

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 2017

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission File No.	Exact Name of Registrants as Specified in their Charters, Address and Telephone Number	States of Incorporation	I.R.S. Employer Identification Nos.	Former name, former address and former fiscal year, if changed since last report
1-14201	SEMPRA ENERGY 488 8 th Avenue San Diego, California 92101 (619) 696-2000	California	33-0732627	No change
1-03779	SAN DIEGO GAS & ELECTRIC COMPANY 8326 Century Park Court San Diego, California 92123 (619) 696-2000	California	95-1184800	No change
1-01402	SOUTHERN CALIFORNIA GAS COMPANY 555 West Fifth Street Los Angeles, California 90013 (213) 244-1200	California	95-1240705	No change

Indicate by check mark whether the registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Sempra Energy	Yes	<u> X </u>	No	<u> </u>
San Diego Gas & Electric Company	Yes	<u> X </u>	No	<u> </u>
Southern California Gas Company	Yes	<u> X </u>	No	<u> </u>

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

	Large accelerated filer	Accelerated filer	Non-accelerated filer	Smaller reporting company	Emerging growth company
Sempra Energy	<u> X </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
San Diego Gas & Electric Company	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> </u>
Southern California Gas Company	<u> </u>	<u> </u>	<u> X </u>	<u> </u>	<u> </u>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Sempra Energy	Yes	<u> </u>	No	<u> </u>
San Diego Gas & Electric Company	Yes	<u> </u>	No	<u> </u>
Southern California Gas Company	Yes	<u> </u>	No	<u> </u>

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Sempra Energy	Yes	<u> </u>	No	<u> X </u>
San Diego Gas & Electric Company	Yes	<u> </u>	No	<u> X </u>
Southern California Gas Company	Yes	<u> </u>	No	<u> X </u>

Indicate the number of shares outstanding of each of the issuers’ classes of common stock, as of the latest practicable date.

Common stock outstanding on July 28, 2017:

Sempra Energy	251,077,626 shares
San Diego Gas & Electric Company	Wholly owned by Enova Corporation, which is wholly owned by Sempra Energy
Southern California Gas Company	Wholly owned by Pacific Enterprises, which is wholly owned by Sempra Energy

SEMPRA ENERGY FORM 10-Q
SAN DIEGO GAS & ELECTRIC COMPANY FORM 10-Q
SOUTHERN CALIFORNIA GAS COMPANY FORM 10-Q
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This combined Form 10-Q is separately filed by Sempra Energy, San Diego Gas & Electric Company and Southern California Gas Company. Information contained herein relating to any individual company is filed by such company on its own behalf. Each company makes representations only as to itself and makes no other representation whatsoever as to any other company.

You should read this report in its entirety as it pertains to each respective reporting company. No one section of the report deals with all aspects of the subject matter. Separate Part I – Item 1 sections are provided for each reporting company, except for the Notes to Condensed Consolidated Financial Statements. The Notes to Condensed Consolidated Financial Statements for all of the reporting companies are combined. All Items other than Part I – Item 1 are combined for the reporting companies.

The following terms and abbreviations appearing in the text of this report have the meanings indicated below.

