

Ross R. Fulton Senior Counsel San Diego Gas & Electric Company 8330 Century Park Court, CP32D San Diego, CA 92123 Tel: 858-654-1861 Fax: 619-699-5027 rfulton@semprautilities.com

November 18, 2020

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. ER21-___

Dear Secretary 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") Fifth Transmission Owner ("TO") Formula rate mechanism ("TO5" or "TO5 Formula"), SDG&E submits this "single-issue" Post-Employment Benefits Other than Pensions ("PBOP") filing ("Filing") to the Commission for approval of its 2019 costs and accruals for PBOP, as recorded in FERC Uniform System of Accounts No. 926 ("Employee Pensions and Benefits") ("Account No. 926").

This Filing updates SDG&E's change in PBOP expense from 2018 (contained in SDG&E's TO5 Cycle 2³ informational filing) to 2019.

The impact of the change in PBOP expense on SDG&E's Base Transmission Revenue Requirement ("BTRR") will be contained in SDG&E's TO5 Cycle 3 informational filing—which will be filed by December 1, 2020 for a January 1, 2021 effective date.

¹ 16 U.S.C. § 824d.

² 18 C.F.R. § 35.13.

The term "Cycle" refers to the specific Information Filing (or annual filing) submitted under the TO5 Formula. The term "TO5 Cycle 2" refers to the second Informational Filing submitted in the TO5 Formula. The capitalized terms have the meaning ascribed to them in SDG&E's TO Tariff or in this Filing.

I. NATURE AND PURPOSE OF FILING

SDG&E is making this single-issue filing under Section D.1 of its TO5 Formula Rate Protocols. Section D.1 provides that SDG&E may make a single-issue filing under Section 205 of the FPA if the PBOP expense levels change.

As noted, the changed PBOP costs will be reflected in SDG&E's TO5 Cycle 3 filing. This approach to PBOP is consistent with Commission precedent that utilities providing service under formulaic "cost of service" rates must file PBOP costs, accrual estimates, and funding commitments for Commission review prior to including those amounts in their formula rates.⁴

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 ("Willis Towers Report") Dated January 2020 for 2019 recorded PBOP costs;
- 3. Exhibit No. SDG-1-1 "Section 1: Summary of Key Results Benefit Cost, Assets, & Obligations" (Excerpt from Exhibit No. SDG-1);
- 4. Exhibit No. SDG-2 –Calculation of 2019 Costs Used to Support the Annual FERC PBOP Costs for the TO5 Cycle 3 Informational Filing; and
- 5. Exhibit No. SDG-2-1 Work papers for Exhibit SDG-2.

III. SDG&E'S 2019 PBOP FILING

The Willis Towers Report reflects the recorded PBOP employer contribution costs for 2019. Employer contributions are the amounts SDG&E paid to provide postretirement benefits, after subtracting participant contributions. SDG&E contributes to the trusts an amount equal to the postretirement benefit cost minus contributions made on behalf of key employees, not to exceed the maximum tax-deductible limit. The standard rule is that the allowable recoverable PBOP funding is the lesser of the Net Periodic Cost ("NPC") or the IRS Maximum Tax-Deductible Contribution ("Max Tax"). As shown in Exhibit No. SDG-1-1, in 2019 SDG&E's NPC is negative—which reflects an income position rather than cost in the amount of \$357,752—compared to the Max Tax of \$1,780,833. SDG&E's total company contribution cost to PBOP in 2019 is thus zero.

Moreover, Exhibit No. SDG-2 demonstrates how PBOP costs are normally calculated and assigned to SDG&E's electric transmission division. To illustrate, after adjusting for capitalized costs and billings to others, PBOP costs, shown on line 13, are charged to Account No. 926 to

⁴ See Boston Edison Co., 70 FERC ¶61,222 (1995); 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).

Kimberly D. Bose, Secretary November 18, 2020 Page 3 of 4

support both electric and gas operations. From this total, costs are allocated to the electric division, as shown on line 15. The electric portion of PBOP costs are then multiplied by the Transmission Wages and Salaries Allocation Factor of 19.15% to calculate the amount applicable to the transmission function shown on line 19. Footnote 1 of work paper AH-2 in the TO5 Cycle 3 Informational Filing discloses both the expense amount specific to the electric division and the amount allocated to transmission service. As noted, this amount is zero for 2019.

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. It does not propose, by this filing, to amend, supersede or, in any manner change the provisions of SDG&E's TO5 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, including Section 35.13, is applicable. In the event the Commission disagrees, however, SDG&E respectfully requests waiver of such requirements and other relief as may be necessary.

V. SERVICE

Electronic copies are being served on the Docket No. ER19-221 service list. Electronic copies are also being served on the California Public Utilities Commission and the CAISO.

VI. CORRESPONDENCE

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

Ross R. Fulton Senior Counsel San Diego Gas & Electric Company 8330 Century Park Court, CP32D San Diego, CA 92123

Phone: 858-654-1861 Fax: 619-699-5027

E-mail: rfulton@sdge.com

Melanie Hancock Transmission Revenue Manager San Diego Gas & Electric Company 8330 Century Park Court, CP31E0 San Diego, CA 92123 Phone: 619-696-2373

E-mail: mhancock@sdge.com

⁵ 18 C.F.R. Part 35.

⁶ *Id.* at §35.13.

Kimberly D. Bose, Secretary November 18, 2020 Page 4 of 4

VII. CONCLUSION

SDG&E respectfully requests that the Commission review and approve the funded and projected PBOP costs reflected in this filing, consistent with SDG&E's TO5 Formula. SDG&E will include the approved 2019 PBOP costs in the TO5 Cycle 3 Informational Filing on or before December 1, 2020, to become effective January 1, 2021.

Respectfully submitted,

/s/ Ross R. Fulton

Ross R. Fulton
Attorney for
San Diego Gas & Electric Company

November 18, 2020

Table of Contents

		Page No.
A.	Exhibit No. SDG-1 – Willis Towers Watson Actuarial Valuation Report Dated January 2020 for 2019 recorded PBOP costs	1-49
В.	Exhibit No. SDG-1-1 – "Section 1: Summary of Key Results – Benefit Cost, Assets, & Obligations" – (Excerpt from Exhibit No. SDG-1)	50-52
C.	Exhibit No. SDG-2 – Derivation of 2019 Costs Used to Support the Annual FERC PBOP Costs for the TO5 Cycle 3 Informational Filing	53-54
D.	Exhibit No. SDG-2-1 – Work papers for Exhibit SDG-2	55-56

San Diego Gas & Electric Company

Exhibit No. SDG-1

Willis Towers Watson Actuarial Valuation Report Dated January 2020 for 2019 recorded PBOP costs

Willis Towers Watson III'IIII

San Diego Gas & Electric Company (SDG&E)

Retiree Combined Group Health and Welfare Program

Actuarial Valuation Report
Postretirement Welfare Cost for Fiscal Year
Ending December 31, 2019
Employer Contributions for Plan Year
Beginning January 1, 2019

January 2020

Table of Contents

Purpos	es of valuation	1
Section	1 : Summary of key results	3
Ben	efit cost, assets & obligations	3
Em	oloyer contributions	5
Con	nments on results	5
Bas	is for valuation	7
Actuari	al certification	9
Section	2 : Accounting exhibits	13
2.1	Balance sheet asset/(liability)	13
2.2	Changes in disclosed liabilities and assets	14
2.3	Summary of net balances	15
2.4	Summary and comparison of benefit cost and cash flows	16
2.5	Detailed results for postretirement welfare cost and funded position	17
2.6	ASC 965 (plan reporting) information	18
2.7	Maximum deductible employer contributions	19
Section	ı 3 : Data exhibits	21
3.1	Plan participant data	21
3.2	Age and service distribution of participating employees	23
Append	lix A : Statement of actuarial assumptions, methods and data sources	24
Append	lix B:Summary of principal other postretirement benefit plan provisions	36
Annend	lix C · Claim cost tables	45

ii

This page is intentionally blank

.

