	(30)	4,447	6,203	-	N/A	N/A	43,681	7,239	139,764
Xcel Services[3]	21,737	26,095	(38,200)	(985)	13,112	21,759	-	N/A	N/A	84,737	32,227	632,568
XEPC (former EMI)	-	23	(33)	-	2	(8)	-	N/A	N/A	(58)	28	546
Total XEPP	51,602	71,959	(105,312)	(1,129)	50,821	67,941	-	34,783	30,761	466,401	90,000	1,753,811
NCE Non-Bargaining Pension Plan												
Discontinued Operations - Cheyenne	-	146	(203)	-	146	89	-	N/A	N/A	1,545	65	3,601
PSCo	3,915	7,642	(10,625)	(165)	3,321	4,088	-	N/A	N/A	17,104	3,434	187,999
SPS	2,431	3,347	(4,645)	(137)	2,608	3,604	-	N/A	N/A	23,427	1,501	83,030
Total NCE	6,346	11,135	(15,473)	(302)	6,075	7,781	-	N/A	N/A	42,076	5,000	274,630
SPS Bargaining Plan												
SPS	6,377	16,788	(23,998)	-	8,741	7,908	-	N/A	N/A	120,664	15,000	394,752
Total SPS	6,377	16,788	(23,998)	-	8,741	7,908	-	N/A	N/A	120,664	15,000	394,752
PSCo Bargaining Plan												
Discontinued Operations - Cheyenne	-	416	(547)	-	421	290	-	N/A	N/A	6,218	386	9,963
PSCo	21,667	43,985	(57,881)	(3,212)	22,122	26,681	-	N/A	N/A	242,695	39,614	1,041,247
Total PSCo	21,667	44,401	(58,428)	(3,212)	22,543	26,971	-	N/A	N/A	248,913	40,000	1,051,210
Total Xcel Energy	85,992	144,283	(203,211)	(4,643)	88,180	110,601	-	34,783	30,761	878,054	150,000	3,474,403

[1] Settlement accounting may be required if lump sum benefit payments exceed the sum of service cost and interest on a plan by plan basis. No settlements have been estimated at this time.
[2] Includes NRG, BMG, Viking, Natro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS
[3] Includes Eloigne

Assumptions

Discount Rate - U.S. GAAP	
XEPP	4.31%
NCE	4.25%
SPS	4.37%
PSCo	4.36%
Discount Rate - Aggregate Normal Cost	7.10%
Salary Scale	3.75%
Expected Return on Assets	
XEPP	7.10%
NCE	6.90%
SPS	6.75%
PSCo	6.50%
Assumed Mortality Table	
Bargaining Participants	RP-2014 Blue Collar projected with generational mortality improvements using an adjusted SOA MP-2016 methodology
Non-bargaining Participants	RP-2014 White Collar, as adjusted for 2014 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 methodology

See February 8, 2019 letter for additional information on data, assumptions, methods, and plan provisions.
Contributions already made are allocated in accordance with the January 2, 2019 contribution directives.

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

EXHIBIT II
Page 1 of 6

2019	Service Cost	Interest Cost	Expected Return on Assets	Amortizations: Prior Service Cost	Amortizations: Net (Gain)/Loss	Settlement Charge[1]	Net Cost	January 1 Prepaid (Accrued)	Expected Benefit Payments
Discontinued Operations[2]	-	30	-	-	(53)	-	(23)	(1,291)	91
Xcel Energy Nuclear	80	22	-	-	(13)	-	89	(663)	42
NSP - MN	33	142	-	-	318	-	493	(272)	472
NSP - WI	17	19	-	-	2	-	38	(458)	49
PSCo[3]	41	126	-	-	300	-	467	(58)	416
SPS	11	67	-	-	120	-	198	(462)	251
Xcel Services[4]	721	898	-	133	578	-	2,330	(16,717)	4,048
XEPC (former EMI)	-	-	-	-	(3)	-	(3)	(27)	-
Total Xcel Energy	903	1,304	-	133	1,249	-	3,589	(19,948)	5,369