GLOSSARY

2016 GRC FD	final decision in the California Utilities' 2016 General Rate Case
AFUDC	allowance for funds used during construction
Annual Report	Annual Report on Form 10-K for the year ended December 31, 2016
AOCI	Accumulated Other Comprehensive Income (Loss)
ASU	Accounting Standards Update
Bay Gas	Bay Gas Storage Company, Ltd.
Bcf	billion cubic feet
Blade	Blade Energy Partners
CAISO	California Independent System Operator
California Utilities	San Diego Gas & Electric Company and Southern California Gas Company, collectively
Cameron LNG JV	Cameron LNG Holdings, LLC
CARB	California Air Resources Board
CCA	Community Choice Aggregation
CCM	cost of capital adjustment mechanism
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFCA	Core Fixed Cost Account
CFE	Comisión Federal de Electricidad (Federal Electricity Commission in Mexico)
Chilquinta Energía	Chilquinta Energía S.A. and its subsidiaries
COFECE	Comisión Federal de Competencia Económica (Mexican Competition Commission)
CPED	Consumer Protection and Enforcement Division
CPI	Consumer Price Index
CPUC	California Public Utilities Commission
CRE	Comisión Reguladora de Energía (Energy Regulatory Commission in Mexico)
CRR	congestion revenue right
DA	Direct Access
DEN	Ductos y Energéticos del Norte, S. de R.L. de C.V.
DOE	U.S. Department of Energy
DOGGR	California Department of Conservation's Division of Oil, Gas, and Geothermal Resources
DPH	Los Angeles County Department of Public Health
Ecogas	Ecogas México, S. de R.L. de C.V.
Edison	Southern California Edison Company
Eletrans	Eletrans S.A., Eletrans II S.A. and Eletrans III S.A., collectively
EnergySouth	EnergySouth Inc.
EPA	U.S. Environmental Protection Agency
EPC	engineering, procurement and construction
EPS	earnings per common share
ERRA	Energy Resource Recovery Account
FERC	Federal Energy Regulatory Commission
FTA	Free Trade Agreement
GCIM	Gas Cost Incentive Mechanism
GdC	Gasoductos de Chihuahua, S. de R.L. de C.V.
GHG	greenhouse gas
GRC	General Rate Case
HLBV	hypothetical liquidation at book value
HMRC	United Kingdom's Revenue and Customs Department
IEnova	Infraestructura Energética Nova, S.A.B. de C.V.
IEnova Pipelines	IEnova Pipelines, S. de R.L. de C.V.
IMG	Infraestructura Marina del Golfo
IRS	Internal Revenue Service
ISFSI	independent spent fuel storage installation
JP Morgan	J.P. Morgan Chase & Co.
kV	kilovolt
LA Storage	LA Storage, LLC

GLOSSARY (CONTINUED)

LNG	liquefied natural gas
LPG	liquid petroleum gas
Luz del Sur	Luz del Sur S.A.A. and its subsidiaries
MHI	Mitsubishi Heavy Industries, Ltd., Mitsubishi Nuclear Energy Systems, Inc., and Mitsubishi Heavy Industries America, Inc., collectively
Mississippi Hub	Mississippi Hub, LLC
MMBtu	million British thermal units (of natural gas)
Mobile Gas	Mobile Gas Service Corporation
Mtpa	million tonnes per annum
MW	megawatt
MWh	megawatt hour
NDT	Nuclear Decommissioning Trusts
NEIL	Nuclear Electric Insurance Limited
NEPA	National Environmental Policy Act
NRC	Nuclear Regulatory Commission
OCI	Other Comprehensive Income (Loss)
OII	Order Instituting Investigation
O&M	operation and maintenance expense
OMEC	Otay Mesa Energy Center
OMEC LLC	Otay Mesa Energy Center LLC
ORA	CPUC Office of Ratepayer Advocates
Otay Mesa VIE	OMEC LLC VIE
PEMEX	Petróleos Mexicanos (Mexican state-owned oil company)
PG&E	Pacific Gas and Electric Company
PHMSA	Pipeline and Hazardous Materials Safety Administration
PP&E	property, plant and equipment
PPA	power purchase agreement
PSEP	Pipeline Safety Enhancement Plan
RAMP	Risk Assessment Mitigation Phase
RBS	The Royal Bank of Scotland plc
RBS SEE	RBS Sempra Energy Europe
RBS Sempra Commodities	RBS Sempra Commodities LLP
Rockies Express	Rockies Express Pipeline LLC
ROE	return on equity
RSA	restricted stock award
RSU	restricted stock unit
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SDCA	United States District Court for the Southern District of California
SDG&E	San Diego Gas & Electric Company
SEC	United States Securities and Exchange Commission
SEDATU	Secretaría de Desarrollo Agrario, Territorial y Urbano (Mexican agency in charge of agriculture, land and urban development)
SFP	secondary financial protection
SoCalGas	Southern California Gas Company
SONGS	San Onofre Nuclear Generating Station
SONGS OII	CPUC's Order Instituting Investigation into the SONGS Outage
TdM	Termoeléctrica de Mexicali
TransCanada	TransCanada Corporation
Tribunal	International Chamber of Commerce International Court of Arbitration Tribunal
TURN	The Utility Reform Network
U.S. GAAP	accounting principles generally accepted in the United States of America
Valero Energy	Valero Energy Corporation
VAT	value-added tax
Ventika	Ventika, S.A.P.I. de C.V. and Ventika II, S.A.P.I. de C.V., collectively
VIE	variable interest entity
Willmut Gas	Willmut Gas Company

INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

We make statements in this report that are not historical fact and constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based upon assumptions with respect to the future, involve risks and uncertainties, and are not guarantees of performance. These forward-looking statements represent our estimates and assumptions only as of the filing date of this report. We assume no obligation to update or revise any forward-looking statement as a result of new information, future events or other factors.