Purposes of valuation

Sempra Energy engaged Willis Towers Watson US LLC ("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 SDG&E Retiree Combined Group Health and Welfare Program for U.S. employees of Sempra Energy (the Plan):

- The value of benefit obligations as of January 1, 2019 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, 2019. 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 2019 plan year.
- 4. The estimated maximum tax-deductible contribution for the tax year in which the 2019 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 2019 will require disclosure in the interim financial statements, but should not affect the expected return on plan assets absent a remeasurement for another purpose.
- 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		01/01/2019	01/01/2018
Benefit Cost/ (Income)	Net Periodic Postretirement Benefit Cost/(Income)	(357,752)	(782,967)
	Immediate Recognition of Benefit Cost/(Income) due to Special Events ¹	0	2,541,947
	Total Benefit Cost/(Income)	(357,752)	1,758,980
Measurement Date		01/01/2019	01/01/2018
Plan Assets	Fair Value of Assets (FVA)	171,789,793	194,105,124
	Market-Related Value of Assets (MRVA)	171,789,793	194,105,124
Benefit Obligations	Accumulated Postretirement Benefit Obligation (APBO)	(166,711,326)	(182,067,722)
Funded Status	Funded Status	5,078,467	12,037,402
Accumulated Other Comprehensive	Net Prior Service Cost/(Credit)	3,330,251	7,303,083
(Income)/Loss	Net Loss/(Gain)	(46,713,058)	(56,656,965)
	Total Accumulated Other Comprehensive (Income)/Loss	(43,382,807)	(49,353,882)
Assumptions	Discount Rate	4.30%	3.65%
	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	6.50% 4.75%	7.00% 5.00%
	Ultimate Health Care Cost Trend Rate	4.75% 4.50%	5.00% 4.50%
	Year of Ultimate Trend Rate	2025 2022	2022 2022
Participant Data	Census Date	January 1, 2019	January 1, 2018
Plan Reporting (ASC 96	55) for Plan Year Ending	12/31/2018	12/31/2017
	Present value of accumulated benefits	166,711,326	182,067,722
	Market value of assets	171,789,793	194,105,124
	Plan reporting discount rate	4.30%	3.65%
	Census Date	January 1, 2019	January 1, 2018

WillisTowers Watson I.I'I'I.I

A health reimbursement account in the amount of \$100,000 was offered to employees who accepted the 2018 Voluntary Retirement Enhancement Program window.

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 7/1/2008) VEBAs.

Employer Contribution	ns	Plan Year 2019	Plan Year 2018
Cash Flow ¹	Funding policy contributions before applying maximum tax-deductible limit	393,017 ²	1,758,980
	Maximum tax-deductible contributions		
	Pay-as-you-go (PAYG)³	393,017	231,479
	Non-Union VEBA	1,012,293	1,074,157
	Union VEBA (pre 7/1/2008)	375,523	335,169
	Union VEBA (post 7/1/2008)	0	0
	401(h)	0	0
	Total	1,780,833	1,640,805
	Expected benefit payments and		
	expenses net of participant contributions	9,577,258	9,277,493

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 7/1/2008) 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 7/1/2008) is designated to pre-fund union health benefits through the end of 2017 and union life insurance benefits, until the trust is exhausted.

² Actual 2019 contributions are \$393,017 of PAYG and no trust contributions.

³ 2018 is actual and 2019 is expected benefits paid from Company assets.

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 plan benefit costs paid directly by the Company (such as, benefits paid to key employees), not to exceed the maximum tax-deductible contributions. Sempra Energy maximizes its contribution to the 401(h) account and Union post 7/1/2008 VEBA, then contributes the remainder, if any, to the Non-Union VEBA and Union pre 7/1/2008 VEBA. Sempra Energy may deviate from this policy, as permitted by its terms, based on cash, tax or other considerations. The actual contributions made during Fiscal 2019 per the funding policy were \$393,017, which is comprised of \$0 to the trusts with the remainder being benefits paid from Company assets.

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 2019 postretirement welfare benefit cost/(income) for the plan, excluding special accounting costs/(income), is \$(357,772).

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, 2019 was \$5,078,467 based on the fair value of plan assets of \$171,789,793 and the APBO of \$(166,711,326).

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, 2018 was derived from a roll forward of the January 1, 2018 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, 2019 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.

Change in net periodic cost and funded position

The postretirement welfare cost/(income) decreased from \$1,758,980, including special termination charges of \$2,541,947 in Fiscal 2018 to \$(357,772) in Fiscal 2019 and the funded position deteriorated from \$12,037,402 on January 1, 2018 to \$5,078,467 on January 1, 2019.

Significant reasons for these changes include the following:

- The discount rate increased 65 basis points as of January 1, 2019 compared to the prior year, which decreased the postretirement welfare cost and improved the funded position.
- Asset losses that occurred during Fiscal 2018 increased the postretirement welfare cost and deteriorated the funded position.
- Expected future claims costs as of January 1, 2019 are lower than those expected based on the January 1, 2018 valuation, which decreased the postretirement welfare cost and improved the funded position.
- Retirement assumption was updated for certain grandfathered participants, which decreased the postretirement welfare cost and improved the funded status.
- Mortality assumption change decreased the postretirement welfare cost and improved the funded position.
- A health reimbursement account in the amount of \$100,000 was offered to employees who accepted the 2018 VREP offer. The offer was deemed a special termination benefit in 2018, resulting in a decrease in cost from 2018 to 2019 and a deterioration of the funded position during 2018, both in the amount of \$2,541,947.

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 as amended by the Tax Cuts and Jobs Act 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 2022

This valuation reflects our understanding of the relevant provisions of PPACA and HCERA, as amended by the Tax Cuts and Jobs Act, and including amendments made to the ACA in January 2018 to delay the excise tax effective date to 2022, suspend the medical device excise tax for 2018 and 2019, suspend the tax on health insurance issuers for 2019 and fund the Children's Health Insurance Program for six years. 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. The valuation does not anticipate the effects of any possible future changes to PPACA or HCERA.

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. The most recent plan change reflected in this valuation was effective in 2018 (2018 VREP) and first reflected in the valuation as of January 1, 2019. Unless otherwise described below under Subsequent Events, assumptions were selected based on information known as of the measurement date.