[1] Settlement accounting may be required if lump sum benefit payments exceed the sum of service cost and interest cost. No settlements have been estimated at this time.
[2] Includes NRG, BMG, Viking, Natrogas, Quixx, Seren and UE
[3] Includes Fort St. Vrain
[4] Includes Eloigne

Assumptions

Discount Rate	4.26%
Salary Scale (career average)	3.75%
Assumed Mortality Table	RP-2014 White Collar, as adjusted for 2014 Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 methodology

See February 8, 2019 letter for additional information on data, assumptions, methods and plan provisions.

EXHIBIT III
Page 1 of 6

XCEL ENERGY INC. - Postretirement Benefits
U.S. GAAP Cost Estimates by Legal Entity
($ in Thousands)

2019	Service Cost	Interest Cost	Expected Return on Assets	Amortizations: Prior Service Cost	Amortizations: Net (Gain)/Loss	Net Cost	January 1 Prepaid (Accrued)	Contribution
Discontinued Operations[1]	-	309	(71)	(110)	79	207	(4,760)	658
Xcel Energy Nuclear	14	36	-	57	(15)	92	(822)	17
NSP - MN[2]	112	3,091	(129)	(3,075)	1,523	1,522	(50,755)	7,187
NSP - WI	27	528	(23)	(351)	299	480	(6,998)	1,168
PSCo	478	15,626	(18,936)	(5,399)	2,936	(5,295)	47,175	-
SPS[3]	879	1,741	(2,039)	(466)	(420)	(305)	(13,234)	-
Xcel Services[3]	43	1,132	(33)	(565)	676	1,253	(12,591)	1,587
XEPC (former EMI)	-	1	-	-	(4)	(3)	(117)	5
Total Xcel Energy	1,553	22,464	(21,231)	(9,909)	5,074	(2,049)	(42,102)	10,622

[1]Includes NRG, BMG, Viking, Natrogas, Cheyenne, Quixx and UE.
[2]Includes Eloigne and Seren.
[3]Includes Executive Life Insurance benefits.

Assumptions

Discount Rate	4.32%	
Expected Return on Assets	5.30%	
Medical Trend	Pre-65	Post-65
Initial (2019)	6.50%	5.30%
Ultimate	4.50%	4.50%
Year Ultimate Reached	2023	2023

Assumed Mortality Table
Bargaining: RPH-2014 Blue Collar headcount-weighted table adjusted for Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 methodology.
Non-bargaining: RPH-2014 White Collar headcount-weighted table adjusted for Xcel Energy mortality study, projected with generational mortality improvements using an adjusted SOA MP-2016 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 February 8, 2019 letter for additional information on data, assumptions, and plan provisions.

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

Exhibit VI
Page 1 of 1

Fiscal Year Ending	2018	2019	2020	2021	2022	2023	2024
U.S. GAAP	Actual	Budget	Budget	Budget	Budget	Budget	Budget
Discount Rate- Workers' Compensation	3.51%	4.23%	4.23%	4.23%	4.23%	4.23%	4.23%
Former NSP - Workers' Compensation [1]							
MN/SD	339	(472)	310	289	270	253	234
MI/WI	(53)	8	4	5	4	3	4
Subtotal	286	(464)	314	294	274	256	238
Former NCE - Workers' Compensation [1]							
Colorado - PSCo	555	30	62	60	58	55	53
Deductible States - Workers' Compensation							
Deductible States - SPS (KS, OK, NM, and TX)	(3)	-	-	-	-	-	-
Total Xcel Energy Workers' Compensation	**838**	**(434)**	**376**	**354**	**332**	**311**	**291**
Discount Rate - LTD Income	3.51%	4.23%	4.23%	4.23%	4.23%	4.23%	4.23%
LTD Income							
Discontinued Operations - Cheyenne	(21)	(32)	3	2	2	1	1
Discontinued Operations [2]	89	57	20	19	18	17	16
NSP-MN	(22)	(99)	226	213	200	188	176
NSP-WI	(258)	(73)	46	42	41	38	36
PSCo	(117)	51	36	28	23	18	14
SPS	(7)	21	17	13	7	5	3
Utility Engineering	(3)	(5)	2	1	2	-	1
Xcel Services	91	10	7	6	5	5	4
XEPC	3	(1)	-	-	-	-	-
Total Xcel Energy LTD Income	**(245)**	**(71)**	**357**	**324**	**298**	**272**	**251**
Total Xcel Energy U.S. GAAP	**593**	**(505)**	**733**	**678**	**630**	**583**	**542**

