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June 26, 2017

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: San Diego Gas & Electric Company's Annual Filing of Revised Costs and Accruals for Post-Employment Benefits Other than Pensions, Docket No. ER17-___

Dear Ms. Bose:

Pursuant to Section 205 of the Federal Power Act,[1] Section 35.13 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations,[2] and San Diego Gas & Electric Company's ("SDG&E") fourth Transmission Owner ("TO") Formula rate mechanism ("TO4 Formula" or "TO4 Formula Rate"),[3] SDG&E submits this "single-issue" Post-Employment Benefits Other than Pensions ("PBOP") filing ("Filing") to the FERC to recover the PBOP costs recorded in 2016.

This Filing updates SDG&E's change in PBOP expense contained in the TO4 Formula ("Cycle 1")[4] to reflect change in expense for 2016, the TO4 Cycle 5 Base Period.

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1 16 U.S.C. § 824d (2015).

2 18 C.F.R. § 35.13.

3 The Commission approved the Offer of Settlement (Settlement) embodying the TO 4 Formula by Letter Order dated May 27, 2014 in *San Diego Gas & Electric Company,* 147 FERC ¶ 61,150 (2014). The PBOP provisions are contained in the Settlement, Article I, Section 1.8., and the TO4 Formula (Appendix VIII, Section B.57 and the Formula Rate Protocols, Section D.1).

4 The term "Cycle" refers to the specific Information Filing (or annual filing) submitted under the TO4 Formula. The term "TO4 Cycle 5" refers to the fifth Informational Filing submitted in the TO4 Formula. The capitalized terms have the meaning ascribed to them in SDG&E's TO Tariff or in this Filing.

The proposed impact of the revised PBOP expense and its impact on the Base Transmission Revenue Requirements ("BTRR") will be reflected in the TO4 Cycle 5 Formula Rate Informational Filing, which will be filed on December 1, 2017, to become effective January 1, 2018.

As discussed in greater detail below, SDG&E submits this filing for approval of its 2016 costs and accruals for PBOP, as recorded in FERC Uniform System of Accounts No. 926 ("Employee Pensions and Benefits") ("Account No. 926").

I. NATURE AND PURPOSE OF FILING

SDG&E is making this single-issue filing in accordance with Section D.1. of the TO4 Formula Rate Protocols, which provide:

> If the expense levels for SDG&E's Post-Employment Benefits Other than Pensions ("PBOP"), as recorded in FERC Account No. 926, Employee Pensions and Benefits, change from those expense levels contained in SDG&E's TO4 Filing submitted in Docket No. ER13-941, then:
>
> a. SDG&E may make a single-issue filing under Section 205 of the FPA, to recover such changed PBOP expense pursuant to the TO4 Formula; or
>
> b. Any person may exercise its rights under Section 206 of the FPA to request that the Commission direct SDG&E to reflect any changed PBOP expense pursuant to the TO4 Formula.
>
> c. SDG&E and/or any other person shall retain full rights to oppose such filings under the FPA and in accordance with the Commission's Rules of Practice and Procedure.
>
> d. If there is a change from the PBOP expense levels contained in SDG&E's TO4 Filing and SDG&E elects not to make a filing, SDG&E will provide notice of the change to the Service List as part of its Draft Informational Filing.

This PBOP treatment is consistent with earlier FERC orders requiring utilities that provide service under formulaic "cost of service" rates to file PBOP costs, accrual estimates and funding commitments for Commission review prior to including such amounts in the formula rates.[5] The PBOP costs will be reflected in SDG&E's TO4 Cycle 5 Informational Filing, which will be filed on December 1, 2017.

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5 *See Boston Edison Co.*, 70 FERC ¶61,222 (1995), and *Maine Yankee Atomic Power Co.*, 68 FERC ¶ 61,375, pp. 62,252-53, *Order on Clarification*, 68 FERC ¶ 61,190, pp. 61,958-59 (1994).

II. LIST OF DOCUMENTS SUBMITTED

This filing consists of the following documents:

1. Transmittal Letter;

2. Exhibit No. SDG-1 – Willis Towers Watson Actuarial Valuation Report dated May 2017 for 2016 recorded PBOP costs;

3. Exhibit No. SDG-1-1 - "Section 1: Summary of Key Results – Benefit Cost, Assets, & Obligations" (from 2015 to 2016) - excerpt from Exhibit No. SDG-1;

4. Exhibit No. SDG-2 - Derivation of 2016 Costs Used in the Transmittal Letter to Support Annual FERC PBOP Costs for the TO4 Cycle 5 Informational Filing for the 12-Month Base Period and True-Up Period (January 2016-December 2016); and

5. Exhibit No. SDG-2-1 - Work papers for Exhibit SDG-2.

III. SDG&E'S 2016 PBOP FILING

The Willis Towers Watson annual Actuarial Report, dated May 2017, reflects recorded PBOP costs for 2016, the TO4 Cycle 5 Base Period. The Actuarial Report is attached as Exhibit No. SDG-1. More particularly, for 2016, SDG&E's total year-end PBOP expense per the actuarial valuation is $2,356,519 as shown in the second page of Exhibit No. SDG-1-1 under Employer Contributions. This amount compares to the 2015 costs of $7,357,561, which was the as-filed starting basis of costs in last year's PBOP filing in Docket No. ER16-1719-000. Exhibit No. SDG-1-1 provides a listing and explanation of the factors contributing to the net decrease of $5,001,042 from 2015 to 2016.

Exhibit No. SDG-2, demonstrates how PBOP costs are derived and assigned to various Sempra Energy affiliates and ultimately to SDG&E's Electric Transmission Division for the Base Period and True-Up Period (January 2016 through December 2016).

After adjusting for capitalized costs and billings to others, $1,215,390 of PBOP costs remains in Account No. 926 (line 13). This amount supports both SDG&E's Electric and Natural Gas operations. The amount of this expense that is allocated to the Electric Division is $915,310 (line 15). This expense will be included in SDG&E's A&G expenses as part of Account No. 926 expenses, and reflected in the TO4 Cycle 5 Informational Filing for the 2016 Base Period and True-Up Period (January 2016 through December 2016).

For the TO4 Cycle 5 2016 Base Period and True-Up Period (January 2016 through December 2016), the $915,310 (line 15) is then allocated on the basis of SDG&E's Transmission Wages and Salary ratio of 17.52 % to arrive at approximately $160,362 (line 19), which is the amount allocated to transmission service.

IV. REQUEST FOR WAIVER OF FILING AND NOTICE REQUIREMENTS

SDG&E submits this filing for the limited purpose of securing Commission approval of funded and projected PBOP costs and does not propose, by this filing, to amend, supersede or, in any manner, change the provisions of SDG&E's TO4 Formula. This filing does not in and of itself change, in any respect, SDG&E's transmission rates. Given the limited scope of this filing, SDG&E does not believe Part 35 of the Commission's regulations,[6] including Section 35.13,[7] is applicable to this filing. In the event the Commission disagrees, however, SDG&E respectfully requests waiver of such requirements and other relief as may be necessary.

V. COMMUNICATIONS

Correspondence and other communications concerning this filing should be addressed to the following individuals:

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SDG&E requests waiver of Rule 203(b)(3) of the Commission's Rules of Practice and Procedure,[8] to the extent necessary to permit each of the individuals identified above to be placed on the Commission's official service list in this proceeding.

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[6] 18 C.F.R. Part 35.

[7] *Id.*, §35.13.

[8] 18 C.F.R. §385.203 (b)(3).

A copy of this letter has been served on all parties to Docket No. ER13-941. In addition, this letter and enclosures have been served on the CPUC and the CAISO.

VI. CONCLUSION

SDG&E respectfully requests that the Commission review and approve the funded and projected PBOP costs reflected in this filing, consistent with the terms of SDG&E's TO4 Formula. SDG&E will include the approved 2016 PBOP costs in the TO4 Cycle 5 Informational Filing on December 1, 2017, to become effective January 1, 2018.

Respectfully submitted,

/s/ Christopher M. Lyons

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San Diego Gas & Electric Company

Exhibit No. SDG-1

2016 Actuarial Valuation Report

San Diego Gas & Electric Company

Postretirement Health and Life Plans

Actuarial Valuation Report
Postretirement Welfare Cost for Fiscal Year Ending December 31, 2016
Employer Contributions for Plan Year Beginning January 1, 2016

September 2016
(Revised January 2017 to reflect VREP and May 2017 to reflect actual pay-as-you-go benefit payments)

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Purposes of valuation

Sempra Energy engaged Towers Watson Delaware Inc., a subsidiary of Willis Towers Watson PLC ("Willis Towers Watson") to value the Company's other postretirement benefit plan.

As requested by Sempra Energy (the Company), this report provides the following information for the Postretirement Welfare Plans for U.S. employees of Sempra Energy (the Plan):

1. The value of benefit obligations as of January 1, 2016 and Net Periodic Postretirement Benefit Cost/(Income) (Benefit Cost), in accordance with FASB Accounting Standards Codification Topic 715 (ASC 715) for the fiscal year beginning January 1, 2016. It is anticipated that a separate report will be prepared for year-end financial reporting and disclosure purposes.

2. Plan reporting information in accordance with FASB Accounting Standards Codification Topic 965 (ASC 965).

3. Expected contributions under the plan sponsor's funding policy for the 2016 plan year.

4. The estimated maximum tax-deductible contribution for the tax year in which the 2016 plan year ends as allowed by the Internal Revenue Code. The maximum tax deductible contribution should be finalized in consultation with Sempra Energy's tax advisor.

Limitations

This valuation has been conducted for the purposes described above and may not be suitable for any other purpose. In particular, please note the following:

1. The expected contribution to the other postretirement benefits plan(s) has been set as described in this report. Note that any significant change in the amounts contributed or expected to be contributed in 2016 will require disclosure in the interim financial statements, but should not affect the expected return on plan assets absent a remeasurement for another purpose.

2. There may be certain events that have occurred since the valuation date that are not reflected in the current valuation. See Subsequent Events in the Basis for Valuation section below for more information.

3. This report does not determine liabilities on a plan termination basis, for which a separate extensive analysis would be required. No funded status measure included in this report is intended to assess, and none may be appropriate for assessing, the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, as all such measures differ in some way from plan termination obligations.

4. The comparisons of accounting obligations to assets presented in this report cannot be relied upon to determine the need for nor the amount of required future contributions to the plan. Nevertheless, such comparisons may be useful to assess the need for future contributions because they reflect current interest rates at the measurement date in determining benefit obligations. However, asset gains and losses, claims costs and demographic experience different from assumed, changes in interest rates and trend rates, future benefit accruals and other factors will all affect the need for and amount of future contributions. In addition, because this plan is not required by law to be funded, benefit payments may also be paid as they come due directly from employer assets.

Section 1: Summary of key results

Benefit cost, assets & obligations

All monetary amounts shown in US Dollars

Fiscal Year Beginning		01/01/2016		01/01/2015	
Benefit Cost/ (Income)	Net Periodic Postretirement Benefit Cost/(Income)	3,611,164		7,357,561	
	Immediate Recognition of Benefit Cost/(Income) due to Special Events[1]	13,640,125		0	
	Total Benefit Cost/(Income)	17,251,289		7,357,561	
Measurement Date		**01/01/2016**		**01/01/2015**	
Plan Assets	Fair Value of Assets (FVA)	160,966,879		163,947,491	
	Market-Related Value of Assets (MRVA)	160,966,879		163,947,491	
Benefit Obligations	Accumulated Postretirement Benefit Obligation (APBO)	(162,708,385)		(190,039,357)	
Funded Status	Funded Status	(1,741,506)		(26,091,866)	
Accumulated Other Comprehensive (Income)/Loss	Net Prior Service Cost/(Credit)	14,833,145		18,598,176	
	Net Loss/(Gain)	(35,589,935)		(14,964,590)	
	Total Accumulated Other Comprehensive (Income)/Loss	(20,756,790)		3,633,586	
Assumptions	Discount Rate	4.50%		4.15%	
	Expected Long-term Rate of Return on Plan Assets[2]	4.00%/7.00%		4.00%/7.00%	
		Pre-65	Post-65	Pre-65	Post-65
	Current Health Care Cost Trend Rate	8.10%	5.50%	7.75%	5.25%
	Ultimate Health Care Cost Trend Rate	5.00%	4.50%	5.00%	4.50%
	Year of Ultimate Trend Rate	2022	2022	2020	2020
Participant Data	Census Date	January 1, 2016		January 1, 2015	
Plan Reporting (ASC 965) for Plan Year Ending		**12/31/2015**		**12/31/2014**	
	Present value of accumulated benefits	162,708,385		190,039,357	
	Market value of assets	160,966,879		163,947,491	
	Plan reporting discount rate	4.50%		4.15%	
	Census Date	January 1, 2016		January 1, 2015	

[1] A health reimbursement account in the amount of $100,000 was offered to employees who accepted the 2016 VREP window. There were 204 acceptances.