In this report, when we use words such as “believes,” “expects,” “anticipates,” “plans,” “estimates,” “projects,” “forecasts,” “contemplates,” “assumes,” “depends,” “should,” “could,” “would,” “will,” “confident,” “may,” “can,” “potential,” “possible,” “proposed,” “target,” “pursue,” “outlook,” “maintain,” or similar expressions, or when we discuss our guidance, strategy, plans, goals, opportunities, projections, initiatives, objectives or intentions, we are making forward-looking statements.

Factors, among others, that could cause our actual results and future actions to differ materially from those described in forward-looking statements include

- actions and the timing of actions, including decisions, new regulations, and issuances of permits and other authorizations by the CPUC, DOE, DOGGR, FERC, EPA, PHMSA, DPH, states, cities and counties, and other regulatory and governmental bodies in the United States and other countries in which we operate;
- the timing and success of business development efforts and construction projects, including risks in obtaining or maintaining permits and other authorizations on a timely basis, risks in completing construction projects on schedule and on budget, and risks in obtaining the consent and participation of partners;
- the resolution of civil and criminal litigation and regulatory investigations;
- deviations from regulatory precedent or practice that result in a reallocation of benefits or burdens among shareholders and ratepayers; modifications of settlements; and delays in, or disallowance or denial of, regulatory agency authorizations to recover costs in rates from customers (including with respect to regulatory assets associated with the SONGS facility and 2007 wildfires) or regulatory agency approval for projects required to enhance safety and reliability;
- the availability of electric power, natural gas and liquefied natural gas, and natural gas pipeline and storage capacity, including disruptions caused by failures in the transmission grid, moratoriums or limitations on the withdrawal or injection of natural gas from or into storage facilities, and equipment failures;
- changes in energy markets; volatility in commodity prices; moves to reduce or eliminate reliance on natural gas; and the impact on the value of our investment in natural gas storage and related assets from low natural gas prices, low volatility of natural gas prices and the inability to procure favorable long-term contracts for storage services;
- risks posed by actions of third parties who control the operations of our investments, and risks that our partners or counterparties will be unable or unwilling to fulfill their contractual commitments;
- weather conditions, natural disasters, accidents, equipment failures, computer system outages, explosions, terrorist attacks and other events that disrupt our operations, damage our facilities and systems, cause the release of greenhouse gases, radioactive materials and harmful emissions, cause wildfires and subject us to third-party liability for property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits) or may be disputed by insurers;
- cybersecurity threats to the energy grid, storage and pipeline infrastructure, the information and systems used to operate our businesses and the confidentiality of our proprietary information and the personal information of our customers and employees;
- capital markets and economic conditions, including the availability of credit and the liquidity of our investments; and fluctuations in inflation, interest and currency exchange rates and our ability to effectively hedge the risk of such fluctuations;
- changes in the tax code as a result of potential federal tax reform, such as the elimination of the deduction for interest and non-deductibility of all, or a portion of, the cost of imported materials, equipment and commodities;
- changes in foreign and domestic trade policies and laws, including border tariffs, revisions to favorable international trade agreements, and changes that make our exports less competitive or otherwise restrict our ability to export;
- the ability to win competitively bid infrastructure projects against a number of strong and aggressive competitors;
- expropriation of assets by foreign governments and title and other property disputes;
- the impact on reliability of SDG&E’s electric transmission and distribution system due to increased amount and variability of power supply from renewable energy sources;
- the impact on competitive customer rates due to the growth in distributed and local power generation and the corresponding decrease in demand for power delivered through SDG&E’s electric transmission and distribution system and from possible

departing retail load resulting from customers transferring to Direct Access and Community Choice Aggregation or other forms of distributed and local power generation and the potential risk of nonrecovery for stranded assets and contractual obligations; and

- other uncertainties, some of which may be difficult to predict and are beyond our control.