[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 February 8, 2019 letter for additional information on data, assumptions, methods, and plan provisions.

2/8/2019
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Southwestern Public Service Company

Calculation of Actuarially Determined Pension and Benefit Amounts

Total Cost Amounts from Actuarial Reports

	QUALIFIED PENSION 2018	QUALIFIED PENSION 2019	OPEB RETIREE MEDICAL 2018	OPEB RETIREE MEDICAL 2019
SPS-NCE	$ 3,993,000	$ 3,604,000		
SPS-Barg	9,739,000	7,908,000		
SPS Total	$ 13,732,000	$ 11,512,000	$ (558,000)	$ (305,000)
Xcel Service	$ 23,352,000	$ 21,759,000	$ 1,527,000	$ 1,253,000
	(1)	(5)	(3)	(7)

Calculation of Total Cost Amounts to Cost of Service Amounts

	QUALIFIED PENSION			OPEB RETIREE MEDICAL		
	Test Year 12 Months Ending 3/31/19	2019 Cost	Known & Measurable Incr/(Decr) from Test Year	Test Year 12 Months Ending 3/31/19	2019 Cost	Known & Measurable Incr/(Decr) from Test Year
SPS						
SPS-NCE Total Cost	$ 3,895,750	$ 3,604,000	$ (291,750)			
SPS-Barg Total Cost	9,281,250	7,908,000	(1,373,250)			
Total SPS	$ 13,177,000	$ 11,512,000	$ (1,665,000)	$ (494,750)	$ (305,000)	$ 189,750
Percent to SPS O&M FERC 926	61.63%	61.63%		61.63%	61.63%	
Amount to SPS O&M FERC 926	$ 8,120,353	$ 7,094,294	$ (1,026,060)	$ (304,891)	$ (187,957)	$ 116,934
Xcel Service						
Xcel Service Total Cost	$ 22,953,750	$ 21,759,000	$ (1,194,750)	$ 1,458,500	$ 1,253,000	$ (205,500)
Percent to SPS O&M FERC 926	12.50%	12.50%		12.50%	12.50%	
Amount to SPS O&M FERC 926	$ 2,870,332	$ 2,720,930	$ (149,402)	$ 182,383	$ 156,686	$ (25,697)
Affiliate Charges	$ (904)	$ -	$ 904	$ 33	$ -	$ (33)
Amount to SPS O&M	**$ 10,989,781**	**$ 9,815,224**	**$ (1,174,557)**	**$ (122,475)**	**$ (31,271)**	**$ 91,204**

1) Attachment RRS-2, Exhibit I Page 1 of 6
3) Attachment RRS-2, Exhibit III Page 1 of 6
5) Attachment RRS-3, Exhibit I Page 1 of 6
7) Attachment RRS-3, Exhibit III Page 1 of 6

Southwestern Public Service Company

Calculation of Actuarially Determined Pension and Benefit Amounts

Total Cost Amounts from Actuarial Reports

	NON-QUALIFIED PENSION 2018	NON-QUALIFIED PENSION 2019	FAS 112 LONG-TERM DISABILITY AND WORKERS COMPENSATION 2018	FAS 112 LONG-TERM DISABILITY AND WORKERS COMPENSATION 2019
SPS	$ 212,000	$ 198,000	$ (10,000)	$ 21,000
Xcel Service	$ 2,872,000	$ 2,330,000	$ 91,000	$ 10,000
	(2)	(6)	(4)	(8)

