

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



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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



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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' Compensation	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.



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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.

Benefit Cost		May 18, 2018 results
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 Nonbargaining 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.



Mr. Richard R. Schrubbe
May 18, 2018

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,

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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.
- Assumed contributions are assigned to the prior plan year.
- Assumed funding balance used to satisfy quarterly requirements and any remaining minimum requirements assigned to the prior plan year
- 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

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

EXHIBIT I
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	Amortizations			Net (Gain)/Loss	Aggregate Cost - 20-year Amortization Method	Aggregate Cost - Compensation Method	Settlement Charge ¹	Net Cost	January 1 Prepaid (Accrued)	Contribution	PBO
	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss								
2018											
Xcel Energy Pension Plan (XEPP)											
Discontinued Operations ²	-	-	3,615	-	N/A	N/A	-	1,812	35,418	4,864	78,815
Xcel Energy Nuclear	6,284	(2,144)	1,129	-	3,042	3,042	-	4,737	(9,131)	6,524	107,357
NSP - MN	21,644	100	37,323	-	30,891	26,292	-	38,585	342,488	56,623	927,782
NSP - WI	4,777	(30)	5,673	-	N/A	N/A	-	6,837	48,153	9,587	156,748
Xcel Services ³	22,849	(986)	17,078	-	N/A	N/A	-	23,362	87,739	42,356	690,963
XEPC (former EMI)	21	(34)	2	-	N/A	N/A	-	(11)	(101)	36	564
Total XEPP	55,554	(1,111,125)	64,825	-	34,465	29,334	-	75,312	504,566	120,000	1,962,249
NCE Non-Bargaining Pension Plan											
Discontinued Operations - Cheyenne	-	-	177	-	N/A	N/A	-	92	1,675	137	3,961
PSCO	4,297	(165)	4,403	-	N/A	N/A	-	4,152	18,991	6,830	206,586
SPS	2,656	(137)	3,388	-	N/A	N/A	-	3,993	27,599	3,033	91,051
Total NCE	6,953	(302)	7,968	-	N/A	N/A	-	8,237	48,165	10,000	301,568
SPS Bargaining Plan											
SPS	7,062	-	10,682	-	N/A	N/A	-	9,739	125,403	5,000	424,828
Total SPS	7,062	(23,370)	10,682	-	N/A	N/A	-	9,739	125,403	5,000	424,828
PSCO Bargaining Plan											
Discontinued Operations - Cheyenne	-	-	489	-	N/A	N/A	-	302	6,370	150	11,411
PSCO	24,788	(3,212)	26,855	-	N/A	N/A	-	31,548	259,393	14,850	1,127,564
Total PSCO	24,788	(3,212)	27,324	-	N/A	N/A	-	31,850	285,763	15,000	1,139,005
Total Xcel Energy	84,357	(4,643)	110,798	-	34,465	29,334	-	125,138	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, Nitro Gas, Utility Engineering, Seren, Quixx, Crockett and QPS

³ Includes Eloigne

Assumptions

Discount Rate - U.S. GAAP	3.60%
XEPP	3.52%
NCE	3.71%
SPS	3.68%
PSCO	3.75%
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
 Non-bargaining Participants

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

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)

	Amortizations							Expected Benefit Payments
	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Settlement Charge ¹	Net Cost	
Discontinued Operations ²	-	27	-	-	(51)	-	(24)	92
Xcel Energy Nuclear	93	25	-	-	16	-	134	32
NSP - MN	25	145	-	-	415	-	585	791
NSP - WI	17	20	-	-	16	-	53	59
PSCO ³	42	111	-	-	352	-	505	435
SFS	21	58	-	-	133	-	212	235
Xcel Services ⁴	800	813	-	227	1,032	-	2,872	3,245
XEPC (former EMI)	-	-	-	-	(3)	-	(3)	-
Total Xcel Energy	998	1,199	-	227	1,910	-	4,334	4,869
								January 1 Prepaid (Accrued)
								(1,320)
								(565)
								(568)
								(459)
								(21)
								(495)
								(14,395)
								(30)

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, Nitrogas, Quiox, Saren and UE

³ Includes Fort St. Vrain

⁴ Includes Eloiogne

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 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)

	Amortizations						Contribution
	Service Cost	Interest Cost	Expected Return on Assets	Prior Service Cost	Net (Gain)/Loss	Net Cost	
2018							
Discontinued Operations ¹	-	308	(99)	(104)	162	267	721
Xcel Energy Nuclear	19	34	-	49	(11)	91	16
NSP - MN ²	151	3,040	(382)	(3,065)	2,392	2,116	7,916
NSP - WI	37	588	(63)	(351)	554	745	1,347
PSCo	609	14,984	(22,699)	(6,178)	4,083	(9,191)	-
SPS ³	1,118	1,641	(2,460)	(404)	(453)	(558)	-
Xcel Services ³	62	1,077	(44)	(557)	989	1,527	1,654
XEPC (former EMi)	-	1	-	1	(5)	(3)	6
Total Xcel Energy	1,996	21,663	(25,747)	(10,629)	7,711	(5,006)	11,669

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

²Includes Eloigne and Seren.

³Includes Executive Life Insurance benefits.

Assumptions

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

Bargaining:

Non-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.
 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	2017 Actual	2018 Actual	2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget
U.S. GAAP							
<u>Discount Rate- Workers' Compensation</u>	3.96%	3.51%					
<u>Former NSP - Workers' Compensation</u> ¹							
MN/SD	509	339					
MI/WI	12	(53)					
Subtotal	521	286					
<u>Former NCE - Workers' Compensation</u> ¹							
Colorado - PSCo	162	555					
<u>Deductible States - Workers' Compensation</u>							
Deductible States - SPS (KS, OK, NM, and TX)	-	(3)					
Total Xcel Energy Workers' Compensation	683	838					
<u>Discount Rate - LTD Income</u>	3.96%	3.51%					
<u>LTD Income</u>							
Discontinued Operations - Cheyenne	14	(21)					
Discontinued Operations ²	78	89					
NSP-MN	120	(22)					
NSP-WI	207	(258)					
PSCo	26	(117)					
SPS	78	(7)					
Utility Engineering	4	(3)					
Xcel Services	17	91					
XEPC	5	3					
Total Xcel Energy LTD Income	549	(245)					
Total Xcel Energy U.S. GAAP	1,232	593					

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://naactl.internal.towerswatson.com/clients/609084A/XcelRETA/actuarial-2018/Documents/Projections/May/Projections - 05182018 to Xcel.xlsx#ASC 712 Cost