We caution you not to rely unduly on any forward-looking statements. You should review and consider carefully the risks, uncertainties and other factors that affect our business as described herein and in our most recent Annual Report and other reports that we file with the SEC.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

SEMPRA ENERGY

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in millions, except per share amounts)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016(1)	2017	2016(1)
	(unaudited)			
REVENUES				
Utilities	\$ 2,197	\$ 1,994	\$ 4,895	\$ 4,436
Energy-related businesses	336	162	669	342
Total revenues	2,533	2,156	5,564	4,778
EXPENSES AND OTHER INCOME				
Utilities:				
Cost of electric fuel and purchased power	(553)	(561)	(1,080)	(1,076)
Cost of natural gas	(228)	(183)	(713)	(494)
Energy-related businesses:				
Cost of natural gas, electric fuel and purchased power	(62)	(62)	(129)	(118)
Other cost of sales	38	(226)	16	(261)
Operation and maintenance	(731)	(706)	(1,445)	(1,406)
Depreciation and amortization	(368)	(314)	(728)	(642)
Franchise fees and other taxes	(101)	(96)	(211)	(207)
Impairment losses	(71)	(21)	(71)	(22)
Equity earnings (losses), before income tax	18	14	21	(8)
Other income, net	91	23	260	72
Interest income	8	6	14	12
Interest expense	(159)	(142)	(328)	(285)
Income (loss) before income taxes and equity earnings (losses) of certain unconsolidated subsidiaries	415	(112)	1,170	343
Income tax (expense) benefit	(167)	106	(462)	(2)
Equity earnings (losses), net of income tax	—	33	(8)	50
Net income	248	27	700	391
Losses (earnings) attributable to noncontrolling interests	12	(10)	1	(21)
Preferred dividends of subsidiary	(1)	(1)	(1)	(1)
Earnings	\$ 259	\$ 16	\$ 700	\$ 369
Basic earnings per common share	\$ 1.03	\$ 0.06	\$ 2.79	\$ 1.48
Weighted-average number of shares outstanding, basic (thousands)	251,447	250,096	251,290	249,915
Diluted earnings per common share	\$ 1.03	\$ 0.06	\$ 2.77	\$ 1.47
Weighted-average number of shares outstanding, diluted (thousands)	252,822	252,036	252,609	251,775
Dividends declared per share of common stock	\$ 0.83	\$ 0.75	\$ 1.65	\$ 1.51

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016.
See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Dollars in millions)

	Sempra Energy shareholders' equity				Total
	Pretax amount	Income tax (expense) benefit	Net-of-tax amount	Noncontrolling interests (after-tax)	
	Three months ended June 30, 2017 and 2016				
(unaudited)					
2017:					
Net income (loss)	\$ 427	\$ (167)	\$ 260	\$ (12)	\$ 248
Other comprehensive income (loss):					
Foreign currency translation adjustments	3	—	3	2	5
Financial instruments	(43)	17	(26)	(4)	(30)
Pension and other postretirement benefits	2	(1)	1	—	1
Total other comprehensive loss	(38)	16	(22)	(2)	(24)
Comprehensive income (loss)	389	(151)	238	(14)	224
Preferred dividends of subsidiary	(1)	—	(1)	—	(1)
Comprehensive income (loss), after preferred dividends of subsidiary	\$ 388	\$ (151)	\$ 237	\$ (14)	\$ 223
2016:					
Net (loss) income	\$ (89)	\$ 106	\$ 17	\$ 10	\$ 27
Other comprehensive income (loss):					
Foreign currency translation adjustments	11	—	11	—	11
Financial instruments	(78)	35	(43)	1	(42)
Pension and other postretirement benefits	2	(1)	1	—	1
Total other comprehensive (loss) income	(65)	34	(31)	1	(30)
Comprehensive (loss) income	(154)	140	(14)	11	(3)
Preferred dividends of subsidiary	(1)	—	(1)	—	(1)
Comprehensive (loss) income, after preferred dividends of subsidiary	\$ (155)	\$ 140	\$ (15)	\$ 11	\$ (4)
Six months ended June 30, 2017 and 2016					
(unaudited)					
2017:					
Net income (loss)	\$ 1,163	\$ (462)	\$ 701	\$ (1)	\$ 700
Other comprehensive income (loss):					
Foreign currency translation adjustments	49	—	49	11	60
Financial instruments	(36)	14	(22)	(2)	(24)
Pension and other postretirement benefits	5	(2)	3	—	3
Total other comprehensive income	18	12	30	9	39
Comprehensive income	1,181	(450)	731	8	739
Preferred dividends of subsidiary	(1)	—	(1)	—	(1)
Comprehensive income, after preferred dividends of subsidiary	\$ 1,180	\$ (450)	\$ 730	\$ 8	\$ 738
2016(1):					
Net income	\$ 372	\$ (2)	\$ 370	\$ 21	\$ 391
Other comprehensive income (loss):					
Foreign currency translation adjustments	79	—	79	5	84
Financial instruments	(237)	110	(127)	(4)	(131)
Pension and other postretirement benefits	4	(2)	2	—	2
Total other comprehensive (loss) income	(154)	108	(46)	1	(45)
Comprehensive income	218	106	324	22	346
Preferred dividends of subsidiary	(1)	—	(1)	—	(1)
Comprehensive income, after preferred dividends of subsidiary	\$ 217	\$ 106	\$ 323	\$ 22	\$ 345