Calculation of Total Cost Amounts to Cost of Service Amounts

	NON-QUALIFIED PENSION			FAS 112 LONG-TERM DISABILITY AND WORKERS COMPENSATION			TOTAL NON-QUALIFIED PENSION, FAS 112 LONG-TERM DISABILITY & FAS 112 WORKERS COMPENSATION		
	Test Year 12 Months Ending 3/31/19	2019 Cost	Known & Measurable Incr/(Decr) from Test Year	Test Year 12 Months Ending 3/31/19	2019 Cost	Known & Measurable Incr/(Decr) from Test Year	Test Year 12 Months Ending 3/31/19	2019 Cost	Known & Measurable Incr/(Decr) from Test Year
SPS									
SPS Total Cost	$ 208,500	$ 198,000	$ (10,500)	$ (9,374)	$ 21,000	$ 30,374	$ 199,126	$ 219,000	$ 19,874
Percent to SPS O&M FERC 926	61.63%	61.63%		61.63%	61.63%		61.63%	61.63%	
Amount to SPS O&M FERC 926	$ 128,489	$ 122,018	$ (6,471)	$ (5,777)	$ 12,941	$ 18,718	$ 122,712	$ 134,959	$ 12,247
Xcel Service									
Xcel Service Total Cost	$ 2,736,500	$ 2,330,000	$ (406,500)	$ 70,750	$ 10,000	$ (60,750)	$ 2,807,250	$ 2,340,000	$ (467,250)
Percent to SPS O&M FERC 926	12.50%	12.50%		12.50%	12.50%		12.50%	12.50%	
Amount to SPS O&M FERC 926	$ 342,195	$ 291,363	$ (50,832)	$ 8,847	$ 1,250	$ (7,597)	$ 351,042	$ 292,613	$ (58,429)
Affiliate Charges	$ (13)	$ -	$ 13	$ 1	$ -	$ (1)	$ (12)	$ -	$ 12
Amount to SPS O&M	**$ 470,671**	**$ 413,381**	**$ (57,290)**	**$ 3,071**	**$ 14,192**	**$ 11,121**	**$ 473,742**	**$ 427,573**	**$ (46,169)**

2) Attachment RRS-2, Exhibit II Page 1 of 6
4) Attachment RRS-2, Exhibit VI
6) Attachment RRS-3, Exhibit II Page 1 of 6.
8) Attachment RRS-3, Exhibit VI