[2] Assumed pre-tax rate of 7.00% for the 401(h) trust and Union (post 7/1/2008) VEBA and post-tax rate of 4.00% for the Non-Union and Union (pre-7/1/08) VEBAs.

Employer Contributions		Plan Year 2016	Plan Year 2015
Cash Flow[1]	Funding policy contributions	2,067,407	7,357,561
	Maximum tax deductible contributions[2]		
	Pay-as-you-go (PAYG)[3]	289,112	405,162
	Non-Union VEBA	1,168,549	1,334,402
	Union VEBA (pre 7/1/2008)	392,588	460,087
	Union VEBA (post 7/1/2008)	0	0
	401(h)	506,270	5,523,056
	Total	2,356,519	7,722,707
	Expected benefit payments and expenses net of participant contributions	7,634,444	7,871,090

1 401(h) is trust designated to pre-fund non-union retiree health benefits, union health benefits from 2018 onward for pre 7/1/2008 retirees and Non-Union VREP HRA benefits. The Union VEBA (post 7/1/08) is designated to pre-fund union health benefits from 2018 onward for retirees on and after 7/1/2008 and HRA and Union VREP HRA benefits. The Non-Union VEBA is designated to pre-fund non-union life insurance benefits, until the trust is exhausted. The Union VEBA (pre-7/1/08) is designated to pre-fund union health benefits through the end of 2017 and union life insurance benefits, until the trust is exhausted.

2 Based on an expected pension contribution of $0 for 2015.

3 2015 is actual Key employees and non-union life insurance pay-as-you-go (PAYG) benefit payments. 2016 is actual Key employees and non-union life insurance PAYG benefit payments.

Employer contributions

Employer contributions are the amounts paid by Sempra Energy to provide for postretirement benefits, net of participant contributions. Sempra Energy's funding policy is to contribute to the trusts an amount equal to the postretirement benefit cost less contributions made on behalf of key employees, not to exceed the maximum tax-deductible limit. Sempra Energy maximizes its contribution to the 401(h) account and Union post-7/1/08 VEBA, then contributes the remainder, if any, to the Non-Union VEBA and Union pre-7/1/08 VEBA. Sempra Energy may deviate from this policy, as permitted by its terms, based on cash, tax or other considerations. For Fiscal 2016, the expected contribution to the trusts under the funding policy is $2,067,407, excluding the amounts paid from Company assets for key employees, estimated to be $150,000[1].

Comments on results

The cost of the postretirement welfare plan is determined in accordance with generally accepted accounting principles in the U.S. ("U.S. GAAP"). The Fiscal 2016 postretirement welfare benefit cost for the plan is $17,251,289, which includes a one-time charge for VREP.

Under U.S. GAAP, the funded position (fair value of plan assets less the projected benefit obligation, or "APBO") of each postretirement welfare plan at the plan sponsor's fiscal year-end (measurement date) is required to be reported as a liability. The APBO is the actuarial present value of benefits attributed to service rendered prior to the measurement date, taking into consideration expected future pay increases for pay-related plans. The plan's overfunded (underfunded) APBO as of January 1, 2016 was $(1,741,506), based on the fair value of plan assets of $160,966,879 and the APBO of $(162,708,385).

Fiscal year-end financial reporting information and disclosures are prepared before detailed participant data and full valuation results are available. Therefore, the postretirement benefit asset (liability) at December 31, 2015 was derived from a roll forward of the January 1, 2015 valuation results, adjusted for the year-end assumptions, including discount rate, and asset values, as well as significant changes in plan provisions and participant population. The next fiscal year financial reporting information will be developed based on the results of the January 1, 2016 valuation, projected to the end of the year and similarly adjusted for the year-end assumptions, including discount rate, and asset values, as well as significant changes in plan provisions and participant population.

[1] 2016 actual Key employees and non-union life insurance PAYG benefit payments are equal to $289,112.

Change in net periodic cost and funded position

The postretirement welfare cost increased from $7,357,561 in Fiscal 2015 to $17,251,289, including special termination charges of $13,640,125, in Fiscal 2016 and the funded position improved from $(26,091,866) on January 1, 2015 to $(1,741,506) on January 1, 2016.

All monetary amounts shown in US Dollars

	Postretirement Welfare Cost	Funded Position
Prior year	$7,357,561	(26,091,866)
Change due to:		
▪ Expected based on prior valuation and contributions during prior year	(359,332)	3,725,015
▪ Unexpected noninvestment experience	(406,933)	4,633,605
▪ Unexpected investment experience	1,115,713	(14,252,276)
▪ Impact of plan-to-plan obligation/asset transfers due to business-as-usual transfers	(4,829)	(53,572)
▪ Unexpected claims experience	(1,018,957)	10,176,109
▪ Updated health care medical/Rx trend	230,715	(2,165,833)
▪ Updated discount rate	(1,293,549)	7,715,272
▪ Other assumption changes	(2,009,225)	14,572,040
Subtotal current year	3,611,164	(1,741,506)
▪ Benefit cost/(income) due to special events	13,640,125	0
Total current year	$17,251,289	$(1,741,506)

Significant reasons for these changes include the following:

- Actual pre-65 and post-65 claims costs were lower than expected for most plans, which decreased the postretirement welfare cost and improved the funded position.
- The discount rate increased 35 basis points as of January 1, 2016 compared to the prior year, which decreased the postretirement welfare cost and improved the funded position.
- Asset losses that occurred during Fiscal 2015 increased the postretirement welfare cost and deteriorated the funded position.
- Other assumption changes decreased the postretirement welfare cost and improved the funded position.
- Health care medical/Rx trend was revised, which increased the postretirement welfare cost and deteriorated the funded position.

- A health reimbursement account in the amount of $100,000 was offered to employees who accepted the 2016 VREP window.

Effects of health care reform

In March 2010, the Patient Protection and Affordable Care Act (PPACA) and Health Care and Education Reconciliation Act (HCERA) were enacted. The key aspects of the Acts affecting the Company's benefit obligation and cost of providing retiree medical benefits are:

- Changes to the Prescription Drug Plan and Medicare Advantage programs beginning in 2011, and extending through 2020
- Estimated excise ("Cadillac") tax on high-cost plans beginning in 2020

This valuation reflects our understanding of the relevant provisions of PPACA and HCERA. The IRS has yet to issue final guidance with respect to many aspects of these laws. It is possible that future guidance may conflict with our understanding of these laws based on currently available guidance and could therefore affect the results shown in this report.

Basis for valuation

Appendix A summarizes the assumptions and methods used in the valuation. Appendix B summarizes our understanding of the principal provisions of the plan being valued. Unless otherwise described below under Subsequent Events, assumptions were selected based on information known as of the measurement date.

Changes in assumptions

- Pre-retirement mortality was changed from the RP-2014 Employee table with MP-2014 generational projection scale to the RP-2015[1] Employee table with MP-2015 generational projection scale.
- Post-retirement mortality was changed from the RP-2014 Healthy Annuitant table blended with Sempra experience (2009 – 2013) with MP-2014 adjusted generational projection scale[2] to the RP-2015[1] Healthy Annuitant table blended with Sempra experience (2009 - 2013) with MP-2015 generational projection scale.[3]
- Retirement and termination rates were updated to reflect a recent experience study reflecting 2013 – 2014 experience.
- The discount rate was changed from 4.15% to 4.50%.
- The HRA crediting rate changed from 3.04% to 3.03%.
- Health care medical/Rx trend rates were updated for pre-65 and post-65:

January 1, 2016			*January 1, 2015*		
Year	Pre-65	Post-65	Year	Pre-65	Post-65
2016	8.10%	5.50%	2015	7.75%	5.25%
2017	8.00%	5.50%	2016	7.00%	4.75%
2018	7.00%	5.00%	2017	7.00%	5.25%
2019	6.50%	4.75%	2018	6.50%	5.00%
2020	6.00%	4.75%	2019	5.50%	4.75%
2021	5.50%	4.75%	2020 (ultimate)	5.00%	4.50%
2022 (ultimate)	5.00%	4.50%			

1 Where used in this report, "RP-2015" refers to the Society of Actuaries' RP-2014 mortality table, with mortality improvements stripped back to 2006 then projected using the MP-2015 generational mortality improvement scale.

2 RP-2014 mortality table with mortality improvements stripped back to 2011 with MP-2014 projection scale, un-modified, and blended with Sempra's experience from 2009 – 2013, then projected with modified MP-2014 generational mortality improvement scale. MP-2014 scale was modified so that long term rate of improvement declines from 1% at age 85 to 0% at age 95.

3 RP-2014 mortality rates, with mortality improvements stripped back to 2006, then projected from 2006 to 2011 and then blended with Sempra's experience from 2009 – 2013. MP-2015 generational mortality improvement scale is used to project mortality improvements from 2006 forward.

Changes in methods or estimation techniques

No such changes have occurred.

Benefits not valued

All benefits described in the Plan Provisions section of this report were valued. Willis Towers Watson has reviewed the plan provisions with Sempra Energy and, based on that review, is not aware of any significant benefits required to be valued that were not.

Changes in benefits valued

The Plan was amended to eliminate Point of Service (POS) medical plans as of January 1, 2016, assuming current POS enrollees transition to the Anthem HMO (40%) and Anthem HDHP (60%) and other enrollment between plans is proportionally constant.

Impact of the plan change was less than 0.10% of APBO (only 13 participants were affected) so in accordance with Sempra's accounting policy, no prior service credit base was established and the impact was realized in unamortized net actuarial gains/losses.

Plan-to-plan transfers

During 2015 the benefit obligation transferred due to business-as-usual transfers was less than 1% of the plan's benefit obligations. Consistent with Sempra's past practices, no outstanding amortization bases were transferred. In connection with these transfers, as well as transfers into this plan, Sempra is transferring assets between the plans. The amount of assets transferred is based on the funded status of the transferring plan as of December 31, 2015.

Special events

A health reimbursement account in the amount of $100,000 was offered to employees who accepted the 2016 VREP window.

Subsequent events

To our knowledge, no material events occurred after the valuation.

Additional information

To our knowledge, there were no material issues (e.g. settlements, curtailments, plan mergers, acquisitions, divestitures UCEBs) to be reflected in this valuation.

Actuarial certification

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. However, please note the information discussed below regarding this valuation.

Reliances

In preparing the results presented in this report, we have relied upon information regarding plan provisions, participants, assets, and sponsor accounting policies and methods provided by the Company and other persons or organizations designated by the Company. We have relied on all the data and information provided as complete and accurate. We have reviewed this information for overall reasonableness and consistency, but have neither audited nor independently verified this information. Based on discussions with and concurrence by the plan sponsor, assumptions or estimates may have been made if data were not available. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations. 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 the Company, may produce materially different results that could require that a revised report be issued.

Measurement of benefit obligations, plan assets and balance sheet adjustments

Census date/measurement date

The measurement date is January 1, 2016. The benefit obligations were measured as of January 1, 2016 and are based on participant data as of the census date, January 1, 2016.

Plan assets and balance sheet adjustments

Information about the fair value of plan assets was furnished to us by the Company. The Company also provided information about the general ledger account balances for the other postretirement benefit plan cost at December 31, 2015, which reflect the expected funded status of the plans before adjustment to reflect the funded status based on the year-end measurements, and differences between the expected Medicare Part D subsidies and amounts received during the year. Willis Towers Watson used information supplied by the Company regarding postretirement benefit asset, postretirement benefit liability and amounts recognized in accumulated other comprehensive income as of December 31, 2015. This data was reviewed for reasonableness and consistency, but no audit was performed.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for tax effects. Any tax effects in AOCI should be determined in consultation with the Company's tax advisors and auditors.