Changes in assumptions and actuarial methods

- Pre-retirement mortality was changed from the RP-2017¹ Employee table with MP-2017 generational projection scale to the RP-2018² Employee table with MP-2018 generational projection scale.
- Post-retirement mortality projection scale was changed from MP-2017 to MP-2018.
- Retirement assumption was updated for certain grandfathered participants as per the 2018 experience study.
- The discount rate was updated from 3.65% to 4.30%.
- Interest credit on Health Reimbursement Accounts was updated from 2.80% to 3.36%.
- Healthcare claims assumptions were updated to reflect 2019 renewal rates, migration, and retiree cost shift factors.
- Health care cost trend assumption for pre-65 members was updated

Changes in estimation techniques

There have been no changes in estimation techniques.

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.

Where used in this report, "RP-2017" refers to the Society of Actuaries' RP-2014 mortality table, with mortality improvements stripped back to 2006 then projected using the MP-2017 generational mortality improvement scale.

Where used in this report, "RP-2018" refers to the Society of Actuaries' RP-2014 mortality table, with mortality improvements stripped back to 2006 then projected using the MP-2018 generational mortality improvement scale.

Changes in benefits valued

There have been no changes in benefits valued.

Plan-to-plan transfers

During 2018 the benefit obligation transferred due to business-as-usual transfers was less than 1% of the plan's benefit obligations for the San Diego Gas & Electric Company (SDG&E), but it exceeded the 1% benefit obligation threshold for Sempra Retiree Group Health Plan (Sempra). Consistent with Sempra's past practices, a portion of Sempra Retiree Group Health Plan's amortization bases were transferred from Sempra's Plan to SDG&E' Plan. 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, 2018.

Special events

In 2018, a health reimbursement account in the amount of \$100,000 was offered to employees who accepted the 2018 VREP window.

Subsequent events

The Setting Every Community Up for Retirement Enhancement Act ("SECURE Act") was enacted in December 2019. This legislation included a repeal of the excise tax on high value medical plans ("Cadillac tax"). This had no impact on this plan.

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 other than those described in the Special events section above.

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. See the Sources of Data and Other Information section of Appendix A for further details. 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. We have relied on all the information provided as complete and accurate. 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, 2019. The benefit obligations were measured as of January 1, 2019 and are based on participant data as of the census date, January 1, 2019.

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, 2018, which reflect the expected funded status of the plans before adjustment to reflect the funded status based on the year-end measurements. 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, 2018. 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.

Plan contributions are assumed to be pre-tax because the plan sponsor's funding policy is to only contribute up to the maximum tax deductible limit. Plan benefits have been adjusted for excise tax as described in the additional assumptions section of this report. The expected return on assets, as shown in this report, has been adjusted to reflect tax effect on taxable trusts.

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, 2019 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 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, Willis Towers Watson US LLC ("Willis Towers Watson").

Suzanne C. Wyatt, FSA, EA, FCA

Valuation Actuary

Lyr Wyath

Bayan Suleman, ASA Valuation Actuary

Kristen Tanaka, FSA
Pricing Specialist

Cory Misterek, ASA Pricing Specialist

The Pricing Specialist is responsible for developing and/or determining the reaonableness 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/602948/2019SempraAnnualWork/PBOP/Sempra 2019 PBOP Valuation Report SDGE (FINAL).docx

Section 2: Accounting exhibits

2.1 Balance sheet asset/(liability)

All monetary amounts shown in US Dollar	tary amounts shown in US	S Dollars
---	--------------------------	-----------

Me	asurement Date	01/01/2019	01/01/2018
Α	Development of Balance Sheet Asset/(Liability) ¹		
	 Accumulated postretirement benefit obligation (APBO) 	(166,711,326)	(182,067,722)
	2 Fair value of assets (FVA) ²	171,789,793	194,105,124
	3 Net balance sheet asset/(liability)	5,078,467	12,037,402
В	Current and Noncurrent Allocation ³		
	1 Noncurrent asset	5,078,467	12,037,402
	2 Current liability	0	0
	3 Noncurrent liability	0	0
	4 Net balance sheet asset/(liability)	5,078,467	12,037,402
С	Accumulated Other Comprehensive (Income)/Loss		
	1 Net prior service cost/(credit)	3,330,251	7,303,083
	2 Net loss/(gain)	(46,713,058)	(56,656,965)
	3 Accumulated other comprehensive (income)/loss ⁴	(43,382,807)	(49,353,882)
D	Assumptions and Dates		
	1 Discount rate	4.30%	3.65%
	2 Rate of compensation increase	N/A	N/A
	3 Current health care cost trend rate (pre-65)	6.50%	7.00%
	Current health care trend rate (post-65)	4.75%	5.00%
	4 Ultimate health care cost trend rate (pre-65)	4.75%	5.00%
	Ultimate health care cost trend rate (post-65)	4.50%	4.50%
	5 Year of ultimate trend rate (pre-65/post-65)	2025/2022	2022/2022
	6 Census date	January 1, 2019	January 1, 2018

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.

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 disclosed liabilities and assets

Αl	I monetary	/ amounts	shown in	US	Dollars
----	------------	-----------	----------	----	---------

Fis	cal Y	ear Beginning	01/01/2019	01/01/2018
Α		ange in Accumulated Postretirement nefit Obligation (APBO)		
	1	APBO at beginning of prior fiscal year	182,067,722	191,340,813
	2	Employer service cost	4,470,391	4,981,459
	3	Interest cost	6,686,102	7,936,835
	4	Actuarial loss/(gain)	(16,680,688)	(12,320,358)
	5	Plan participants' contributions	7,820,543	7,333,761
	6	Gross benefits paid from assets	(20,407,817)	(14,890,975)
	7	Gross benefits paid by the Company	(231,479)	(1,510,378)
	8	Plan-to-plan transfers between SDG&E and SoCalGas	105,243	(18,133)
	9	Plan-to-plan transfers between SDG&E and Sempra	339,362	(785,302)
	10	Plan change	0	0
	11	Acquisitions/(divestitures)	0	0
	12	Curtailments	0	0
	13	Special/contractual termination benefits	2,541,947	0
	14	APBO at beginning of current fiscal year	166,711,326	182,067,722
В	Cha	ange in Plan Assets		
	1	Fair value of assets at beginning of prior fiscal year	194,105,124	168,700,969
	2	Actual return on assets	(11,403,928)	30,373,999
	3	Employer contributions	1,640,805	4,990,364
	4	Plan participants' contributions	0	0
	5	Benefits paid ¹	(12,818,753)	(9,067,592)
	6	Plan-to-plan transfers between SDG&E and SoCalGas	165,636	23,720
	7	Plan-to-plan transfers between SDG&E and Sempra	100,909	(916,336)
	8	Acquisitions/(divestitures)	0	0
		Settlements	0	0
	10	Fair value of assets at beginning of current fiscal year	171,789,793	194,105,124

_

¹ Net of retiree contributions

Willis Towers Watson I.I'I'I.I

Summary of net balances 2.3

A reconciliation of net prior service cost/(credit)