Southwestern Public Service Company

Calculation of Active Health and Welfare Amounts

Calculation of Total Cost Amounts to Cost of Service Amounts

	ACTIVE HEALTH CARE			MISC BENEFIT PROGRAMS AND LIFE INSURANCE			TOTAL HEALTH AND WELFARE		
	Test Year Adjusted 12 Months Ending 3/31/19	Amount Included in Cost of Service	Known & Measurable Incr/(Decr) from Base Period Adjusted	Test Year 12 Months Ending 3/31/19	Amount Included in Cost of Service	Known & Measurable Incr/(Decr) from Base Period Adjusted	Test Year Adjusted 12 Months Ending 3/31/19	Amount Included in Cost of Service	Known & Measurable Incr/(Decr) from Test Year Adjusted
SPS									
Total Cost Per Book Amount	$ 16,032,231						$ 16,032,231		
Adjust to Incurred Basis	(339,472)						(339,472)		
Total Cost on Incurred Basis	$ 15,692,759	$ 15,945,132		$ 1,202,270	$ 1,202,270		$ 16,895,029	$ 17,147,402	
Percent to SPS O&M FERC 926	61.68%	61.67%		61.63%	61.63%		61.67%	61.67%	
Amount to SPS O&M FERC 926	$ 9,678,590	$ 9,834,115	$ 155,525	$ 740,901	$ 740,901	$ -	$ 10,419,491	$ 10,575,016	$ 155,525
Xcel Service									
Total Cost Per Book Amount	$ 37,628,208						$ 37,628,208		
Adjust to Incurred Basis	(2,229,096)						(2,229,096)		
Total Cost on Incurred Basis	$ 35,399,112	$ 36,801,095		$ 6,094,738	$ 6,094,738		$ 41,493,850	$ 42,895,833	
Percent to SPS O&M FERC 926	12.55%	12.54%		12.50%	12.50%		12.54%	12.54%	
Amount to SPS O&M FERC 926	$ 4,441,269	$ 4,616,585	$ 175,316	$ 762,138	$ 762,138	$ -	$ 5,203,407	$ 5,378,723	$ 175,316
Affiliate/Other Charges	$ 4,928	$ 4,928	$ -	$ (83)	$ (83)	$ -	$ 4,845	$ 4,845	$ -
Amount to SPS O&M FERC 926	**$ 14,124,786**	**$ 14,455,628**	**$ 330,842**	**$ 1,502,956**	**$ 1,502,956**	**$ -**	**$ 15,627,743**	**$ 15,958,584**	**$ 330,842**

Southwestern Public Service Company

Average Balances of Qualified and Non-Qualified Pension Fund Amounts

FERC Account	JDE Object Account	SAP Object Account	Account Desciption	Mar LTD (2018)	Apr LTD (2018)	May LTD (2018)	June LTD (2018)	Jul LTD (2018)	Aug LTD (2018)	Sep LTD (2018)
Prepaid Pension Asset - Qualified										
228.3	431110.1000	2421006	Accrd Qual Pen Post 15	$ (74,567,250)	$ (74,550,667)	$ (74,534,083)	$ (74,517,500)	$ (74,500,917)	$ (74,484,333)	$ (74,467,750)
182.3	150201.1700	1151021	FAS 158 Reg Asset Pensi	13,155,000	13,155,000	13,155,000	12,924,000	12,924,000	12,924,000	13,154,750
182.3	244510.9997	1402006	FAS 158 RA Pension Cont	(13,155,000)	(13,155,000)	(13,155,000)	(12,924,000)	(12,924,000)	(12,924,000)	(13,154,750)
182.3	244510.1700	1402006	FAS 158 Reg Asset Pensi	232,169,359	231,008,442	229,847,525	228,686,609	227,525,692	226,364,775	225,203,859
Total Prepaid Pension Asset - Qualified				**$ 157,602,109**	**$ 156,457,775**	**$ 155,313,442**	**$ 154,169,109**	**$ 153,024,775**	**$ 151,880,442**	**$ 150,736,109**
Prepaid Pension Asset - Non-Qualified										
FERC Account	**JDE Object Account**	**SAP Object Account**	**Account Desciption**							
182.3	244510.1800	1402001	FAS 158 Reg Asset Nqual	$ 374,604	$ 371,253	$ 367,903	$ 364,552	$ 361,202	$ 357,851	$ 354,501
182.3	150201.1800	1151001	FAS 158 RA Non Qualified Curr	(39,072)	(39,072)	(39,072)	(39,450)	(39,450)	(39,450)	(39,072)
182.3	244510.9998	1402001	FAS 158 RA NQual Pensio	39,072	39,072	39,072	39,450	39,450	39,450	39,072
242	338310.1000	2244031	A/P NonQualified Pen Po	(235,000)	(235,000)	(235,000)	(235,000)	(235,000)	(235,000)	(235,000)
219	488200.160	3152011	OCI NonQ Pension FAS 158	864,549	856,816	849,083	841,350	833,617	825,885	818,152
228.3	431440	2421036	Accrued Nonqual Pension	(1,472,791)	(1,460,016)	(1,447,242)	(1,437,752)	(1,428,263)	(1,410,845)	(1,399,997)
Total Prepaid Pension Asset - Non-Qualified				**$ (468,638)**	**$ (466,947)**	**$ (465,256)**	**$ (466,850)**	**$ (468,444)**	**$ (462,109)**	**$ (462,344)**
Total Net Prepaid Pension Costs				**$ 157,133,471**	**$ 155,990,829**	**$ 154,848,186**	**$ 153,702,259**	**$ 152,556,331**	**$ 151,418,333**	**$ 150,273,765**