Assumptions and methods under U.S. GAAP

As required by U.S. GAAP, the actuarial assumptions and methods employed in the development of the other postretirement benefit cost and other financial reporting have been selected by the Company. Willis Towers Watson has concurred with these assumptions and methods. U.S. GAAP requires that each significant assumption "individually represent the best estimate of a particular future event."

The results shown in this report have been developed based on actuarial assumptions that, to the extent evaluated by Willis Towers Watson, we consider to be reasonable. Other actuarial assumptions could also be considered to be reasonable. Thus, reasonable results differing from those presented in this report could have been developed by selecting different reasonable assumptions.

A summary of the assumptions and methods used is provided in Appendix A. Note that any subsequent changes in methods or assumptions for the January 1, 2016 measurement date will change the results shown in this report.

Nature of actuarial calculations

The results shown in this report are estimates based on data that may be imperfect and on assumptions about future events that cannot be predicted with any certainty. The effects of certain plan provisions may be approximated, or determined to be insignificant and therefore not valued. Reasonable efforts were made in preparing this valuation to confirm that items that are significant in the context of the actuarial liabilities or costs are treated appropriately, and are not excluded or included inappropriately. Any rounding (or lack thereof) used for displaying numbers in this report is not intended to imply a degree of precision, which is not a characteristic of actuarial calculations.

If overall future plan experience produces higher benefit payments or lower investment returns than assumed, the relative level of plan costs reported in this valuation will likely increase in future valuations (and vice versa). Future actuarial measurements may differ significantly from the current measurements presented in this report due to many factors, including: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for the measurements (such as the end of an amortization period), and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements.

See Basis for Valuation in Section 1 above for a discussion of any material events that have occurred after the valuation date that are not reflected in this valuation.

Limitations on use

This report is provided subject to the terms set out herein and in our engagement letter dated December 14, 2015 and any accompanying or referenced terms and conditions.

The information contained in this report was prepared for the internal use of the Company and its auditors in connection with our actuarial valuation of the other postretirement benefit plans as described in Purposes of Valuation above. It is not intended for and may not be used for other purposes, and we accept no responsibility or liability in this regard. The Company may distribute this actuarial valuation report to the appropriate authorities who have the legal right to require the Company to provide them this report, in which case the Company will use best efforts to notify Willis Towers Watson in advance of this distribution. Further distribution to, or use by, other parties of all or part of this report is expressly prohibited without Willis Towers Watson’s prior written consent. Willis Towers Watson accepts no responsibility for any consequences arising from any other party relying on this report or any advice relating to its contents.

Professional qualifications

The undersigned consulting actuaries are members of the Society of Actuaries and meet the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to other postretirement benefit plans. Our objectivity is not impaired by any relationship between the plan sponsor and our employer, Towers Watson Delaware Inc., a subsidiary of Willis Towers Watson PLC ("Willis Towers Watson").

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The Pricing Specialist is responsible for developing and/or determining the reasonableness of retiree welfare plan trend and participation assumptions as well as assumed per capita claims costs (including the aging/morbidity assumption if applicable). The Valuation Actuary is responsible for other aspects of the valuation (e.g., developing and/or reviewing the reasonableness of other valuation assumptions and methods, ensuring that the valuation model reasonably reflects the substantive plan and actual plan operation, preparing demographic data, performing the valuation, implementing the correct accounting or funding calculations, etc.).

http://natct.internal.towerswatson.com/clients/602948/2016SempraValuations/PBOP/SDGE_14a_Sempra 2016 Val PBOP SDGE-FINAL_REVISED.docx

Section 2: Accounting exhibits

2.1 Balance sheet asset/(liability)

All monetary amounts shown in US Dollars

Measurement Date			01/01/2016	01/01/2015
A	**Development of Balance Sheet Asset/(Liability)[1]**			
	1	Accumulated postretirement benefit obligation (APBO)	(162,708,385)	(190,039,357)
	2	Fair value of assets (FVA)[2]	160,966,879	163,947,491
	3	Net balance sheet asset/(liability)	(1,741,506)	(26,091,866)
B	**Current and Noncurrent Allocation[3]**			
	1	Noncurrent asset	0	0
	2	Current liability	0	0
	3	Noncurrent liability	(1,741,506)	(26,091,866)
	4	Net balance sheet asset/(liability)	(1,741,506)	(26,091,866)
C	**Accumulated Other Comprehensive (Income)/Loss**			
	1	Net prior service cost/(credit)	14,833,145	18,598,176
	2	Net loss/(gain)	(35,589,935)	(14,964,590)
	3	Accumulated other comprehensive (income)/loss[4]	(20,756,790)	3,633,586
D	**Assumptions and Dates**			
	1	Discount rate	4.50%	4.15%
	2	Rate of compensation increase	N/A	N/A
	3	Current health care cost trend rate (pre-65)	8.10%	7.75%
		Current health care trend rate (post-65)	5.50%	5.25%
	4	Ultimate health care cost trend rate (pre-65)	5.00%	5.00%
		Ultimate health care cost trend rate (post-65)	4.50%	4.50%
	5	Year of ultimate trend rate	2022	2020
	6	Census date	January 1, 2016	January 1, 2015

[1] Whether the amounts in this table that differ from those disclosed at year-end must be disclosed in subsequent interim financial statements should be determined.

[2] Excludes receivable contributions.

[3] The current liability (for each underfunded plan) was measured as the benefits expected to be paid over the next 12 months in excess of the fair value of the plan's assets at the measurement date.

[4] Amount shown is pre-tax and should be adjusted by plan sponsor for tax effects.

2.2 Changes in liabilities and assets

All monetary amounts shown in US Dollars

Fiscal Year Beginning		01/01/2016	01/01/2015
A	**Change in Accumulated Postretirement Benefit Obligation (APBO)**		
1	APBO at beginning of prior fiscal year	190,039,357	175,850,177
2	Employer service cost	6,702,637	6,585,331
3	Interest cost	8,003,128	9,078,119
4	Actuarial loss/(gain)	(34,931,193)	(152,291)
5	Plan participants' contributions	6,579,363	6,511,586
6	Gross benefits paid from plan assets	(13,045,772)	(12,364,708)
7	Gross benefits paid for Key employees	(522,774)	(619,469)
8	Plan-to-plan transfers between SDG&E and SoCal Gas	(20,466)	(5,928)
9	Plan-to-plan transfers between SDG&E and Sempra	(95,895)	(247,760)
10	Plan change	0	0
11	Acquisitions/(divestitures)	0	0
12	Curtailments	0	0
13	Settlements	0	0
14	Special/contractual termination benefits	0	5,404,300
15	APBO at beginning of current fiscal year	162,708,385	190,039,357
B	**Change in Plan Assets**		
1	Fair value of assets at beginning of prior fiscal year	163,947,491	145,773,523
2	Actual return on assets	(3,139,041)	11,034,694
3	Employer contributions	7,317,545	13,882,705
4	Plan participants' contributions	0	0
5	Benefits paid[1]	(6,989,183)	(6,472,591)
6	Plan-to-plan transfers between SDG&E and SoCal Gas	(9,142)	15,006
7	Plan-to-plan transfers between SDG&E and Sempra	(160,791)	(285,846)
8	Acquisitions/(divestitures)	0	0
9	Settlements	0	0
10	Fair value of assets at beginning of current fiscal year	160,966,879	163,947,491

2.3 Summary of net balances

A reconciliation of net prior service cost/(credit)

All monetary amounts shown in US Dollars

	Remaining Amount at 01/01/2015	Plan Amendment	Amount Amortized during 2015	Effect of Curtailments	Effect of Transfers	Remaining Amount at 01/01/2016	Remaining Amortization Period	Amount to be Amortized in 2016
Base 1 (Med)	$15,133,958	$ 0	$ 3,213,555	$ 0	$ 0	$11,920,403	3.7	$ 3,213,555
Base 2 (Med)	140,103	0	20,374	0	0	119,729	5.9	20,374
Base 1 (Life)	792,736	0	226,783	0	0	565,953	2.5	226,783
Base 2 (Life)	673,017	0	89,941	0	0	583,076	6.5	89,941
Base 3	13,185	0	1,968	0	0	11,217	5.7	1,968
Base 4	543,912	0	58,073	0	0	485,839	8.4	58,073
Base 5	5,134	0	645	0	0	4,489	7.0	645
Base 6	1,081,057	0	139,132	0	0	941,925	6.8	139,132
Base 7	(14,441)	0	(3,762)	0	0	(10,679)	2.8	(3,762)
Base 8	229,515	0	18,322	0	0	211,193	11.5	18,322
Total	$18,598,176	$ 0	$ 3,765,031	$ 0	$ 0	$14,833,145		$ 3,765,031

B Reconciliation of Net Loss/(Gain)[1]

All monetary amounts shown in US Dollars

	Remaining Amount at 01/01/2015	Experience Loss/(Gain) during 2015	Amount Amortized during 2015	Effect of Curtailments/ Settlements	Effect of Transfers	Remaining Amount at 01/01/2016	Amount to be Amortized in 2016
	$ (14,964,590)	$ (20,625,345)	$ 0	$ 0	$ 0	$ (35,589,935)	$ (1,285,900)

1 See Appendix A for description of amortization method.

2.4 Summary and comparison of benefit cost and cash flows

All monetary amounts shown in US Dollars

Fiscal Year Ending			12/31/2016	12/31/2015
A		**Total Benefit Cost**		
	1	Employer service cost	4,664,496	6,702,637
	2	Interest cost	7,361,895	8,003,128
	3	Expected return on assets[1]	(10,894,358)	(11,113,235)
	4	Subtotal	1,132,033	3,592,530
	5	Net prior service cost/(credit) amortization	3,765,031	3,765,031
	6	Net loss/(gain) amortization	(1,285,900)	0
	7	Subtotal	2,479,131	3,765,031
	8	Net periodic postretirement benefit cost/(income)	3,611,164	7,357,561
	9	Curtailments	0	0
	10	Settlements	0	0
	11	Special/contractual termination benefits	0	0
	12	Immediate recognition of benefit cost/(income) due to special events	13,640,125	0
	13	Total benefit cost	17,251,289	7,357,561
B		**Assumptions[2]**		
	1	Discount rate	4.50%	4.15%
	2	Rate of return on assets[3]	4.00%/7.00%	4.00%/7.00%
	3	Rate of compensation increase	N/A	N/A
	4	Current health care cost trend rate (pre-65)	8.10%	7.75%
		Current health care cost trend rate (post-65)	5.50%	5.25%
	5	Ultimate health care cost trend rate (pre-65)	5.00%	5.00%
		Ultimate health care cost trend rate (post-65)	4.50%	4.50%
	6	Year of ultimate trend rate	2022	2020
	7	Census date	January 1, 2016	January 1, 2015
C		**Assets at Beginning of Year**		
	1	Fair market value	160,966,879	163,947,491
	2	Market-related value	160,966,879	163,947,491
D		**Cash Flow[4]**	**Expected**	**Actual**
	1	Employer contributions[1]	2,067,407	7,317,545
	2	Benefits paid by the Employer (for Key employees)	150,000	142,777
	3	Benefits paid from plan assets, net of participant contributions	7,484,444	6,989,183

[1] $150,000 of expected benefit payments are company paid; thus these are included in the contribution amount and not included in the expected return on plan assets.

[2] These assumptions were used to calculate Net Periodic Postretirement Benefit Cost/(Income) as of the beginning of the year. Rates are expressed on an annual basis where applicable. For assumptions used for interim measurement periods, if any, refer to Appendix A.

[3] Assumed pre-tax rate of 7.00% for the 401(h) trust and Union (post 7/1/2008) VEBA and post-tax rate of 4.00% for the Non-Union and Union (pre-7/1/08) VEBAs.

[4] Net of Medicare Part D subsidy.