All monetary amounts shown in US Dollars

			NI HIGH	All Hollocally amounts of own in 60 policies	III OO DOIIAIS				
	Remaining Amount at 01/01/2018	Plan Amendment	Amount Amortized during 2018	Adjustment to GAAP Accounting ¹	Effect of Curtailments	Effect of Transfers	Remaining Amount at 01/01/2019	Remaining Amortization Period	Amount to be Amortized in 2019
Base 1	\$ 5,493,293	0	\$ 3,213,555	\$ (318,376)	0	0	\$ 1,961,362	1.0	\$ 1,961,362
Base 2	78,981	0	20,374	0	0	0	58,607	2.9	20,374
Base 3	112,387	0	112,387	0	0	0	0	0	0
Base 4	403,194	0	89,941	0	0	0	313,253	3.5	89,941
Base 5	7,281	0	1,968	0	0	0	5,313	2.7	1,968
Base 6	369,693	0	58,073	0	0	0	311,620	5.4	58,073
Base 7	3,199	0	645	0	0	0	2,554	4.0	645
Base 8	663,661	0	139,132	0	0	0	524,529	3.8	139,132
Base 9	(3,155)	0	(3,155)	0	0	0	0	0	0
Base 10	174,549	0	18,322	0	0	0	156,227	8.5	18,322
12.31.18 Transfer from Sempra's Base 2	0	0	0	0	0	(34)	(34)	4.3	(8)
12.31.18 Transfer from Sempra's Base 3	0	0	0	0	0	(3,180)	(3,180)	9.4	(338)
Total	\$ 7,303,083	0 \$	\$ 3,651,242	\$ (318,376)	0 \$	\$ (3,214)	\$ 3,330,251		\$ 2,289,471

B Reconciliation of Net Loss/(Gain)²

		100000000000000000000000000000000000000	al indictally amounts shown in Oo Dollais				
Remaining Amount at	Experience Loss/(Gain)	Amount Amortized	Adjustment to GAAP	Effect of Curtailments/	Effect of	Remaining Amount at	Amount to be Amortized in
01/07/10/10	during 2010	during 2010	Acconung.	Settlements	Idioleis	01/01/2013	2013
\$ (56,656,965)	\$ 7,844,283	\$ (2,414,394)	\$ (145,089)	0	\$ (169,681)	\$ (169,681) \$(46,713,058) \$	\$ (1,875,557)

Adjustment from Regulatory accounting to GAAP accounting See Appendix A for description of amortization method.

^{- 2}

Summary and comparison of benefit cost and cash flows 2.4

All monetary amounts shown in US Dollars

Fis	cal Ye	ear Ending	12/31/2019	12/31/2018
A		al Benefit Cost		
		Employer service cost	3,681,859	4,470,391
		Interest cost	7,123,163	6,686,102
		Expected return on assets ¹	(11,576,708)	(13,176,308)
		Subtotal	(771,686)	(2,019,815)
	5	Net prior service cost/(credit) amortization	2,289,471	3,651,242
		Net loss/(gain) amortization	(1,875,557)	(2,414,394)
	7	Subtotal	413,914	1,236,848
	8	Net periodic postretirement benefit cost/(income)	(357,772)	(782,967)
	9	Immediate recognition of benefit cost/(income) due to special events	0	2,541,947
	10	Total benefit cost	(357,772)	1,758,980
В	Ass	umptions		
	1	Discount rate	4.30%	3.65%
	2	Rate of return on assets ¹	4.00%/7.00%	4.00%/7.00%
	3	Current health care cost trend rate (pre-65)	6.50%	7.00%
		Current health care cost trend rate (post-65)	4.75%	5.00%
	4	Ultimate health care cost trend rate (pre-65)	4.75%	5.00%
		Ultimate health care cost trend rate (post-65)	4.50%	4.50%
	5	Year of ultimate trend rate (pre-65/post-65)	2025/2022	2022/2022
	6	Census date	January 1, 2019	January 1, 2018
С	Ass	ets at Beginning of Year		
	1	Fair market value	171,789,793	194,105,124
	2	Market-related value	171,789,793	194,105,124
D	Cas	h Flow²	2019	2018
	1	Actual Employer trust contributions	0	1,409,326
	2	Actual Benefits paid by the Employer	393,017	231,479
	3	Actual Benefits paid from plan assets, net of participant contributions	10,105,443	12,587,274
	4	Expected Employer trust contributions	0	N/A ³
	5	Expected benefits paid by the Employer	240,000	500,000
	6	Expected benefit payments and expenses net of participant contributions	9,337,258	8,777,493

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 7/1/2008) VEBAs.
 Net of Medicare Part D subsidy, if any.

³ 2018 cost was determined assuming that any trust contributions were made at year-end.

2.5 Detailed results for postretirement welfare cost and funded position

All monetary amounts shown in US Dollars **Detailed Results** 01/01/2019 01/01/2018 **Service Cost** 1 Medical and dental 3.453.777 4,180,266 2 Life insurance 228,082 290,125 3 Total 3,681,859 4,470,391 **Accumulated Postretirement Benefit Obligation (APBO)** 1 Medical and dental Participants currently receiving benefits 77,409,438 а 78,042,731 b Fully eligible active participants 31,139,908 34,887,523 Other participants 43,347,609 52,913,705 С d Total 165,843,959 151,896,955 2 Life insurance Participants currently receiving benefits 8,414,932 8,401,550 а b Fully eligible active participants 3,531,158 4,123,349 С Other participants 2,868,281 3,698,864 d Total 14,814,371 16,223,763 3 All benefits Participants currently receiving benefits 85,824,370 86,444,281 а b Fully eligible active participants 34,671,066 39,010,872 Other participants 46,215,890 56,612,569 С d Total 166,711,326 182,067,722 Assets 1 Fair value 171,789,793 194,105,124 2 Investment losses (gains) not yet in market-related value 3 Market-related value 171,789,793 194,105,124 **Funded Position** 1 Overfunded (underfunded) APBO 5,078,467 12,037,402 2 APBO funded percentage 103.0% 106.6% E Amounts in Accumulated Other Comprehensive Income 3,330,251 7,303,083 1 Prior service cost (credit) (56,656,965) 2 Net actuarial loss (gain) (46,713,058)

(49,353,882)

(43,382,807)

3 Total

2.6 ASC 965 (plan reporting) information

Α Ρ τε	esent Value of Benefit Obligation and Funded Status Present value of benefit obligations a Participants currently receiving benefits b Other fully eligible participants c Other participants d Total Fair value of assets	85,824,370 34,671,066 46,215,890 166,711,326 171,789,793
1	Present value of benefit obligations a Participants currently receiving benefits b Other fully eligible participants c Other participants d Total	34,671,066 46,215,890 166,711,326
1	Present value of benefit obligations a Participants currently receiving benefits b Other fully eligible participants c Other participants d Total	34,671,066 46,215,890 166,711,326
	a Participants currently receiving benefits b Other fully eligible participants c Other participants d Total	34,671,066 46,215,890 166,711,326
2	b Other fully eligible participants c Other participants d Total	34,671,066 46,215,890 166,711,326
2	c Other participants d Total	46,215,890 166,711,326
2	d Total	166,711,326
2		· · · · · · · · · · · · · · · · · · ·
2	Fair value of assets	171,789,793
B Ch	anges in Benefit Obligations	
1	At prior plan year end	182,067,722
2	Additional benefits accumulated including effects of noninvestment experience	5,688,004
3	Decrease in the discount period	6,413,626
4	Benefits paid, net of employee contributions	(12,818,753)
5	Assumption changes	(17,625,825)
6		0
7	Special Termination Benefits	2,541,947
8	Plan-to-plan transfers between SDG&E and SoCalGas	105,243
9		339,362
10		0
11	At current plan year end	166,711,326