Southwestern Public Service Company

Average Balances of Qualified and Non-Qualified Pension Fund Amounts

FERC Account	JDE Object Account	SAP Object Account	Account Desciption	Oct LTD (2018)	Nov LTD (2018)	Dec LTD (2018)	Jan LTD (2019)	Feb LTD (2019)	Mar LTD (2019)	13 Month Average
Prepaid Pension Asset - Qualified										
228.3	431110.1000	2421006	Accrd Qual Pen Post 15	$ (74,451,167)	$ (74,434,583)	$ (85,598,000)	$ (46,762,000)	$ (69,147,000)	$ (69,172,000)	
182.3	150201.1700	1151021	FAS 158 Reg Asset Pensi	13,154,750	13,154,750	12,896,000	12,896,000	12,896,000	11,172,500	
182.3	244510.9997	1402006	FAS 158 RA Pension Cont	(13,154,750)	(13,154,750)	(12,896,000)	(12,896,000)	(12,896,000)	(11,172,500)	
182.3	244510.1700	1402006	FAS 158 Reg Asset Pensi	224,042,942	222,882,025	229,640,109	206,345,776	227,820,442	226,886,109	
Total Prepaid Pension Asset - Qualified				**$ 149,591,775**	**$ 148,447,442**	**$ 144,042,109**	**$ 159,583,776**	**$ 158,673,442**	**$ 157,714,109**	**$ 153,633,570**
Prepaid Pension Asset - Non-Qualified										
FERC Account	**JDE Object Account**	**SAP Object Account**	**Account Desciption**							
182.3	244510.1800	1402001	FAS 158 Reg Asset Nqual	$ 351,150	$ 347,800	$ 386,878	$ 383,765	$ 380,652	$ 377,539	
182.3	150201.1800	1151001	FAS 158 RA Non Qualified Curr	(39,072)	(39,072)	(38,694)	(38,694)	(38,694)	(37,106)	
182.3	244510.9998	1402001	FAS 158 RA NQual Pensio	39,072	39,072	38,694	38,694	38,694	37,106	
242	338310.1000	2244031	A/P NonQualified Pen Po	(235,000)	(235,000)	(251,000)	(251,000)	(251,000)	(251,000)	
219	488200.160	3152011	OCI NonQ Pension FAS 158	810,419	802,686	856,072	849,185	842,298	835,411	
228.3	431440	2421036	Accrued Nonqual Pension	(1,389,148)	(1,378,300)	(1,455,000)	(1,408,783)	(1,397,852)	(1,386,920)	
Total Prepaid Pension Asset - Non-Qualified				**$ (462,579)**	**$ (462,814)**	**$ (463,049)**	**$ (426,833)**	**$ (425,901)**	**$ (424,970)**	**$ (455,903)**
Total Net Prepaid Pension Costs				**$ 149,129,196**	**$ 147,984,628**	**$ 143,579,059**	**$ 159,156,943**	**$ 158,247,541**	**$ 157,289,139**	**$ 153,177,668**