2.5 Detailed results for postretirement welfare cost and funded position

All monetary amounts shown in US Dollars

Detailed Results	01/01/2016	01/01/2015
A Service Cost		
1 Medical and dental	4,426,398	6,419,512
2 Life insurance	238,098	283,125
3 Total	4,664,496	6,702,637
B Accumulated Postretirement Benefit Obligation [APBO]		
1 Medical and dental		
a Participants currently receiving benefits	53,303,169	55,234,623
b Fully eligible active participants	38,380,820	41,020,686
c Other participants	57,945,586	79,924,955
d Total	149,629,575	176,180,264
2 Life insurance		
a Participants currently receiving benefits	6,173,086	6,331,760
b Fully eligible active participants	3,803,754	3,916,987
c Other participants	3,101,970	3,610,346
d Total	13,078,810	13,859,093
3 All benefits		
a Participants currently receiving benefits	59,476,255	61,566,383
b Fully eligible active participants	42,184,574	44,937,673
c Other participants	61,047,556	83,535,301
d Total/contractual termination benefits	162,708,385	190,039,357
C Assets		
1 Fair value	160,966,879	163,947,491
2 Investment losses (gains) not yet in market-related value	0	0
3 Market-related value	160,966,879	163,947,491
D Funded Position		
1 Overfunded (underfunded) APBO	(1,741,506)	(26,091,866)
2 APBO funded percentage	98.9%	86.3%
E Amounts in Accumulated Other Comprehensive Income		
1 Prior service cost (credit)	14,833,145	18,598,176
2 Net actuarial loss (gain)	(35,589,935)	(14,964,590)
3 Total	(20,756,790)	3,633,586
F Effect of Change in Health Care Cost Trend Rate		
1 One-percentage-point increase:		
a Sum of service cost and interest cost	534,913	1,011,979
b APBO	4,525,690	7,748,311
2 One-percentage-point decrease:		
a Sum of service cost and interest cost	(438,641)	(824,414)
b APBO	(3,821,254)	(6,488,757)

2.6 ASC 965 (plan reporting) information

All monetary amounts shown in US Dollars

Plan Year Ending		12/31/2015
A	**Present Value of Benefit Obligation and Funded Status**	
1	Present value of benefit obligations	
	a Participants currently receiving benefits	59,476,255
	b Other fully eligible participants	42,184,574
	c Other participants	61,047,556
	d Total	162,708,385
2	Fair value of assets	160,966,879
B	**Changes in Benefit Obligations**	
1	At prior plan year end	190,039,357
2	Additional benefits accumulated including effects of noninvestment experience	2,329,078
3	Decrease in the discount period	7,743,082
4	Benefits paid, net of employee contributions	(6,989,183)
5	Assumption changes	(30,297,588)
6	Plan amendments	0
7	Plan-to-plan transfers between SDG&E and SoCalGas	(20,466)
8	Plan-to-plan transfers between SDG&E and Sempra	(95,895)
9	Net increase/(decrease)	
10	At current plan year end	162,708,385

See postretirement cost sharing provisions in Appendix B for retirees' relative share of the plan's estimated cost of providing postretirement benefits.

Actuarial Assumptions and Methods

The key actuarial assumptions used for plan reporting calculations as of December 31, 2015 are the same as those used to measure benefit obligations for Sempra Energy's December 31, 2015 financial reporting, refer to Appendix A. The same plan provisions shown in Appendix B were used to determine the present value of accumulated benefits.

2.7 Maximum deductible employer contributions

All monetary amounts shown in US Dollars

Non-Union 401(h)[1]			01/01/2016
A	**Section 401(h) Deduction Limit – Aggregate Normal Cost – Preliminary**		
	1	Present Value of Projected Benefits (PVB) excluding key employees	109,318,101
	2	Market value of assets	107,580,185
	3	Present value of future normal costs: [(1)-(2)]	1,737,917
	4	Present value future service	23,568
	5	Normal cost accrual rate: [(3)÷(4)]	73.7405
	6	Number of employees, excluding key employees	3,092
	7	Aggregate normal cost BOY: [(5)x(6)]	228,006
	8	Aggregate normal cost with interest to the end of the fiscal year: [(7) x 1.065]	242,826
	9	10% of PVB as of the end of the fiscal year	11,138,454
	10	Greater of 10% of PVB or normal cost, but not greater than the end of year unfunded PVB	1,850,881
B	**Section 401(h) Subordination Test – Preliminary**		
	1	Cumulative subordination limit[2]	76,291,366
	2	Cumulative 401(h) contributions through prior year	75,785,097
	3	Maximum employer contribution to satisfy subordination test	506,270
C	**401(h) Funding Discount Rate**		6.50%
D	**Maximum Employer Contribution – Preliminary**		
	1	Amount – lesser of IRC Section 401(h) Deduction Limit and Subordination Test	506,270

[1] 401(h) is trust designated to pre-fund non-union retiree health benefits, union health benefits from 2018 onward for pre 7/1/2008 retirees and Non-Union VREP HRA benefits. The Union VEBA (post 7/1/08) is designated to pre-fund union health benefits from 2018 onward for retirees on and after 7/1/2008 and HRA and Union VREP HRA benefits. The Non-Union VEBA is designated to pre-fund non-union life insurance benefits, until the trust is exhausted. The Union VEBA (pre-7/1/08) is designated to pre-fund union health benefits through the end of 2017 and union life insurance benefits, until the trust is exhausted.

[2] Consists of cumulative subordination limit as of the end of the 2015 plan year, plus one third of the lesser of 2016 pension plan target normal cost, including load for administrative expenses, and actual pension contributions for the 2016 plan year. The 2016 target normal cost and pension contributions reflect the funding provisions of the Highway and Transportation Funding Act as amended by the Bipartisan Budget Act of 2015. Reflects plan-to-plan transfers. These amounts are estimates pending final pension contributions.

All monetary amounts shown in US Dollars

	VEBAs[1]	Non-Union	Union prior to 7/1/2008
A	**Present Value of Projected Benefits (PVB) Excluding Key Employees**	12,359,080	7,505,097
B	**Actuarial Value of Plan Assets**	1,628,873	3,603,421
C	**Present Value of Future Normal Costs: [(A)-(B)]**	10,730,207	3,901,676
D	**Present Value of Future Service**	29,528	13,447
E	**Normal Cost Accrual Rate: [(C)÷(D)]**	363	290
F	**Number of Employees, Excluding Key Employees**	3,092	1,301
G	**Aggregate Normal Cost BOY: [(E)x(F)]**	1,123,605	377,488
H	**VEBA Funding Discount Rate**	4.00%	4.00%
I	**Maximum Deductible VEBA Contribution EOY: [(G)x(1+H)]**	1,168,549	392,588

	VEBAs[1]	Union post 7/1/2008
A	**Present Value of Projected Benefits (PVB) Excluding key employees - Preliminary**	42,834,991
B	**Market Value of Plan Assets**	48,154,400
C	**Unfunded PVB – Maximum Tax Deductible Contribution: [(A)-(B)]**	0
D	**VEBA Funding Discount Rate**	6.50%

[1] 401(h) is trust designated to pre-fund non-union retiree health benefits, union health benefits from 2018 onward for pre 7/1/2008 retirees and Non-Union VREP HRA benefits. The Union VEBA (post 7/1/08) is designated to pre-fund union health benefits from 2018 onward for retirees on and after 7/1/2008 and HRA and Union VREP HRA benefits. The Non-Union VEBA is designated to pre-fund non-union life insurance benefits, until the trust is exhausted. The Union VEBA (pre-7/1/08) is designated to pre-fund union health benefits through the end of 2017 and union life insurance benefits, until the trust is exhausted.

Section 3: Data exhibits

3.1 Plan participant data

Census Date	01/01/2016	01/01/2015
A Participating Employees		
1 Union		
a Fully eligible	156	132
b Other	1,145	1,186
c Total participating employees	1,301	1,318
2 Non-Union		
a Fully eligible	804	763
b Other	2,302	2,302
c Total participating employees	3,106	3,065
3 Total		
a Fully eligible	960	895
b Other	3,447	3,488
c Total participating employees	4,407	4,383
4 Average age		
a Union	46.0	45.7
b Non-union	47.3	47.4
c Total	46.9	46.9
5 Average credited service		
a Union	17.8	17.7
b Non-union	14.0	14.0
c Total	15.1	15.2
6 Average future working life		
a to full retirement age		
1 Union	16.0	15.4
2 Non-union	14.6	13.8
3 Total	15.0	14.3
b to full eligibility age		
1 Union	15.1	15.1
2 Non-union	12.1	12.3
3 Total	13.1	13.3

Census Date			01/01/2016	01/01/2015
B	**Retirees and Surviving Spouses[1]**			
1	Union			
	a	Number under 65	86	75
	b	Number 65 and older	395	379
	c	Total	481	454
	d	Number with married/family health care coverage	236	233
	e	Number with single health care coverage	245	221
	f	Average age	73.4	73.8
2	Non-Union			
	a	Number under 65	244	265
	b	Number 65 and older	823	766
	c	Total	1,067	1,031
	d	Number with married/family health care coverage	558	540
	e	Number with single health care coverage	509	491
	f	Average age	71.7	71.6
3	Total			
	a	Number under 65	330	340
	b	Number 65 and older	1,218	1,145
	c	Total	1,548	1,485
	d	Number with married/family health care coverage	794	773
	e	Number with single health care coverage	754	712
	f	Average age	72.2	72.3

Employee data was supplied by the employer as of the census date. Data on persons receiving benefits was supplied by the plan administrator.

[1] Excludes 214 participants entitled to life benefits only (no medical/dental coverage) as of January 1, 2016.

3.2 Age and service distribution of participating employees

	Attained Years of Credited Service and Number								
Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
Under 25	39	0	0	0	0	0	0	0	39
25-29	158	57	5	0	0	0	0	0	220
30-34	178	193	115	7	0	0	0	0	493
35-39	128	184	232	73	0	0	0	0	617
40-44	75	152	186	136	13	0	0	0	562
45-49	51	109	149	94	41	24	2	0	470
50-54	58	110	144	106	82	65	43	3	611
55-59	31	83	104	102	71	57	118	164	730
60-64	20	49	61	52	33	28	64	180	487
65-69	4	22	17	15	11	7	14	67	157
70 & over	0	3	0	5	3	1	0	9	21
Total	742	962	1,013	590	254	182	241	423	4,407

Average Age:	46.9	Number of Participants[1]:	Fully eligible	960
Average Service:	15.1		Other	3,447

[1] Excludes 214 participants entitled to life benefits only (no medical/dental coverage) as of January 1, 2016.

Appendix A: Statement of actuarial assumptions and methods

Actuarial Assumptions and Methods – Postretirement Welfare Cost for Fiscal 2016
Plan Reporting Based on Calendar Year

Economic Assumptions

Discount rate for post-retirement benefit cost	4.50% as of 1/1/2016
Discount rate for 2016 VREP special termination cost	3.85% as of 10/31/2016
Discount rate for 401(h) and Union VEBA (post 7/1/08) funding	6.50%
Discount rate for Non-Union VEBA and Union VEBA (pre-7/1/08) funding	4.00%
Expected long-term rate of return on plan assets (before-tax)	7.00%
Expected long-term rate of return on plan assets (after-tax)	4.00%

The expected long-term rate of return on plan assets assumption is used for ASC 715 accounting and is net of expenses paid from the trust. Insurance carriers' administrative expenses are accounted for by including them in the fully insured premiums. The funding discount rate has not been adjusted to reflect administrative expenses paid from the trust.

Healthcare reimbursement account interest crediting rate	3.03%

Salary increase rate

Age	*Rate*
Below 25	9.50%
25-29	8.00%
30-34	6.50%
35-39	5.50%
40-44	5.00%
45-49	4.50%
Above 49	3.50%

Participation Assumptions

Inclusion date	The valuation date coincident with or next following the date on which the employee is hired (excludes employees not yet eligible for active healthcare coverage).
New or rehired employees	It was assumed there will be no new or rehired employees.