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016. See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY
CONDENSED CONSOLIDATED BALANCE SHEETS

(Dollars in millions)

	June 30, 2017	December 31, 2016(1)
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 223	\$ 349
Restricted cash	70	66
Accounts receivable – trade, net	1,139	1,390
Accounts receivable – other, net	165	164
Due from unconsolidated affiliates	26	26
Income taxes receivable	110	43
Inventories	239	258
Regulatory balancing accounts – undercollected	261	259
Fixed-price contracts and other derivatives	186	83
Assets held for sale	109	201
Other	239	271
Total current assets	<u>2,767</u>	<u>3,110</u>
Other assets:		
Restricted cash	17	10
Due from unconsolidated affiliates	373	201
Regulatory assets	3,569	3,414
Nuclear decommissioning trusts	1,029	1,026
Investments	2,134	2,097
Goodwill	2,379	2,364
Other intangible assets	541	548
Dedicated assets in support of certain benefit plans	427	430
Insurance receivable for Aliso Canyon costs	554	606
Deferred income taxes	166	234
Sundry	859	815
Total other assets	<u>12,048</u>	<u>11,745</u>
Property, plant and equipment:		
Property, plant and equipment	45,704	43,624
Less accumulated depreciation and amortization	(11,143)	(10,693)
Property, plant and equipment, net (\$335 and \$354 at June 30, 2017 and December 31, 2016, respectively, related to VIE)	<u>34,561</u>	<u>32,931</u>
Total assets	<u>\$ 49,376</u>	<u>\$ 47,786</u>

(1) Derived from audited financial statements.

See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY
CONDENSED CONSOLIDATED BALANCE SHEETS (CONTINUED)

(Dollars in millions)

	June 30, 2017	December 31, 2016(1)
	(unaudited)	
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term debt	\$ 1,826	\$ 1,779
Accounts payable – trade	1,054	1,346
Accounts payable – other	113	130
Due to unconsolidated affiliates	11	11
Dividends and interest payable	339	319
Accrued compensation and benefits	314	409
Regulatory balancing accounts – overcollected	204	122
Current portion of long-term debt	1,287	913
Fixed-price contracts and other derivatives	109	83
Customer deposits	158	158
Reserve for Aliso Canyon costs	63	53
Liabilities held for sale	47	47
Other	538	557
Total current liabilities	6,063	5,927
Long-term debt (\$289 and \$293 at June 30, 2017 and December 31, 2016, respectively, related to VIE)	15,000	14,429
Deferred credits and other liabilities:		
Customer advances for construction	146	152
Pension and other postretirement benefit plan obligations, net of plan assets	1,240	1,208
Deferred income taxes	4,191	3,745
Deferred investment tax credits	27	28
Regulatory liabilities arising from removal obligations	2,746	2,697
Asset retirement obligations	2,469	2,431
Fixed-price contracts and other derivatives	330	405
Deferred credits and other	1,559	1,523
Total deferred credits and other liabilities	12,708	12,189
Commitments and contingencies (Note 11)		
Equity:		
Preferred stock (50 million shares authorized; none issued)	—	—
Common stock (750 million shares authorized; 251 million and 250 million shares outstanding at June 30, 2017 and December 31, 2016, respectively; no par value)	3,046	2,982
Retained earnings	11,004	10,717
Accumulated other comprehensive income (loss)	(718)	(748)
Total Sempra Energy shareholders' equity	13,332	12,951
Preferred stock of subsidiary	20	20
Other noncontrolling interests	2,253	2,270
Total equity	15,605	15,241
Total liabilities and equity	\$ 49,376	\$ 47,786