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, 2018 are the same as those used to measure benefit obligations for Sempra Energy's December 31, 2018 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

No	n-Union 401(h)¹	01/01/2019
NO	11-0111011 401(11)	01/01/2013
Α	Section 401(h) Deduction Limit – Aggregate Normal Cost	
	Present Value of Projected Benefits (PVB) excluding key employees	103,159,782
	2 Market value of assets	109,682,474
	3 Present value of future normal costs: [(1)-(2)]	0
	4 Present value future service	24,111
	5 Normal cost accrual rate: [(3)÷(4)]	0
	6 Number of employees, excluding key employees	2,923
	7 Aggregate normal cost BOY: [(5)x(6)]	0
	8 Aggregate normal cost with interest to the end of the fiscal year: [(7) x 1.065]	0
	9 10% of PVB as of the end of the fiscal year	10,265,926
	10 Greater of 10% of PVB or normal cost, but not greater than the end of year unfunded PVB	0
В	Section 401(h) Subordination Test ²	
	1 Cumulative subordination limit	100,792,956
	2 Cumulative 401(h) contributions through prior year	73,080,959
	3 Maximum employer contribution to satisfy subordination test	27,711,997
С	401(h) Funding Discount Rate	6.50%
D	Maximum Employer Contribution	
	1 Amount – lesser of IRC Section 401(h) Deduction Limit and Subordination Test	0

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 7/1/2008) 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 7/1/2008) is designated to pre-fund union health benefits through the end of 2017 and union life insurance benefits, until the trust is exhausted.

Consists of cumulative subordination limit as of the end of the 2018 plan year, plus one third of the lesser of 2019 pension plan target normal cost, including load for administrative expenses, and actual pension contributions for the 2019 plan year. Amounts reflect plan-to-plan transfers adjustments based on 2019 pension results.

All monetary amounts shown in US Dollars

VE	BAs ¹	Non-Union	Union prior to 7/1/2008
Α	Present Value of Projected Benefits (PVB) Excluding Key Employees	13,424,376	4,328,543
В	Actuarial Value of Plan Assets	3,845,627	600,606
С	Present Value of Future Normal Costs: [(A)-(B)]	9,578,749	3,727,937
D	Present Value of Future Service	28,790	12,631
E	Normal Cost Accrual Rate: [(C)÷(D)]	333	295
F	Number of Employees, Excluding Key Employees	2,923	1,224
G	Aggregate Normal Cost BOY: [(E)x(F)]	973,359	361,080
н	VEBA Funding Discount Rate	4.00%	4.00%
ı	Maximum Deductible VEBA Contribution EOY: [(G)x(1+H)]	1,012,293	375,523

VEBAs ¹		Union post 7/1/2008
Α	Present Value of Projected Benefits (PVB) Excluding Key Employees	36,084,336
В	Market Value of Plan Assets	57,661,086
С	Unfunded PVB – Maximum Tax Deductible Contribution: [(A)-(B)]	0
D	VEBA Funding Discount Rate	6.50%

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 7/1/2008) 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 7/1/2008) 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

Cer	nsus C	Date	01/01/2019		
			Represented	Non-Represented	Total
Α	Part	icipating Employees			
	1	Number			
	;	a Fully eligible	178	677	855
	_!	b Other	1,046	2,259	3,305
	_	c Total participating employees	1,224	2,936	4,160
	2	Average age	45.8	46.2	46.1
	3	Average credited service	17.0	13.1	14.2
	4	Average future working life			
	;	a to full retirement age	16.1	15.6	15.7
	I	b to full eligibility age	15.3	12.2	13.2
В	Reti	rees and Surviving Spouses			
	1	Retirees and surviving spouses			
	;	a Number under 65	118	379	497
	I	b Number 65 and older	465	1,252	1,717
	_	c Total	583	1,631	2,214
	-	d Average age	73.0	71.0	71.5
	•	e Number with married/family health care coverage	233	584	817
	1	f Number with single health care coverage	231	579	809
	9	g Number with life insurance	286	1,271	1,557

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

Census Date		01/01/2018		
		Represented	Non-Represented	Total
Α	Participating Employees			
	1 Number			
	a Fully eligible	168	693	861
	b Other	1,086	2,197	3,283
	c Total participating employees	1,254	2,890	4,144
	3 Average age	46.0	46.7	46.5
	4 Average credited service	17.3	13.4	14.6
	5 Average future working life			
	a to full retirement age	15.9	15.2	15.4
	b to full eligibility age	14.9	11.9	13.0
В	Retirees and Surviving Spouses			
	1 Retirees and surviving spouses			
	a Number under 65	102	396	498
	b Number 65 and older	456	1,140	1,596
	c Total	558	1,536	2,094
	d Average age	73.2	70.8	71.5
	 Number with married/family health care coverage 	220	570	790
	f Number with single health care coverage	224	560	784
	g Number with life insurance	277	1,185	1,462

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

SDG&E Retiree Combined Group Health and Welfare Program

3.2 Age and service distribution of participating employees

			Attair	Attained Years of Credited Service and Number	edited Service	and Number			
Attained Age	0-4	2-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
Under 25	64	0	0	0	0	0	0	0	64
25-29	220	47	4	0	0	0	0	0	271
30-34	211	116	131	9	0	0	0	0	464
35-39	158	123	219	103	8	0	0	0	909
40-44	101	85	190	216	21	0	0	0	613
45-49	89	82	136	168	52	15	0	0	521
50-54	54	40	107	140	29	25	25	0	490
55-59	42	55	84	140	47	92	64	7.1	579
60-64	23	26	49	29	33	33	32	159	422
69-99		9	7	19	9	10	9	41	110
70 & over	0	2	~	က	က	~	0		21
Total	952	582	932	862	231	192	127	282	4,160
Average Age: Average Service:	46.1 14.2		Number	Number of Participants:	Fu	Fully eligible Other		855 3,305	

Appendix A: Statement of actuarial assumptions, methods and data sources

Actuarial Assumptions and Methods – Other Postretirement Benefit Cost for Fiscal 2019 Plan Reporting Based on Calendar Year

Economic Assumptions	
Discount rate for post-retirement benefit cost	4.30% 1
Discount rate for 401(h) and Union VEBA (post 7/1/2008) funding	6.50%
Discount rate for Non-Union VEBA and Union VEBA (pre 7/1/2008) 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, premium equivalents and per capita claims costs. The funding discount rate has not been adjusted to reflect administrative expenses paid from the trust.

Healthcare reimbursement account interest crediting rate

Salary increase rate

3.36%

Age	Rate
Below 25	10.00%
25-29	8.50%
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.

Willis Towers Watson In 1911

¹ Discount rate for the 2018 VREP special termination cost as of 7/31/2018 is 4.30%.