	Current Retirees	Future Retirees	
Participation:	Based on valuation census data	Percentages of eligible individuals electing coverage:	
		Pre-65	**Post-65**
■ Medical/dental/mental health		80%	70%
■ Life insurance		100%	100%

- Former vested terminated employees — Not eligible for postretirement health/life benefits

	Current Retirees	Future Retirees
Percentage of covered retirees electing spousal coverage (medical/dental)	Based on valuation census data	80% of males, 50% of females
Spouse ages	Based on valuation census data	Wife three years younger than husband
Non-spouse dependent coverage	None assumed	0% of participants are assumed to elect coverage for non-spouse dependents in retirement.

Medical plan elections

Assumption for current actives and pre-65 retirees regarding their medical plan election upon attainment of age 65 and forward.

Current Pre-65 Medical Plan	Assumed Post-65 Medical Plan
Anthem HMO Anthem HMO with Scripps Anthem PPO Out-of-CA (OOA) Anthem Health Care Plus	A blended assumption of 70% Plan F & 30% Plan N
Kaiser HMO	Kaiser Senior Advantage

Demographic Assumptions

Mortality (healthy and disabled)

Pre-retirement: RP-2015 Employee table with MP-2015 generational projection scale. “RP-2015” refers to the Society of Actuaries’ RP-2014 mortality table, with mortality improvements stripped out back to 2006 then projected forward using the MP-2015 generational mortality improvement scale.

Post-retirement: RP-2015 Healthy Annuitant table blended with Sempra experience (2009-2013) with MP-2015 generational projection scale. RP-2014 mortality rates projected to 2011 and blended with Sempra’s experience from 2009 – 2013. MP-2015 generational mortality improvement scale used to project mortality improvements.

Disability

10% of the 1987 Commissioner’s Group Disability Table with 12 month elimination period. Participants on disability are assumed to retire at age 65.

Sample rates per 1,000.

Age	Males	Females
25	0.0593	0.0978
40	0.1594	0.3347
55	1.0100	0.9510

Termination

Based on years of service. Rates per 1,000:

Rate leaving during the year	
Years of Service	**Rate**
0-2	70
3-4	95
5	65
6-8	35
9-17	20
18-19	10
20 and over	0

Retirement

The following rates apply for:

1. Participants with grandfathered SoCal benefits – with 20 years of service as of January 1, 2007 – who are expected to have 90 points prior to age 62. Rates shown are for decrement prior to age 62, on or after age 62 are the same as rate table (3) below. Rates per 1,000:

Rate retiring during the year	
Points[1]	**Rate**
Below 90	50
90-91	200
Above 91	170

2. Other participants with grandfathered SoCal or SDG&E benefits with 20 years of service as of January 1, 2007. Rates per 1,000:

Rate retiring during the year	
Age	**Rate**
55-59	50
60-61	150
62	300
63	250
64-65	300
66-67	350
68-69	400
Above 69	1,000

[1] Points are equal to age plus service

3. All other participants. Rates per 1,000:

Rate retiring during the year	
Age	**Rate**
55-59	30
60-61	100
62-64	200
65	300
66-69	250
Above 69	1,000

Benefit commencement dates:

Preretirement death benefit	None
Deferred vested benefit	None
Retirement benefit	Upon termination of employment

Trend Rates

Basis for trend assumptions Best estimate assumptions developed based on a review of recent and expected future claims experience.

Health care cost trend rate:

Medical Benefits

	Under Age 65	Age 65 and Over
2016	8.10%	5.50%
2017	8.00%	5.50%
2018	7.00%	5.00%
2019	6.50%	4.75%
2020	6.00%	4.75%
2021	5.50%	4.75%
Ultimate trend	5.00%	4.50%
Year ultimate trend reached	2022	2022

Mental Health Benefits	Same as medical benefits above.
Employer cap (fixed employer contribution)	0%

Dental benefit trend rate:

Employer cap (fixed employer contribution)	0%
All other dental benefits	4.00% for Indemnity Dental (Delta) and 4.00% for MetLife Dental

Participant Contribution Trend Rates

Medical costs	Same as applicable medical and dental plan trend rates for participants not subject to the employer cap. For others, retiree contributions will increase the same as applicable health care plan trend rates while premium costs are under the defined dollar employer cap, and will increase dollar for dollar with the premium after the defined dollar cap is reached.

Per Capita Claims Costs

Basis for per capita claim cost assumptions	The claim costs are developed based on participant demographics and the 2016 calendar year premiums or premium equivalents for the respective medical plans. See Appendix C for more details.

Additional Assumptions

Administrative expenses	Included in fully insured premiums.
Excise tax	For participants eligible for a defined dollar benefit: Once the premium exceeds the defined dollar benefit amount, the retirees will pay the difference between the premium amount and the defined dollar benefit. Under this arrangement, Sempra's obligation doesn't change with the excise tax since by 2020 the premium both before and after inclusion of the excise tax will exceed Sempra's defined dollar benefit and the retiree will pay the entire cost of the tax. There are very few participants who are not subject to the defined dollar benefit. Therefore, no excise tax has been valued for them.
Healthcare Reimbursement Account (HRA) **Usage**	Retirees are assumed to apply for and be reimbursed for 100% of medical premiums using their HRA until the account is exhausted. Unused balances are forfeited upon death of the covered retiree and spouse.
Cash flow:	
Timing of benefit payments	Benefit payments are assumed to be made uniformly throughout the year and on average at mid-year.
Amount and timing of contributions	Contributions in accordance with Sempra’s funding policy are assumed to be made throughout the year and, on average, at mid-year.

Methods – Postretirement Welfare Cost and Funded Position

Census date	January 1, 2016
Measurement date	January 1, 2016
Service cost and Accumulated Post-retirement Benefit Obligation (APBO)	Costs are determined using the Projected Unit Credit Cost Method. The annual service cost is equal to the present value of the portion of the projected benefit attributable to service during the upcoming year, and the Accumulated Postretirement Benefit Obligation (APBO) is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the expected full eligibility date is counted in allocating costs.

Development of claim cost	Claim costs are developed based on participant demographics and the 2016 premium or premium equivalent rates for the respective medical plans.
Market-related value of assets	Equals fair value of assets.
Amortization of unamortized amounts:	
Prior service cost (credit)	Increase in APBO resulting from a plan amendment is amortized on a straight-line basis over the average expected remaining service of active participants expected to benefit under the plan. Amortization of net prior service cost/(credit) resulting from a plan change is included as a component of Net Periodic Postretirement Benefit Cost/(Income) in the year first recognized and every year thereafter until such time as it is fully amortized. The annual amortization payment is determined in the first year as the increase in APBO due to the plan change divided by the average remaining service period to full eligibility for participating employees expected to receive benefits under the Plan. Reductions in APBO first reduce any unrecognized prior service cost; any remaining amount is amortized on a straight-line basis as described above.
Net loss (gain)	Amortization of the net gain or loss resulting from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in market-related value) is included as a component of Net Periodic Postretirement Benefit Cost/(Income) for a year. Net loss (gain) in excess of 10% of the greater of APBO and market-related value of assets is amortized on a straight-line basis over the expected average remaining service of active participants.
Present value of projected benefits for maximum tax deductible purposes	Aggregate cost method.
Benefits not valued	All benefits described in the Plan Provisions section of this report were valued. Willis Towers Watson has reviewed the plan provisions with Sempra Energy and, based on that review, is not aware of any significant benefits required to be valued that were not.

Data Sources

Sempra Energy or its third party vendors furnished participant data, premium and retiree contribution amounts as of January 1, 2016. Sempra Energy also provided the postretirement benefit asset, postretirement benefit liability, and amounts recognized in accumulated other comprehensive income as of the end of the 2015 fiscal year, and amounts recognized in other comprehensive income in 2015. Data were reviewed for reasonableness and consistency, but no audit was performed. Based on discussions with the plan sponsor, assumptions or estimates were made when data were not available, and the data was adjusted to reflect any significant events that occurred between the date the data was collected and the measurement date. We are not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.

Assumptions Rationale - Significant Economic Assumptions

Discount rate	As required by U.S. GAAP the discount rate was chosen by the plan sponsor based on market information on the measurement date.
Expected return on plan assets	We understand that the expected return on assets assumption reflects the plan sponsor's estimate of future experience for trust asset returns, reflecting the plan's current asset allocation and any expected changes during the current plan year, current market conditions and the plan sponsor's expectations for future market conditions. The analysis was informed by analysis of historical data and real returns on the various classes of assets held by the trust.
Healthcare Reimbursement Account Plan (HRA) interest rate	Interest credits on certain HRA accounts are based on the 30-year Treasury rate for the November preceding the plan year. Thus, current market rates at the valuation date are reflected and represent an estimate of future experience.
Administrative expenses	Administrative expenses are included in the fully insured premiums and per capita claims costs.
Claims cost trend rates	Assumed increases were chosen by the plan sponsor and, as required by U.S. GAAP, reflect anticipated future premium costs. Near-term expectations are influenced by current market forces and Sempra specific utilization. All future trend rates are influenced by general and medical sector inflation. Ultimate trend is limited by anticipated GDP growth. Small increases in trend rates are anticipated due to implementation of certain ACA provisions. After examining historical variability in trend rates, we believe that the selected assumptions do not significantly conflict with what would be reasonable based on a combination of market conditions at the measurement date and future expectations consistent with other economic assumptions used, other than the discount rate.
Per capita claims costs	Per capita claims costs were chosen by the plan sponsor to be the best estimate of the plan's per capita claims costs including expenses in the plan year beginning on the measurement date (with any expected changes in future years reflected in the trend rate assumption). Sempra's fully insured premium rates are a blend of costs for actives and retirees under age 65. Over age 65 retiree premium rates are not blended and represent the actual cost of insurance for these retirees and their spouses. Each year, an actuarial study based on active and retiree claims data supplied by the carriers is completed to determine the cost of retiree health care insurance as a percentage of the blended premium rates. The annual results are blended over a three-year period with a weighting of 1/6, 2/6, and 3/6 for 2014, 2015 and 2016, respectively in the current study. This reduces major fluctuations and gives greater weight to current experience, but tends to avoid spikes while improving credibility. The most recent results of this study are reflected in the increases above. An estimate of the subsidization of retirees by actives for dental plans is also determined annually and included in the per capita dental costs for all retirees. Per capita claims costs are based on pooled active and retiree premium rates adjusted by age to reflect the higher cost of retirees compared to active employees. Final average per capitas were distributed by age in

	accordance with the Willis Towers Watson AGEDIST model. This model uses medical prescription drug claims experience on millions of lives from 2012 and 2013 to estimate the variation in plan cost by age.
Assumed post-65 medical plan	Assumed post-65 medical plan election was chosen by the plan sponsor and takes into consideration historical data.

Assumptions Rationale - Significant Demographic Assumptions

Assumptions were selected by the plan sponsor and, as required by U.S.GAAP, represents a best estimate of future experience.

Mortality	For pre-retirement mortality, the plan sponsor selected the Society of Actuaries' most recent mortality table/improvement scale, that is, the RP-2015 "Employee" table, no collar adjustment, with MP-2015 generational mortality improvement scale, due to a lack of credible plan-specific data for pre-retirement deaths. For post-retirement, the plan sponsor selected a Sempra-specific table as of December 31, 2015, which reflects 2009-2013 mortality experience for retirees of Sempra's qualified pension plans. Sempra's experience was used to adjust the RP-2015 "Healthy Annuitant" table. This adjusted table was blended with the standard RP-2015 "Healthy Annuitant" tables based on the level of credibility Sempra's experience allowed (an 80% credible adjustment, reflecting a level of accuracy of +/- 5% with a 95% confidence level). Sempra also selected an adjusted MP-2015 projection scale used to project mortality improvements from 2006 forward. "RP-2015" refers to the Society of Actuaries' RP-2014 mortality table, with mortality improvements stripped back to 2006 then projected forward using MP-2015 generational mortality improvement scale.
Termination	Termination rates were chosen by the plan sponsor and updated to reflect a recent experience study based on the 2013 – 2014 experience. Assumed termination rates differ by service because of observed differences in termination rates by service.
Disability	Given the lack of credible experience for disabled participants in this plan, and the materiality of this assumption, there is not a different assumption that is believed to provide a better estimate.
Retirement	Retirement rates were chosen by the plan sponsor and updated to reflect a recent experience study based on the 2013 – 2014 experience. Assumed retirement rates differ by age because of expected differences in retirement rates by age.
Participation:	
Participants	Assumed participation rates reflect historical experience based on an experience study conducted in 2014 as well as anticipated future reductions in rates of participation due to availability of public exchanges.
Covered spouses	Assumed coverage rates for spouses reflect historical experience based on an experience study conducted in 2014 as well as anticipated future reductions in rates of spousal coverage due to availability of public exchanges.