(1) Derived from audited financial statements.

See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in millions)

	Six months ended June 30,	
	2017	2016(1)
	(unaudited)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	\$ 700	\$ 391
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	728	642
Deferred income taxes and investment tax credits	411	(76)
Impairment losses	71	22
Equity earnings, net	(13)	(42)
Fixed-price contracts and other derivatives	(142)	41
Other	(19)	45
Net change in other working capital components	138	167
Insurance receivable for Aliso Canyon costs	52	(354)
Changes in other assets	(88)	(67)
Changes in other liabilities	51	147
Net cash provided by operating activities	<u>1,889</u>	<u>916</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Expenditures for property, plant and equipment	(1,802)	(2,006)
Expenditures for investments	(97)	(46)
Proceeds from sale of assets	4	443
Distributions from investments	18	12
Purchases of nuclear decommissioning and other trust assets	(823)	(206)
Proceeds from sales by nuclear decommissioning and other trusts	823	204
Increases in restricted cash	(194)	(32)
Decreases in restricted cash	185	44
Advances to unconsolidated affiliates	(183)	(9)
Repayments of advances to unconsolidated affiliates	2	9
Other	—	(6)
Net cash used in investing activities	<u>(2,067)</u>	<u>(1,593)</u>
CASH FLOWS FROM FINANCING ACTIVITIES		
Common dividends paid	(368)	(335)
Preferred dividends paid by subsidiary	(1)	(1)
Issuances of common stock	28	29
Repurchases of common stock	(14)	(54)
Issuances of debt (maturities greater than 90 days)	1,932	1,384
Payments on debt (maturities greater than 90 days)	(1,006)	(986)
(Decrease) increase in short-term debt, net	(493)	865
Net distributions to noncontrolling interests	(25)	(10)
Other	(9)	(10)
Net cash provided by financing activities	<u>44</u>	<u>882</u>
Effect of exchange rate changes on cash and cash equivalents	<u>8</u>	<u>8</u>
(Decrease) increase in cash and cash equivalents	(126)	213
Cash and cash equivalents, January 1	<u>349</u>	<u>403</u>
Cash and cash equivalents, June 30	<u>\$ 223</u>	<u>\$ 616</u>

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016.

See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)

(Dollars in millions)

	Six months ended June 30,	
	2017	2016(1)
	(unaudited)	
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Interest payments, net of amounts capitalized	\$ 301	\$ 279
Income tax payments, net of refunds	109	73
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES		
Accrued capital expenditures	\$ 428	\$ 541
Increase in capital lease obligations for investment in property, plant and equipment	502	—
Equitization of note receivable due from unconsolidated affiliate	19	—
Common dividends issued in stock	27	27
Dividends declared but not paid	214	195

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016.
See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in millions)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016(1)
	(unaudited)			
Operating revenues				
Electric	\$ 946	\$ 897	\$ 1,821	\$ 1,740
Natural gas	112	95	294	243
Total operating revenues	1,058	992	2,115	1,983
Operating expenses				
Cost of electric fuel and purchased power	316	314	577	562
Cost of natural gas	38	25	103	64
Operation and maintenance	237	266	464	512
Depreciation and amortization	166	158	329	317
Franchise fees and other taxes	60	59	123	122
Total operating expenses	817	822	1,596	1,577
Operating income	241	170	519	406
Other income, net	15	13	33	27
Interest expense	(49)	(48)	(98)	(96)
Income before income taxes	207	135	454	337
Income tax expense	(54)	(48)	(144)	(113)
Net income	153	87	310	224
(Earnings) losses attributable to noncontrolling interest	(4)	13	(6)	12
Earnings attributable to common shares	\$ 149	\$ 100	\$ 304	\$ 236