	Current Retirees Future Retirees		
Participation:	Based on valuation census data	Percentages of eligible individuals electing coverage:	
		Pre-65 Post-65	
Medical/dental		80% 70%	
Life insurance		100% 100%	
Former employees other than retirees	Not eligible for postretirement welfare	e 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 p medical plan election upon attainmen		
	Current Pre-65 Medical Plan	Assumed Post-65 Medical Plan	

Anthem Select HMO	UHC Medicare Advantage HMO,
Anthem PPO Out of CA (OOA)	65% UHC Medicare Advantage
Anthem Health Care Plus+	PPO #2 and 20% UHC Medicare Advantage PPO #1
Kaiser HMO	Kaiser Senior Advantage

Demographic Assumptions

Mortality

Pre-retirement

Base Mortality Table (Male Table used for males; Female Table used for females)

- 1. Base table: RP-2014 Employee table adjusted backward to 2006 with MP-2014
- 2. Base mortality table year: 2006
- 3. Table type: No Collar

Anthem Select HMO

- 4. Healthy or Disabled: Healthy
- 5. Table weighting: Benefit

Mortality Improvement Scale (Male Table used for males; Female Table used for females)

- 1. Base scale: MP-2018
- 2. Projection Type: "Generational"

A blended assumption of 15%

000030

3. Adjustment: Unadjusted

Post-retirement

Base Mortality Table (Male Table used for males; Female Table used for females)

- 1. Base table: Sempra specific (see note below)
- 2. Base mortality table year: 2011

Sempra specific table is based on the RP-2014 healthy "Annuitants" table, no collar, benefits weighted, male rates for males, female rates for females, projected back to 2006 by scale MP-2014 (unadjusted), then projected from 2006 to 2011 by scale MP-2015 (unadjusted) with resulting rates increased 4.64% to reflect Sempra's experience for the period of 2009 – 2013 and a credibility factor of 80%. Mortality Improvement Scale (Male Table used for males; Female Table used for females)

Mortality Improvement Scale (Male Table used for males; Female Table used for females)

- 1. Base scale: MP-2018
- 2. Projection Type: "Generational"
- 3. Adjustment: Unadjusted

Disability rates

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 (not due to disability or retirement) rates

Based on years of service. Rate leaving during the year per 1,000:

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. Rate retiring during the year per 1,000:

Points ¹	Rate
Below 90	50
90-91	170
Above 91	150

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

Age	Rate
55-59	50
60-61	150
62-65	250
66-67	300
68-69	350
Above 69	1,000

3. All other participants. Rate retiring during the year per 1,000:

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

Upon termination of employment Retirement benefit

(for HRA)

Straight-time hourly wage rate Assumed plan compensation for the year beginning on the valuation date was determined using the field Annual Rate provided as of January 1, 2019.

Future accrual rate for HRA

Unused sick time and holiday credits of eligible active participants is assumed to increase at a rate of 40 hours per year until retirement.

Points are equal to age plus service

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
2019	6.50%	4.75%
2020	6.25%	4.75%
2021	6.00%	4.75%
2022	5.50%	4.50%
2023	5.25%	4.50%
2024	5.00%	4.50%
2025 onwards	4.75%	4.50%

Employer cap (fixed employer contribution)

Dental benefit trend rate:

Employer cap (fixed employer

contribution)

0%

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 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.

Dental costs

All participants are subject to the employer cap.

Per Capita Claims Costs

Basis for per capita claim cost assumptions

The claim costs are developed based on participant demographics and the 2019 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, premium equivalents for selfinsured and per capita claims costs.

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 2022 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)/VREP usage

Retirees are assumed to apply for and be reimbursed for a flat dollar assumed drawdown of \$1,000 for regular HRAs and \$5,000 for VREP HRAs using their HRA until the account is exhausted.

Unused balances are forfeited upon death of the covered retiree and spouse.

Funding policy

Sempra's funding policy is to contribute an amount equal to the postretirement welfare cost, not to exceed the maximum tax-deductible limit. Sempra maximizes its contribution to the §401(h) account and contributes the remainder to the VEBA. The sponsor may deviate from this policy, as permitted by its terms, based on cash, tax or other considerations.

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, 2019

Measurement date

January 1, 2019

Service cost and accumulated postretirement benefit obligation

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 measurement date. Service from hire date through the expected full eligibility date is counted in allocating costs. Costs are allocated prorata over the service period described above.

APBO is measured by determining a portfolio of bonds, using the December 31, 2018 Willis Towers Watson BOND:Link model, that will provide the cash flows necessary to satisfy the projected benefit payments underlying the APBO determined using the methodology described above, and determining the market value of that portfolio. A single discount rate that will equate the present value of those benefit payments to the market value of the bond portfolio is determined. Service cost is determined by discounting the projected benefit payments underlying service cost, determined using the methodology described above, by the same discount rate determined above for the APBO. Interest cost is measured by applying the discount rate to the APBO and service cost.

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 marketrelated 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.

Sources of Data and Other Information

Sempra Energy or its third party vendors furnished participant data, premium and retiree contribution amounts as of January 1, 2019. 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 2018 fiscal year, and amounts recognized in other comprehensive income in 2018. 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.

In consultation with Sempra, the following assumptions were made for missing or apparently inconsistent data elements:

We are aware of an issue with changes in retiree service since last year, which may affect cost sharing for a few participants. The data issue is being researched and is expected to have a minimal impact on the valuation results.

Accumulated other comprehensive (income)/loss amounts shown in the report are shown prior to adjustment for deferred taxes. Any deferred tax effects in AOCI should be determined in consultation with Sempra Energy's tax advisors and auditors. Willis Towers Watson used information supplied by Sempra Energy regarding the postretirement benefit asset, postretirement benefit liability, and amounts recognized in accumulated other comprehensive income as of the end of the 2019 fiscal year and amounts recognized in other comprehensive income in the 2019 fiscal year.

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.
Salary increase rate	Assumed increases were chosen by the plan sponsor based on an experience study that was conducted in 2018 with annual consideration of whether any conditions have changed that would be expected to produce different results in the future. They represent an estimate of future experience.
Administrative expenses	Administrative expenses are included in the fully insured premiums, premium equivalents 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. 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).

Over age 65 retiree premium rates are not blended and represent the actual cost of insurance for these retirees and their spouses.

Kaiser and Anthem Health Care Plus+ premium equivalent rates are a blend of costs for actives and retirees under age 65. For Kaiser, the stand-alone projected retiree costs provided by Kaiser are compared against insured rates provided for the blended active/early retiree plan. For Anthem Health Care Plus+, average age/gender factors between the active and retiree participants enrolled in the plan are compared to determine the cost of retiree health care. 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.

For the remaining pre-age 65 medical plans, separate active and retiree only premium equivalents were developed.

Per capita claims costs are based on a composite enrollment-weighted average of adjusted premiums and retiree only level premium equivalents. Separate active and inactive composite averages were developed. Final average per capitas were distributed by age in accordance with the Willis Towers Watson AGEDIST model. This model uses medical and prescription drug claims experience on millions of lives from 2012 and 2013 to estimate the variation in plan cost by age.

Regular HRA & VREP HRA Drawdown

The drawdown assumptions were chosen by the plan sponsor based on an experience study conducted in 2018.