Benefit commencement date: Employees are assumed to commence immediately at assumed retirement ages and surviving spouses are assumed to commence at earliest possible age as there is insufficient data to indicate a better assumption.

Marital assumptions:

Percent married	The percentage married is assumed reasonable for the size and demographics of the plan's population.
Spouse age	The assumed age difference for spouses is assumed reasonable for the size and demographics of the plan's population.

Source of Prescribed Methods

Accounting methods The methods used for accounting purposes as described in Appendix A are "prescribed methods set by another party", as defined in the actuarial standards of practice (ASOPs). As required by U.S. GAAP, these methods were selected by the plan sponsor.

Changes in Assumptions and Methods

Change in assumptions since prior valuation

Pre-retirement mortality was updated to the RP-2015[1] "Employee" tables, no collar adjustment, with MP-2015 generational mortality improvements.

Post-retirement mortality was updated to a Sempra-specific RP-2015[1] "Healthy Annuitants" tables using an adjusted MP-2015 projection scale for post-retirement.

The discount rate changed from 4.15% as of January 1, 2015 to 4.50% as of January 1, 2016.

The HRA interest crediting rate changed from 3.04% to 3.03%.

Assumed retirement and termination rates were updated based on an experience study conducted in 2015.

The health care medical/Rx trend rates were updated for pre-65 and post-65:

January 1, 2016			January 1, 2015		
Year	**Pre-65**	**Post-65**	**Year**	**Pre-65**	**Post-65**
2016	8.10%	5.50%	2015	7.75%	5.25%
2017	8.00%	5.50%	2016	7.00%	4.75%
2018	7.00%	5.00%	2017	7.00%	5.25%
2019	6.50%	4.75%	2018	6.50%	5.00%
2020	6.00%	4.75%	2019	5.50%	4.75%
2021	5.50%	4.75%	2020 (ultimate)	5.00%	4.50%
2022 (ultimate)	5.00%	4.50%			

[1] RP-2015 mortality tables refer to the RP-2014 mortality tables, with improvements stripped back, and then projected with the MP-2015 generational mortality scale.

Appendix B: Summary of principal other postretirement benefit plan provisions

Substantive Plan Provisions for Participants Who Retired Prior to January 1, 2006

Medical Benefits

Eligibility	Retirement on or after age 55 with at least 5 years of service.
Plan	Before age 65, retirees can elect coverage from among three Anthem medical plans (one HMO, OOA and Anthem Health Care Plus) and one Kaiser HMO. Upon attainment of age 65, retirees can choose from among two United Healthcare Senior Supplement with EGWP prescriptions drug wrap plans (F & N) and two Medicare Advantage plans.
Survivor eligibility	For survivors of retirees or active employees age 55 with at least 5 years of service, coverage continues after the retiree or active employee's death. The Company contributes a monthly fixed $300 contribution before age 65 and $145 contribution upon attainment of age 65.

Postretirement Contributions

Pre-1987 retirees	Retirees are not required to make monthly contributions except for Plan F where they pay the difference in premiums between UHC Plan F and UHC Plan N. Dependents are required to make monthly contributions of $35 for any of the Anthem medical plans and UHC Plan N, $5 for United Healthcare Advantage, and pay the difference in premiums between UHC Plan F and UHC Plan N for UHC Plan F.
Post-1986 retirees	For employees who retire on or after January 1, 1987, SDG&E has capped the company contribution at $90/month for pre-65 and $50/month for post-65 medical coverage ($30 for the Medicare Advantage plans). However, since SDG&E's postretirement medical pricing for pre-65 retirees is based on a blend of lower active and higher retiree claim experience, it was assumed that SDG&E had a substantive commitment to provide increasing pre-65 retiree contributions. Thus, the valuation assumes an additional pre-65 cost for postretirement welfare purposes in order to reflect the increase in SDG&E's subsidy.

Life Insurance Benefits

Eligibility	Retirement on or after age 55 with at least 5 years of service.
Postretirement contributions	Retirees pay the full cost unless retired prior to January 1, 1987.
Benefits	Employees who retired prior to January 1, 1987 received a postretirement life benefit of $2,500. Retirees were eligible to purchase supplemental postretirement life coverage at a subsidized rate of $0.50 per thousand dollars of coverage.

Mental Health and Substance Abuse Benefits

Eligibility	Same as medical benefits.
Survivor eligibility	Benefits extend to the surviving spouse upon the employee's death.
Benefits	Coverage is included in medical plan benefit or benefit is solely paid by the Company.
	Mental health and substance abuse benefits for retirees before attainment of age 65 are carved out of the Anthem medical plans and provided by a self-insured plan. The self-insured plan is administered by Managed Health Network (MHN) and is coordinated with the retiree's medical plan. These benefits for all retirees in other medical plans are covered under their medical plan.

Future Plan Changes

No future plan changes were recognized in determining postretirement welfare cost or in determining employer funding policy contributions or maximum tax-deductible contributions.

Changes in Benefits Valued Since Prior Year

The Plan was amended to eliminate Point of Service (POS) medical plans as of January 1, 2016, assuming current POS enrollees transition to the Anthem HMO (40%) and Anthem HDHP (60%) and other enrollment between plans is proportionally constant.

Impact of the plan change was less than 0.10% of APBO (only 13 participants were affected) so in accordance with Sempra's accounting policy, no prior service credit base was established and the impact was realized in unamortized net actuarial gains/losses.

Temporary Deviations

We are not aware of any temporary deviations.

Substantive Plan Provisions for Nonrepresented Participants Who Retire On or After January 1, 2006[1]

Medical Benefits	
Eligibility	Retirement on or after age 55 with at least 10 continuous years of service or age 62 with at least 5 years of service.
Plan	Before age 65, retirees can elect coverage from among three Anthem medical plans (one HMO, OOA and Anthem Health Care Plus) and one Kaiser HMO. Upon attainment of age 65, retirees can choose from among two United Healthcare Senior Supplement with EGWP prescriptions drug wrap plans (F & N) and two Medicare Advantage plans.
Survivor eligibility	For survivors of retirees or active employees age 55 with at least 10 years of continuous service or age 62 with at least 5 years of service, coverage continues after the retiree or active employee's death. The Company contributes an amount as described in the next paragraph.
Postretirement contributions	Pre-65 retiree contribution is equal to the active premium (blended rate) minus the monthly fixed $300 employer contribution. Pre-65 employer contribution is equal to the monthly fixed contribution plus the excess of the unblended early retiree cost over the active premium. Post-65 employer contribution is equal to the monthly fixed $145 employer contribution without inflation.

Healthcare Reimbursement Account (HRA) under 2013 Voluntary Retirement Enhancement Program (2013 VREP)	
Eligibility for VREP	Regular full time employees, including those on a leave of absence; and age 62 with at least 5 years of continuous service as of August 31, 2013; subject to eligible job title and functional area, who accepted and retired under the offer.
Survivor eligibility	Upon the participant's death, surviving spouses and eligible dependents can use the remaining HRA balance to pay for their eligible health expenses.
Benefits	Upon retirement, the Company will credit the HRA with $50,000 which can be used to pay retiree and eligible dependent health expenses. No additional accruals or interest credits will be applied towards the HRA.

Healthcare Reimbursement Account (HRA) under 2014 Voluntary Retirement Enhancement Program (2014 VREP)	
Eligibility for VREP	Employees who retired under the 2014 Voluntary Retirement Enhancement Program.
Survivor eligibility	Upon the participant's death, surviving spouses and eligible dependents can use the remaining HRA balance to pay for their eligible health expenses.
Benefits	Upon retirement, the Company will credit the HRA with $50,000 which can be used to pay retiree and eligible dependent health expenses. No additional accruals or interest credits will be applied towards the HRA.

[1] Participants who do not satisfy the eligibility conditions above, but are at least age 55 with 5 or more years of service (and retired prior to December 31, 2010) will be eligible for the benefits described in the section "Substantive Plan Provisions for Participants who Retired Prior to January 1, 2006".

Healthcare Reimbursement Account (HRA) under 2016 Voluntary Retirement Enhancement Program (2016 VREP)

Eligibility for VREP	Select non-union employees who were retirement eligible and accepted the offer to retire under the 2016 VREP by October 31, 2016.
Survivor eligibility	Upon the participant's death, surviving spouses and eligible dependents can use the remaining HRA balance to pay for their eligible health expenses.
Benefits	Upon retirement, the Company will credit the HRA with $100,000 which can be used to pay retiree and eligible dependent health expenses. No additional accruals or interest credits will be applied towards the HRA.

Dental Benefits

Eligibility	Retirement on or after age 55 with at least 10 continuous years of service or age 62 with at least 5 years of service.
Benefits	Retirees can elect coverage under the MetLife Dental plan or the Delta Dental plan. The company will contribute a flat dollar amount of up to $24.50/month for a retiree and up to $45/month for a retiree with one or more dependents.

Life Insurance Benefits

Eligibility	Retirement on or after age 55 with at least 10 continuous years of service or age 62 with at least 5 years of service.
Postretirement contributions	None, benefit is solely paid by the Company.
Benefits	$10,000 flat amount or $25,000 flat amount for SoCal Gas grandfathered nonrepresented participants.

Mental Health and Substance Abuse Benefits

Eligibility	Same as medical benefits.
Survivor eligibility	Benefits extend to the surviving spouse upon the employee's death.
Benefits	Coverage is included in medical plan benefit or benefit is solely paid by the Company. Mental health and substance abuse benefits for retirees before attainment of age 65 are carved out of the Anthem medical plans and provided by a self-insured plan. The self-insured plan is administered by Managed Health Network (MHN) and is coordinated with the retiree's medical plan. These benefits for all retirees in other medical plans are covered under their medical plan.

Future Plan Changes

No future plan changes were recognized in determining postretirement welfare cost or in determining employer funding policy contributions or maximum tax-deductible contributions.

Changes in Benefits Valued Since Prior Year

The Plan was amended to eliminate Point of Service (POS) medical plans as of January 1, 2016, assuming current POS enrollees transition to the Anthem HMO (40%) and Anthem HDHP (60%) and other enrollment between plans is proportionally constant.

Impact of the plan change was less than 0.10% of APBO (only 13 participants were affected) so in accordance with Sempra's accounting policy, no prior service credit base was established and the impact was realized in unamortized net actuarial gains/losses.

A health reimbursement account in the amount of $100,000 was offered to employees who accepted the 2016 VREP window.

Temporary Deviations

We are not aware of any temporary deviations.

Substantive Plan Provisions for Represented Participants Who Retired Between January 1, 2006 and June 30, 2008[1]

Medical Benefits

Eligibility	Retirement after age 60 with at least 10 years of service.
Plan	Before age 65, retirees can elect coverage from among three Anthem medical plans (one HMO, OOA and Anthem Health Care Plus) and one Kaiser HMO. Upon attainment of age 65, retirees can choose from among two United Healthcare Senior Supplement with EGWP prescriptions drug wrap plans (F & N) and two Medicare Advantage plans.
Survivor eligibility	For survivors of retirees or active employees age 60 with at least 10 years of service, coverage continues after the retiree or active employee's death. The Company contributes an amount as described in the next paragraph.
Postretirement contributions	Pre-65 retiree contribution is equal to the active premium (blended rate) minus the monthly fixed $300 employer contribution. Pre-65 employer contribution is equal to the monthly fixed contribution plus the excess of the unblended early retiree cost over the active premium. Post-65 employer contribution is equal to the monthly fixed $145 employer contribution without inflation.

Dental Benefits

None.

Life Insurance Benefits

None.