Southwestern Public Service Company

Development of Qualified Pension Asset Balance

($ in Thousands)	*Actual* Aug. 31 1988	*Actual* Aug. 31 1989	*Actual* Aug. 31 1990	*Actual* Aug. 31 1991	*Actual* Aug. 31 1992	*Actual* Aug. 31 1993	*Actual* Aug. 31 1994	*Actual* Aug. 31 1995	*Actual* Aug. 31 1996	*Actual* Sep. - Dec. Transition	*Actual* Dec. 31 1997	*Actual* Dec. 31 1998
Begining Balance Pension Asset (Liability)	$ 2,706	$ 3,724	$ 3,902	$ 4,531	$ (5,955)	$ (7,207)	$ (7,347)	$ (7,039)	$ (7,045)	$ (6,905)	$ (6,548)	$ -
Pension (Expense) Credit Accrual	$ 1,018	$ (471)	$ (1,332)	$ (2,464)	$ (2,487)	$ (1,354)	$ (761)	$ (1,097)	$ (855)	$ 9	$ 12,645	$ 15,175
Net Employer Contributions	$ -	$ 649	$ 1,961	$ -	$ 1,235	$ 1,214	$ 1,069	$ 1,091	$ 995	$ 348	$ (6,097)	
Other				$ (8,022)								$ 9,436
Ending Balance Pension Asset (Liability)	$ 3,724	$ 3,902	$ 4,531	$ (5,955)	$ (7,207)	$ (7,347)	$ (7,039)	$ (7,045)	$ (6,905)	$ (6,548)	$ -	$ 24,611

Southwestern Public Service Company

Development of Qualified Pension Asset Balance

Actual	*Actual*	*Actual*	*Actual*	*Actual*	*Actual*	*Actual*	*Actual*	*Actual*	*Actual*	*Actual*
Dec. 31	**Dec. 31**	**Dec. 31**	**Dec. 31**	**Dec. 31**	**Dec. 31**	**Dec. 31**	**Dec. 31**	**Dec. 31**	**Dec. 31**	**Dec. 31**
1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
$ 24,611	$ 40,087	$ 61,359	$ 82,503	$ 105,044	$ 121,580	$ 132,757	$ 143,309	$ 150,827	$ 158,778	$ 169,516
$ 15,476	$ 21,352	$ 21,131	$ 22,235	$ 16,536	$ 11,177	$ 9,102	$ 6,934	$ 7,951	$ 10,738	$ 6,644
$ -	$ -	$ -	$ -	$ -	$ -	$ 1,450	$ 584	$ -	$ -	$ 8,354
	$ (80)	$ 14	$ 306							
$ 40,087	$ 61,359	$ 82,503	$ 105,044	$ 121,580	$ 132,757	$ 143,309	$ 150,827	$ 158,778	$ 169,516	$ 184,514

Southwestern Public Service Company

Development of Qualified Pension Asset Balance

Actual Dec. 31 2010	*Actual* Dec. 31 2011	*Actual* Dec. 31 2012	*Actual* Dec. 31 2013	*Actual* Dec. 31 2014	*Actual* Dec. 31 2015	*Actual* Dec. 31 2016	*Actual* Dec. 31 2017	*Actual* Dec. 31 2018	*Forecast* Dec. 31 2019	*Forecast* Dec. 31 2020	*Forecast* Dec. 31 2021	*Forecast* Dec. 31 2022	*Forecast* Dec. 31 2023	*Forecast* Dec. 31 2024
$ 184,514	$ 178,721	$ 171,936	$ 167,329	$ 167,773	153,681	147,626	144,174	153,002	144,091	149,080	152,585	156,514	156,508	161,324
$ (5,793)	$ (11,961)	$ (17,624)	$ (21,571)	$ (16,829)	(17,706)	(15,404)	(14,566)	(13,732)	(11,512)	(11,007)	(9,649)	(8,606)	(8,180)	(7,240)
$ -	$ 5,176	$ 13,060	$ 22,015	$ 4,869	11,651	18,088	23,503	8,033	16,501	14,512	13,578	8,600	12,996	1,504
		$ (44)		$ (2,132)		(6,135)	(109)	(3,212)						
$ 178,721	$ 171,936	$ 167,329	$ 167,773	$ 153,681	$ 147,626	$ 144,174	$ 153,002	$ 144,091	$ 149,080	$ 152,585	$ 156,514	$ 156,508	$ 161,324	$ 155,588