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-2018 "Employee" table, no collar adjustment, with MP-2018 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, which reflects 2009-2013 mortality experience for retirees of

Sempra's qualified pension plans. Sempra's experience was used to adjust the RP-2014 "Healthy Annuitant" table adjusted backward to 2006 with MP-2014 and projected forward to 2011 using MP-2018. Sempra's experience was blended with the standard tables based on the level of credibility Sempra's experience allowed (an 80% credible adjustment). Sempra also selected the MP-2018 generational projection scale to project mortality improvements from 2011 forward.

"RP-2018" refers to the Society of Actuaries' RP-2014 mortality table, with mortality improvements stripped back to 2006 then projected forward using MP-2018 generational mortality improvement scale.

Termination

Termination rates were based on an experience study conducted in 2015, with annual consideration of whether any conditions have changed that would be expected to produce different results in the future.

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 based on an experience study conducted in

2018, with annual consideration of whether any conditions have changed that would be expected to produce different results in the

future.

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 2017 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 2017 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:

Spousal coverage Spousal coverage is based on an experience study conducted in

2017, with annual consideration of whether any conditions have changed that would be expected to produce different results in the

future.

Spouse age Spouse age is based on a standard assumption.

Source of Prescribed Methods

Accounting methods

The methods used for accounting purposes as described in Appendix A, including the method of determining the market-related value of plan assets, 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, Methods and Estimation Techniques

Change in assumptions since prior valuation

Pre-retirement mortality was changed from the RP-2017 Employee table with MP-2017 generational projection scale to the RP-2018 Employee table with MP-2018 generational projection scale.

Post-retirement mortality was changed from the Sempra specific table, base year of 2011, with MP-2017 generational projection from 2011 to the Sempra specific table, base year of 2011, with MP-2018 generational projection from 2011.

Retirement assumptions was updated for certain grandfathered participants as per the 2018 experience study

The discount rate was updated from 3.65% to 4.30%.

Healthcare claims assumptions were updated to reflect 2019 renewal rates, migration, and retiree cost shift factors.

Health care cost trend assumption for pre-65 members was updated.

Interest credit on HRAs was updated from 2.80% to 3.36%.

Change in methods since prior valuation

None.

Change in estimation techniques since prior valuation

None.

Appendix B: Summary of principal other postretirement benefit plan provisions

Substantive Plan Provisions

The most recent change reflected in the following substantive plan provisions was effective January 1, 2018

Covered employees All regular full time employees

Participation date Date of becoming a covered employee

Definitions

Eligibility service
Years and months of service as a covered participant
Years and months of service as a covered employee

Spouse
A spouse who was married to the participant both on the participant's retirement date and on the measurement date

Surviving spouse A spouse who was married to the participant both on the

participant's retirement date and on the date of his or her death

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, one OOA, and Anthem Health

Care Plus+) and one Kaiser HMO.

Upon attainment of age 65, retirees can choose among two United HealthCare Medicare Advantage PPO plans (PPO #1 and PPO #2), a United HealthCare Medicare Advantage HMO plan, or a Kaiser

Senior Advantage plan.

Under age 65 benefits Comprehensive major medical; deductible, coinsurance, and out-of-

pocket limit varies by plan.

Age 65 and older benefitsSame plan as under age 65 with Medicare carve-out.

Survivor eligibility For survivors of retirees or active employees age 55 with a

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 PPO #2 where they pay the difference in premiums between PPO #3

PPO #2 where they pay the difference in premiums between PPO #2

and PPO #1. Dependents are required to make monthly

contributions of \$35 for any of the Anthem medical plans and PPO #1, \$5 for United Healthcare Advantage, and pay the difference in

premiums between PPO #2 and PPO #1 for PPO #2.

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

Postretirement contributions

Benefits

Retirement on or after age 55 with at least 5 years of service.

Retirees pay the full cost unless retired prior to January 1, 1987.

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.

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

None.

Temporary Deviations

We are not aware of any temporary deviations.

Substantive Plan Provisions for Nonrepresented Participants Who Retire On or After January 1, 2006¹

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, one OOA, and Anthem Health

Care Plus+) and one Kaiser HMO.

Upon attainment of age 65, retirees can choose among two United HealthCare Medicare Advantage PPO plans (PPO #1 and PPO #2), a United HealthCare Medicare Advantage HMO plan, or a Kaiser

Senior Advantage plan.

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.

Comprehensive major medical; deductible, coinsurance, and out-of-

Same plan as under age 65 with Medicare carve-out.

pocket limit varies by plan.

Age 65 and older benefits

Under age 65 benefits

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.

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".

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

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.

Healthcare Reimbursement Account (HRA) under

2018 Voluntary Retirement Enhancement Program (2018 VREP)

Eligibility for VREP Select non-union employees who were retirement eligible and

accepted the offer to retire under the 2018 VREP by July 31, 2018.

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.

Survivor eligibility For survivors of eligible retirees or active participants, eligibility

continues beyond death of retiree or active participant eligible to

retire.

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.

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

A health reimbursement account in the amount of \$100,000 was offered to employees who accepted the 2018 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, 2008¹

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, one OOA, and Anthem Health Care Plus+)

and one Kaiser HMO.

Upon attainment of age 65, retirees can choose among two United HealthCare Medicare Advantage PPO plans (PPO #1 and PPO #2), a United HealthCare Medicare Advantage HMO plan, or a Kaiser

Senior Advantage plan.

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.

Under age 65 benefits Comprehensive major medical; deductible, coinsurance, and out-of-

pocket limit varies by plan.

Age 65 and older benefits Same plan as under age 65 with Medicare carve-out.

Dental Benefits

None.

Life Insurance Benefits

None.

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

None.

Temporary Deviations

We are not aware of any temporary deviations.

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".

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, one OOA, and Anthem Health Care Plus) and one Kaiser HMO.

Upon attainment of age 65, retirees can choose among two United HealthCare Medicare Advantage PPO plans (PPO #1 and PPO #2), a United HealthCare Medicare Advantage HMO plan, or a Kaiser Senior Advantage plan.

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.

Under age 65 benefits

Comprehensive major medical; deductible, coinsurance, and out-of-pocket limit varies by plan.

Age 65 and older benefits

Same plan as under age 65 with Medicare carve-out.

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	25%
Above 65	15%

Postretirement contributions None.

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

Survivor eligibility For survivors of eligible retirees or active participants, eligibility

continues beyond death of retiree or active participant eligible to

retire.

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.

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

None.

Temporary Deviations

We are not aware of any temporary deviations.