[1] Participants who do not satisfy the eligibility conditions above, but are at least age 55 with 5 or more years of service at retirement will be eligible for the benefits described in the section "Substantive Plan Provisions for Participants who Retired Prior to January 1, 2006".

Mental Health and Substance Abuse Benefits

Eligibility Same as medical benefits.

Survivor eligibility Benefits extend to the surviving spouse upon the employee's death.

Benefits Coverage is included in medical plan benefit or benefit is solely paid by the Company.

Mental health and substance abuse benefits for retirees before attainment of age 65 are carved out of the Anthem medical plans and provided by a self-insured plan. The self-insured plan is administered by Managed Health Network (MHN) and is coordinated with the retiree's medical plan. These benefits for all retirees in other medical plans are covered under their medical plan.

Future Plan Changes

No future plan changes were recognized in determining postretirement welfare cost or in determining employer funding policy contributions or maximum tax-deductible contributions.

Changes in Benefits Valued Since Prior Year

The Plan was amended to eliminate Point of Service (POS) medical plans as of January 1, 2016, assuming current POS enrollees transition to the Anthem HMO (40%) and Anthem HDHP (60%) and other enrollment between plans is proportionally constant.

Impact of the plan change was less than 0.10% of APBO (only 13 participants were affected) so in accordance with Sempra's accounting policy, no prior service credit base was established and the impact was realized in unamortized net actuarial gains/losses.

Temporary Deviations

We are not aware of any temporary deviations.

Substantive Plan Provisions for Represented Participants Who Retire On or After July 1, 2008

Medical Benefits

Eligibility

- Tier 1 (high): Retirement after age 60 with at least 10 years of continuous service.
- Tier 1 (low): Retirement after age 62 with at least 5 years of continuous service.
- Tier 2: Retirement after age 55 with at least 10 years of continuous service.
- Tier 3: Retirement after age 55 with at least 5 years of continuous service.

Plan Before age 65, retirees can elect coverage from among three Anthem medical plans (one HMO, OOA and Anthem Health Care Plus) and one Kaiser HMO.

Upon attainment of age 65, retirees can choose from among two United Healthcare Senior Supplement with EGWP prescriptions drug wrap plans (F & N) and two Medicare Advantage plans.

Survivor eligibility For survivors of retirees or active employees, coverage continues after the retiree or active employee's death. For Tier 1 (high), the Company contributes an amount as described in the next paragraph. For Tier 1 (low), Tier 2 and Tier 3, the Company contributes a monthly fixed $300 contribution before age 65 and $145 contribution upon attainment of age 65.

Postretirement contributions

- Tier 1 (high): Pre-65 retiree contribution is equal to the active premium (blended rate) minus the monthly fixed $300 employer contribution. Pre-65 employer contribution is equal to the monthly fixed contribution plus the excess of the unblended early retiree cost over the active premium. Post-65 employer contribution is equal to the monthly fixed $145 employer contribution without inflation.
- Tier 1 (low): Pre-65 retiree contribution is equal to the active premium (blended rate) minus the monthly fixed $300 employer contribution. Pre-65 employer contribution is equal to the monthly fixed contribution plus the excess of the unblended early retiree cost over the active premium. Post-65 employer contribution is equal to the monthly fixed $50 employer contribution without inflation ($30 for the Medicare Advantage plans).
- Tier 2: Pre-65 retiree contribution is equal to the active premium (blended rate) minus the monthly fixed $150 employer contribution. Pre-65 employer contribution is equal to the monthly fixed contribution plus the excess of the unblended early retiree cost over the active premium. Post-65 employer contribution is equal to the monthly fixed $50 employer contribution without inflation ($30 for the Medicare Advantage plans).
- Tier 3: Pre-65 retiree contribution is equal to the active premium (blended rate) minus the monthly fixed $90 employer contribution. Pre-65 employer contribution is equal to the monthly fixed contribution plus the excess of the unblended early retiree cost over the active premium. Post-65 employer contribution is equal to the monthly fixed $50 employer contribution without inflation ($30 for the Medicare Advantage plans).

Healthcare Reimbursement Account Plan (HRA)

Eligibility

Represented active full-time employees retiring on or after December 1, 2009.

Survivor eligibility

Upon the participant's death, surviving spouses and eligible dependents can use the remaining HRA balance to pay for their qualified medical expenses.

Benefits

Upon retirement, the Company will contribute to the retiree's HRA an amount determined by adding a percent of unused extended sick hours and all unused vacation hours, and multiplying those hours by the employee's straight-time hourly wage rate on his last day of work.

Age at Retirement	Percent of unused sick time
55-59	10%
60-63	15%
64-65	25%

Postretirement contributions

None.

Healthcare Reimbursement Account (HRA) under 2014 Voluntary Retirement Enhancement Program (2014 VREP)

Eligibility for VREP	Employees who retired under the 2014 Voluntary Retirement Enhancement Program.
Survivor eligibility	Upon the participant's death, surviving spouses and eligible dependents can use the remaining HRA balance to pay for their eligible health expenses.
Benefits	Upon retirement, the Company will credit the HRA with $50,000 which can be used to pay retiree and eligible dependent health expenses. No additional accruals or interest credits will be applied towards the HRA.

Dental Benefits

Eligibility	Same as for medical benefits.
Benefits	Tier 1 (high) & Tier 1 (low): Retirees can elect coverage under the MetLife Dental plan or the Delta Dental plan. The company will contribute a flat dollar amount of up to $24.50/month for a retiree and up to $45/month for a retiree with one or more dependents. Tiers 2 & 3: None.

Life Insurance Benefits

Eligibility	Same as for medical benefits.
Postretirement contributions	None, benefit is solely paid by the Company.
Benefits	Tier 1 (high) & Tier 1 (low): $10,000 flat amount. Tiers 2 & 3: None.

Mental Health and Substance Abuse Benefits

Eligibility	Same as medical benefits.
Survivor eligibility	Benefits extend to the surviving spouse upon the employee's death.
Benefits	Coverage is included in medical plan benefit or benefit is solely paid by the Company. Mental health and substance abuse benefits for retirees before attainment of age 65 are carved out of the Anthem medical plans and provided by a self-insured plan. The self-insured plan is administered by Managed Health Network (MHN) and is coordinated with the retiree's medical plan. These benefits for all retirees in other medical plans are covered under their medical plan.

Future Plan Changes

No future plan changes were recognized in determining postretirement welfare cost or in determining employer funding policy contributions or maximum tax-deductible contributions.

Changes in Benefits Valued Since Prior Year

The Plan was amended to eliminate Point of Service (POS) medical plans as of January 1, 2016, assuming current POS enrollees transition to the Anthem HMO (40%) and Anthem HDHP (60%) and other enrollment between plans is proportionally constant.

Impact of the plan change was less than 0.10% of APBO (only 13 participants were affected) so in accordance with Sempra's accounting policy, no prior service credit base was established and the impact was realized in unamortized net actuarial gains/losses.

Temporary Deviations

We are not aware of any temporary deviations.

Appendix C: Claim cost tables

Average per Life Gross Medical Claim Cost (before Retiree Contribution)

All monetary amounts shown in US Dollars

		Annual Amount	
Plan	Age	Retiree	Spouse
Anthem Out-of-Area	55–59	10,626	10,626
	60-64	13,150	13,150
	>=65	N/A	N/A
Anthem HMO (Select)	55–59	8,143	8,143
	60-64	10,076	10,076
	>=65	N/A	N/A
	55–59	11,031	11,031
Anthem HMO with Scripps (Traditional)	60-64	13,651	13,651
	>=65	N/A	N/A
Kaiser HMO	55–59	7,340	7,340
	60-64	9,083	9,083
	>=65	N/A	N/A
Anthem HealthCare Plus+	55–59	7,867	7,867
	60-64	9,735	9,735
	>=65	N/A	N/A
United Healthcare Plan F	65–69	5,331	5,331
	70–74	5,903	5,903
	75–79	6,352	6,352
	80–84	6,544	6,544
	85-89	6,532	6,532
	90-94	6,120	6,120
	>=95	5,726	5,726
United Healthcare Plan N	65–69	4,873	4,873
	70–74	5,396	5,396
	75–79	5,807	5,807
	80–84	5,982	5,982
	85–89	5,972	5,972
	90-94	5,594	5,594
	>=95	5,235	5,235
Kaiser – Senior Advantage	65–69	3,222	3,222
	70–74	3,568	3,568
	75–79	3,840	3,840
	80–84	3,956	3,956
	85–89	3,948	4,948
	90-94	3,699	3,699
	>=95	3,461	3,461

United Healthcare – Medicare Advantage	65–69	3,438	3,438
	70–74	3,807	3,807
	75–79	4,097	4,097
	80–84	4,221	4,221
	85-89	4,213	4,213
	90-94	3,947	3,947
	>=95	3,693	3,693

Average per life mental health claim cost

All monetary amounts shown in US Dollars

		Annual Amount	
	Age	Retiree	Spouse
	All ages	248	248

Average per life dental gross claim cost

All monetary amounts shown in US Dollars

		Annual Amount	
Plan	Age	Retiree	Spouse
Delta	All ages	555	463
MetLife	All ages	222	182

Appendix D: Regulatory versus GAAP accounting

Postretirement Welfare Cost for Fiscal Year 2016	Regulatory Accounting	GAAP Accounting
A Service cost	4,664,496	4,664,496
B Interest cost	7,361,895	7,361,895
C Expected return on assets	(10,894,358)	(10,894,358)
D Amortization of:		
1 Prior service cost	3,765,031	3,317,853
2 Losses (gains)	(1,285,900)	(1,297,718)
Total	2,479,131	2,020,135
E Subtotal postretirement welfare cost	3,611,164	3,152,168
F Immediate Recognition of Benefit Cost (Income) due to Special Events	13,640,125	13,640,125
E Total postretirement welfare cost	17,251,289	16,792,293
Funded Position as of January 1, 2016		
Overfunded (Underfunded) APBO	(1,741,506)	(1,741,506)
Amounts Not Yet Amortized in Net Periodic Cost		
Unamortized net actuarial loss (gain)	(35,589,935)	(35,767,488)
Unamortized prior service cost (credit)	14,833,145	13,173,235
Total	(20,756,790)	(22,594,253)

Exhibit No. SDG-1

Appendix D: Summary of net balances U.S. GAAP accounting

A Summary of net prior service cost/(credit)

All monetary amounts shown in US Dollars

	Remaining Amount at 01/01/2015	Plan Amendment	Amount Amortized during 2015	Effect of Curtailments	Effect of Transfers	Remaining Amount at 01/01/2016	Remaining Amortization Period	Amount to be Amortized in 2016
Base 1 (Med)	$13,026,870	$ 0	$ 2,766,377	$ 0	$ 0	$ 10,260,493	3.7	$ 2,766,377
Base 2 (Med)	140,103	0	20,374	0	0	119,729	5.9	20,374
Base 1 (Life)	792,736	0	226,783	0	0	565,953	2.5	226,783
Base 2 (Life)	673,017	0	89,941	0	0	583,076	6.5	89,941
Base 3	13,185	0	1,968	0	0	11,217	5.7	1,968
Base 4	543,912	0	58,073	0	0	485,839	8.4	58,073
Base 5	5,134	0	645	0	0	4,489	7.0	645
Base 6	1,081,057	0	139,132	0	0	941,925	6.8	139,132
Base 7	(14,441)	0	(3,762)	0	0	(10,679)	2.8	(3,762)
Base 8	229,515	0	18,322	0	0	211,193	11.5	18,322
Total	$16,491,088	$ 0	$ 3,317,853	$ 0	$ 0	$13,173,235		$ 3,317,853

B Summary of Net Loss/(Gain)[1]

All monetary amounts shown in US Dollars

	Remaining Amount at 01/01/2015	Experience Loss/(Gain) during 2015	Amount Amortized during 2015	Effect of Curtailments/ Settlements	Effect of Transfers	Remaining Amount at 01/01/2016	Amount to be Amortized in 2016
	$ (15,142,143)	$ (20,625,345)	$ 0	$ 0	$ 0	$ (35,767,488)	$ (1,297,718)