Appendix C: Claims costs tables

Average Per Life Gross Medical Claims Costs (before Retiree Contribution, Including Mental Health Claims Costs and Administrative Fees)

All monetary amounts shown in US Dollars

F	All monetary amounts shown	i ili US Dollais	
		Annua	I Amount
	Age	Represented	Non-Represented
Active Participants	50 - 54	7,176	7,379
•	55 - 59	8,616	8,861
	60 - 64	10,662	10,965
	65 - 69	3,645	3,645
	70 - 74	4,036	4,036
	75 - 79	4,343	4,343
	80 - 84	4,475	4,475
	85 - 89	4,467	4,467
	90 - 94	4,184	4,184
	>= 95	3,915	3,915
Retirees and Surviving Spouses	50 - 54	6,974	7,278
• •	55 - 59	8,374	8,739
	60 - 64	10,362	10,814
	65 - 69	3,481	3,481
	70 - 74	3,855	3,855
	75 - 79	4,148	4,148
	80 - 84	4,274	4,274
	85 - 89	4,266	4,266
	90 - 94	3,997	3,997
	>= 95	3,740	3,740

Average Per Life Dental Gross Claims Costs

All monetary amounts shown in US Dollars

	· ··· · · · · · · · · · · · · · · · ·		
		Annual A	Amount
Plan	Age	Retiree	Spouse
Delta	All ages	526	438
MetLife	All ages	136	122

San Diego Gas & Electric Company

Exhibit No. SDG-1-1

"Section 1: Summary of Key Results – Benefit Cost, Assets, & Obligations" – (Excerpt from Exhibit No. SDG-1)

Section 1: Summary of key results

Benefit cost, assets & obligations

	All monetary amounts shown in US D	Oollars	
Fiscal Year Beginning		01/01/2019	01/01/2018
Benefit Cost/ (Income)	Net Periodic Postretirement Benefit Cost/(Income)	(357,752)	(782,967)
	Immediate Recognition of Benefit Cost/(Income) due to Special Events ¹	0	2,541,947
	Total Benefit Cost/(Income)	(357,752)	1,758,980
Measurement Date		01/01/2019	01/01/2018
Plan Assets	Fair Value of Assets (FVA)	171,789,793	194,105,124
	Market-Related Value of Assets (MRVA)	171,789,793	194,105,124
Benefit Obligations	Accumulated Postretirement Benefit Obligation (APBO)	(166,711,326)	(182,067,722)
Funded Status	Funded Status	5,078,467	12,037,402
Accumulated Other Comprehensive	Net Prior Service Cost/(Credit)	3,330,251	7,303,083
(Income)/Loss	Net Loss/(Gain)	(46,713,058)	(56,656,965)
	Total Accumulated Other Comprehensive (Income)/Loss	(43,382,807)	(49,353,882)
Assumptions	Discount Rate	4.30%	3.65%
	Expected Long-term Rate of Return on Plan Assets ²	4.00%/7.00%	4.00%/7.00%
		Pre-65 Post-65	<u>Pre-65</u> <u>Post-65</u>
	Current Health Care Cost Trend Rate	6.50% 4.75%	7.00% 5.00%
	Ultimate Health Care Cost Trend Rate	4.75% 4.50%	5.00% 4.50%
	Year of Ultimate Trend Rate	2025 2022	2022 2022
Participant Data	Census Date	January 1, 2019	January 1, 2018
Plan Reporting (ASC 96	55) for Plan Year Ending	12/31/2018	12/31/2017
	Present value of accumulated benefits	166,711,326	182,067,722
	Market value of assets	171,789,793	194,105,124
	Plan reporting discount rate	4.30%	3.65%
	Census Date	January 1, 2019	January 1, 2018

WillisTowers Watson In I'll II

A health reimbursement account in the amount of \$100,000 was offered to employees who accepted the 2018 Voluntary Retirement Enhancement Program window.

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 7/1/2008) VEBAs.

Employer Contribution	ns	Plan Year 2019	Plan Year 2018
Cash Flow ¹	Funding policy contributions before applying maximum tax-deductible limit	393,017 ²	1,758,980
	Maximum tax-deductible contributions		
	Pay-as-you-go (PAYG)³	393,017	231,479
	Non-Union VEBA	1,012,293	1,074,157
	Union VEBA (pre 7/1/2008)	375,523	335,169
	Union VEBA (post 7/1/2008)	0	0
	401(h)	0	0
	Total	1,780,833	1,640,805
	Expected benefit payments and		
	expenses net of participant contributions	9,577,258	9,277,493

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 7/1/2008) 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 7/1/2008) is designated to pre-fund union health benefits through the end of 2017 and union life insurance benefits, until the trust is exhausted.

Actual 2019 contributions are \$393,017 of PAYG and no trust contributions.

³ 2018 is actual and 2019 is expected benefits paid from Company assets.

San Diego Gas & Electric Company

Exhibit No. SDG-2

Derivation of 2019 Costs Used to Support the Annual FERC PBOP Costs for the TO5 Cycle 3 Informational Filing

San Diego Gas & Electric Company Derivation of 2019 Costs Used to Support the Annual FERC PBOP's Filing for the TO5 Cycle 3 Informational Filing

		V	B	
Line No.	Amounts Embedded in Account 926 - Employee Pension & Benefits	Reference	Base Period / True-Up Period 2019	Line No.
1				1
7	PBOP Cost Per Exhibit No. SDG-1, Section 1, Pages 3-4 ¹			7
\mathfrak{S}				ю
4	Total Company Contribution to PBOP	Line 2	1	4
5				S
9	Adjustments:			9
7	Capitalized Costs (reflects SDG&E's electric and gas capital costs)	Line 4 * 44.20 %	1	7
∞	Billings to SCG for Shared Services - (Capital & O&M)	Line 4 * 4.89%	1	∞
6	Billings to Others for Shared Services - Unregulated Affiliates	Line 4 * 0.29 %	1	6
10	Billings from SCG for Shared Services - (O&M) ²		1	10
1	Net Adjustments	Line 7 to Line 10	1	11
12				12
13	Net PBOP Cost after Capital & Billings - Electric & Gas	Line 4 + Line 11	1	13
14				14
15	SDG&E Account 926 for PBOP Expense - Electric Portion ³	Line 13 * 72.22 %		15
16				16
17	Transmission Wage and Salary Factor *		19.15%	17
18				18
19	Allocated to SDG&E's Electric Transmission Cost of Service	Line 15 * Line 17		19
20				20

the maximum tax-deductible limit. The standard rule is that the allowable recoverable PBOP funding is the lesser of the Net Periodic Cost (NPC) or the IRS Maximum Tax Deductible Contribution (Max Tax). In 2019, SDG&E's NPC is negative (in an income position rather than cost in the amount of \$357,752) compared to the Max Tax of \$1,780,833. 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 As such, the amount of SDG&E-specific PBOP total contribution cost is zero for 2019.

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. 7

The total PBOP cost shown in Column B, Line 15 will be the amount reflected in the TO5 Cycle 3 Informational Filing for A&G expenses line for FERC account 926 in the 2019 Base Period and the 12-Month True-Up Period (Jan - Dec 2019). See details in Workpaper for Exhibit SDG-2. 3

The transmission wage & salary allocation factor for the 2019 Base Period and 12-Month True-Up Period from Jan - Dec 2019 is 19.15%.

San Diego Gas & Electric Company

Exhibit No. SDG-2-1

Work papers for Exhibit SDG-2

San Diego Gas & Electric Company
2019 Monthly Electric PBOP Cost
Used to Derive Account 926 for PBOP Expense - Electric Portion
For the TO5 Cycle 3 - 2019 Base Period and
True-Up Period (Jan to Dec 2019)

		Recorded	
Line No	Period	Up Period 1	Line No
1	January	-	1
2	February	•	2
3	March	57,390	3
4	April	(57,390)	4
5	May	(0)	5
9	June	(0)	9
7	July	(0)	7
∞	August	(0)	∞
6	September		6
10	October	1	10
11	November	1	11
12	December	1	12
13			13
14	Total	(0)	14

The monthly recorded 2019 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.