1 See Appendix A for description of amortization method.

San Diego Gas & Electric Company

Exhibit No. SDG-1-1

Summary of Key Results – Benefit Cost, Assets, & Obligations (from 2015 to 2016) – Excerpt from Exhibit No. SDG-1

Section 1: Summary of key results

Benefit cost, assets & obligations

All monetary amounts shown in US Dollars

Fiscal Year Beginning		01/01/2016		01/01/2015	
Benefit Cost/ (Income)	Net Periodic Postretirement Benefit Cost/(Income)	3,611,164		7,357,561	
	Immediate Recognition of Benefit Cost/(Income) due to Special Events[1]	13,640,125		0	
	Total Benefit Cost/(Income)	17,251,289		7,357,561	
Measurement Date		**01/01/2016**		**01/01/2015**	
Plan Assets	Fair Value of Assets (FVA)	160,966,879		163,947,491	
	Market-Related Value of Assets (MRVA)	160,966,879		163,947,491	
Benefit Obligations	Accumulated Postretirement Benefit Obligation (APBO)	(162,708,385)		(190,039,357)	
Funded Status	Funded Status	(1,741,506)		(26,091,866)	
Accumulated Other Comprehensive (Income)/Loss	Net Prior Service Cost/(Credit)	14,833,145		18,598,176	
	Net Loss/(Gain)	(35,589,935)		(14,964,590)	
	Total Accumulated Other Comprehensive (Income)/Loss	(20,756,790)		3,633,586	
Assumptions	Discount Rate	4.50%		4.15%	
	Expected Long-term Rate of Return on Plan Assets[2]	4.00%/7.00%		4.00%/7.00%	
		Pre-65	Post-65	Pre-65	Post-65
	Current Health Care Cost Trend Rate	8.10%	5.50%	7.75%	5.25%
	Ultimate Health Care Cost Trend Rate	5.00%	4.50%	5.00%	4.50%
	Year of Ultimate Trend Rate	2022	2022	2020	2020
Participant Data	Census Date	January 1, 2016		January 1, 2015	
Plan Reporting (ASC 965) for Plan Year Ending		**12/31/2015**		**12/31/2014**	
	Present value of accumulated benefits	162,708,385		190,039,357	
	Market value of assets	160,966,879		163,947,491	
	Plan reporting discount rate	4.50%		4.15%	
	Census Date	January 1, 2016		January 1, 2015	

[1] A health reimbursement account in the amount of $100,000 was offered to employees who accepted the 2016 VREP window. There were 204 acceptances.

[2] Assumed pre-tax rate of 7.00% for the 401(h) trust and Union (post 7/1/2008) VEBA and post-tax rate of 4.00% for the Non-Union and Union (pre-7/1/08) VEBAs.

Employer Contributions		Plan Year 2016	Plan Year 2015
Cash Flow[1]	Funding policy contributions	2,067,407	7,357,561
	Maximum tax deductible contributions[2]		
	Pay-as-you-go (PAYG)[3]	289,112	405,162
	Non-Union VEBA	1,168,549	1,334,402
	Union VEBA (pre 7/1/2008)	392,588	460,087
	Union VEBA (post 7/1/2008)	0	0
	401(h)	506,270	5,523,056
	Total	2,356,519	7,722,707
	Expected benefit payments and expenses net of participant contributions	7,634,444	7,871,090

1 401(h) is trust designated to pre-fund non-union retiree health benefits, union health benefits from 2018 onward for pre 7/1/2008 retirees and Non-Union VREP HRA benefits. The Union VEBA (post 7/1/08) is designated to pre-fund union health benefits from 2018 onward for retirees on and after 7/1/2008 and HRA and Union VREP HRA benefits. The Non-Union VEBA is designated to pre-fund non-union life insurance benefits, until the trust is exhausted. The Union VEBA (pre-7/1/08) is designated to pre-fund union health benefits through the end of 2017 and union life insurance benefits, until the trust is exhausted.

2 Based on an expected pension contribution of $0 for 2015.

3 2015 is actual Key employees and non-union life insurance pay-as-you-go (PAYG) benefit payments. 2016 is actual Key employees and non-union life insurance PAYG benefit payments.

Employer contributions

Employer contributions are the amounts paid by Sempra Energy to provide for postretirement benefits, net of participant contributions. Sempra Energy's funding policy is to contribute to the trusts an amount equal to the postretirement benefit cost less contributions made on behalf of key employees, not to exceed the maximum tax-deductible limit. Sempra Energy maximizes its contribution to the 401(h) account and Union post-7/1/08 VEBA, then contributes the remainder, if any, to the Non-Union VEBA and Union pre-7/1/08 VEBA. Sempra Energy may deviate from this policy, as permitted by its terms, based on cash, tax or other considerations. For Fiscal 2016, the expected contribution to the trusts under the funding policy is $2,067,407, excluding the amounts paid from Company assets for key employees, estimated to be $150,000[1].

Comments on results

The cost of the postretirement welfare plan is determined in accordance with generally accepted accounting principles in the U.S. ("U.S. GAAP"). The Fiscal 2016 postretirement welfare benefit cost for the plan is $17,251,289, which includes a one-time charge for VREP.

Under U.S. GAAP, the funded position (fair value of plan assets less the projected benefit obligation, or "APBO") of each postretirement welfare plan at the plan sponsor's fiscal year-end (measurement date) is required to be reported as a liability. The APBO is the actuarial present value of benefits attributed to service rendered prior to the measurement date, taking into consideration expected future pay increases for pay-related plans. The plan's overfunded (underfunded) APBO as of January 1, 2016 was $(1,741,506), based on the fair value of plan assets of $160,966,879 and the APBO of $(162,708,385).

Fiscal year-end financial reporting information and disclosures are prepared before detailed participant data and full valuation results are available. Therefore, the postretirement benefit asset (liability) at December 31, 2015 was derived from a roll forward of the January 1, 2015 valuation results, adjusted for the year-end assumptions, including discount rate, and asset values, as well as significant changes in plan provisions and participant population. The next fiscal year financial reporting information will be developed based on the results of the January 1, 2016 valuation, projected to the end of the year and similarly adjusted for the year-end assumptions, including discount rate, and asset values, as well as significant changes in plan provisions and participant population.

[1] 2016 actual Key employees and non-union life insurance PAYG benefit payments are equal to $289,112.

Change in net periodic cost and funded position

The postretirement welfare cost increased from $7,357,561 in Fiscal 2015 to $17,251,289, including special termination charges of $13,640,125, in Fiscal 2016 and the funded position improved from $(26,091,866) on January 1, 2015 to $(1,741,506) on January 1, 2016.

All monetary amounts shown in US Dollars

	Postretirement Welfare Cost	Funded Position
Prior year	$7,357,561	(26,091,866)
Change due to:		
▪ Expected based on prior valuation and contributions during prior year	(359,332)	3,725,015
▪ Unexpected noninvestment experience	(406,933)	4,633,605
▪ Unexpected investment experience	1,115,713	(14,252,276)
▪ Impact of plan-to-plan obligation/asset transfers due to business-as-usual transfers	(4,829)	(53,572)
▪ Unexpected claims experience	(1,018,957)	10,176,109
▪ Updated health care medical/Rx trend	230,715	(2,165,833)
▪ Updated discount rate	(1,293,549)	7,715,272
▪ Other assumption changes	(2,009,225)	14,572,040
Subtotal current year	3,611,164	(1,741,506)
▪ Benefit cost/(income) due to special events	13,640,125	0
Total current year	$17,251,289	$(1,741,506)

Significant reasons for these changes include the following:

- Actual pre-65 and post-65 claims costs were lower than expected for most plans, which decreased the postretirement welfare cost and improved the funded position.
- The discount rate increased 35 basis points as of January 1, 2016 compared to the prior year, which decreased the postretirement welfare cost and improved the funded position.
- Asset losses that occurred during Fiscal 2015 increased the postretirement welfare cost and deteriorated the funded position.
- Other assumption changes decreased the postretirement welfare cost and improved the funded position.
- Health care medical/Rx trend was revised, which increased the postretirement welfare cost and deteriorated the funded position.

San Diego Gas & Electric Company

Exhibit No. SDG-2

Derivation of 2016 Costs Used in the Transmittal Letter to Support Annual FERC PBOP's Filing for the TO4 Cycle 5 – Base Period and 12-Months True-Up Period (Jan – Dec 2016)

San Diego Gas & Electric Company
Derivation of 2016 Costs Used in the Transmittal Letter to Support
Annual FERC PBOP's Filing for the TO4 Cycle 5 12-Months Base Period and True-Up Period (Jan - Dec 2016)

Line No.	Amounts Embedded in Account 926 - Employee Pension & Benefits	A Reference	B Base Period / True-Up Period 2016	Line No.
1				1
2	PBOP Cost Per Exhibit No. SDG-1, Section 1, Page 4		$ 2,356,519	2
3				3
4	Total Company Contribution to PBOP	L2	2,356,519	4
5				5
6	Adjustments:			6
7	Capitalized Costs (reflects SDG&E's electric and gas capital costs)	L4 * 41.44 %	(976,541)	7
8	Billings to SCG for Shared Services - (Capital & O&M)	L4 * 6.75 %	(159,065)	8
9	Billings to Others for Shared Services - Unregulated Affiliates	L4 * 0.40 %	(9,426)	9
10	Billings from SCG for Shared Services - (O&M) **(1)**		3,903	10
11	Net Adjustments	L7 to L10	(1,141,129)	11
12				12
13	Net PBOP Cost after Capital & Billings - Electric & Gas	L4 + L11	1,215,390	13
14				14
15	SDG&E Account 926 for PBOP Expense - Electric Portion **(2)**	L13 * 75.31 %	$ 915,310	15
16				16
17	Transmission Wage and Salary Factor **(3)**		17.52%	17
18				18
19	Allocated to SDG&E's Electric Transmission Cost of Service	L15* L17	$ 160,362	19
20				20

(1) The O&M billings from Southern California Gas Company (SCG) is based on SCG's PBOP cost. The allocated expense is derived based on SCG's O&M ratio factor over its total billing to SDG&E.

(2) The total PBOP cost shown in Column B, Line 15 will be the amount reflected in the TO4 Cycle 5 Informational Filing for A&G expenses line for FERC account 926 in the 2016 Base Period and the 12-months True-up Period (Jan - Dec 2016). See details in Workpaper for Exhibit SDG-2.

(3) The transmission wage & salary allocation factor for the 2016 base period and 12-months true-up period from Jan - Dec 2016 was at 17.52%.

San Diego Gas & Electric Company

Exhibit No. SDG-2-1

Work papers for Exhibit SDG-2

San Diego Gas & Electric Company
2016 Monthly Electric PBOP Cost
Used to Derive Account 926 for PBOP Expense - Electric Portion
For the TO4 Cycle 5 - 2016 Base Period and
True-Up Period (Jan to Dec 2016)

Line No	Period	Recorded 2016 Base Period / True-Up Period **(1)**	Line No
1	January	$ 12,500	1
2	February	29,262	2
3	March	16,890	3
4	April	16,902	4
5	May	4,509	5
6	June	5,319	6
7	July	4,914	7
8	August	4,914	8
9	September	4,914	9
10	October	4,914	10
11	November	4,914	11
12	December	805,361	12
13			13
14	Total	$ 915,310	14

(1) The monthly recorded 2016 PBOP costs vary by month based upon PBOP activities such as:
(1) monthly premium payments for key retirees that cannot be paid by the trust which generally does not change much.
(2) monthly amounts deposited into the Health Reimbursement Account (HRA) for retired employees which can vary monthly based on the number of retirees per month and the amounts contributed per retiree.
(3) contributions to the employee benefit trusts that were deferred until December.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served an electronic copy of the foregoing document upon each person designated on the official service list compiled by the Secretary in Docket No. ER13-941-000 and ER16-1719-000. In addition, I certify that I have also caused the foregoing to be served by overnight delivery upon the following:

Arocles Aguilar (via Overnight Mail)
General Counsel
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Roger Collanton (via Overnight Mail)
General Counsel
California Independent System Operator Corporation
250 Outcropping Way
Folsom, CA 95630

Dated at San Diego, California, this 26th day of June, 2017.

/s/ *Jenny Norin*
Jenny Norin
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