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016.
See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in millions)

	SDG&E shareholder's equity				Noncontrolling interest (after-tax)	Total
	Pretax amount	Income tax expense	Net-of-tax amount			
	Three months ended June 30, 2017 and 2016					
(unaudited)						
2017:						
Net income	\$ 203	\$ (54)	\$ 149	\$ 4	\$	153
Other comprehensive income (loss):						
Financial instruments	—	—	—	1		1
Total other comprehensive income	—	—	—	1		1
Comprehensive income	\$ 203	\$ (54)	\$ 149	\$ 5	\$	154
2016:						
Net income (loss)	\$ 148	\$ (48)	\$ 100	\$ (13)	\$	87
Other comprehensive income (loss):						
Financial instruments	—	—	—	1		1
Total other comprehensive income	—	—	—	1		1
Comprehensive income (loss)	\$ 148	\$ (48)	\$ 100	\$ (12)	\$	88
Six months ended June 30, 2017 and 2016						
(unaudited)						
2017:						
Net income	\$ 448	\$ (144)	\$ 304	\$ 6	\$	310
Other comprehensive income (loss):						
Financial instruments	—	—	—	4		4
Total other comprehensive income	—	—	—	4		4
Comprehensive income	\$ 448	\$ (144)	\$ 304	\$ 10	\$	314
2016(1):						
Net income (loss)	\$ 349	\$ (113)	\$ 236	\$ (12)	\$	224
Other comprehensive income (loss):						
Financial instruments	—	—	—	(1)		(1)
Total other comprehensive loss	—	—	—	(1)		(1)
Comprehensive income (loss)	\$ 349	\$ (113)	\$ 236	\$ (13)	\$	223

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016.
See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS

(Dollars in millions)

	June 30, 2017	December 31, 2016(1)
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 12	\$ 8
Restricted cash	1	11
Accounts receivable – trade, net	368	354
Accounts receivable – other, net	20	17
Due from unconsolidated affiliates	2	4
Income taxes receivable	98	122
Inventories	89	80
Prepaid expenses	23	59
Regulatory balancing accounts – net undercollected	261	259
Regulatory assets	104	81
Fixed-price contracts and other derivatives	29	58
Other	19	19
Total current assets	1,026	1,072
Other assets:		
Restricted cash	13	1
Deferred income taxes recoverable in rates	1,059	1,014
Other regulatory assets	1,004	998
Nuclear decommissioning trusts	1,029	1,026
Sundry	362	358
Total other assets	3,467	3,397
Property, plant and equipment:		
Property, plant and equipment	18,996	17,844
Less accumulated depreciation and amortization	(4,781)	(4,594)
Property, plant and equipment, net (\$335 and \$354 at June 30, 2017 and December 31, 2016, respectively, related to VIE)	14,215	13,250
Total assets	\$ 18,708	\$ 17,719

(1) Derived from audited financial statements.

See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS (CONTINUED)

(Dollars in millions)

	June 30, 2017	December 31, 2016(1)
	(unaudited)	
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term debt	\$ 5	\$ —
Accounts payable	433	460
Due to unconsolidated affiliates	26	15
Interest payable	41	40
Accrued compensation and benefits	77	121
Accrued franchise fees	37	43
Current portion of long-term debt	57	191
Asset retirement obligations	83	79
Fixed-price contracts and other derivatives	61	61
Customer deposits	77	76
Other	54	82
Total current liabilities	<u>951</u>	<u>1,168</u>
Long-term debt (\$289 and \$293 at June 30, 2017 and December 31, 2016, respectively, related to VIE)	<u>5,523</u>	<u>4,658</u>
Deferred credits and other liabilities:		
Customer advances for construction	52	52
Pension and other postretirement benefit plan obligations, net of plan assets	244	232
Deferred income taxes	2,980	2,829
Deferred investment tax credits	17	16
Regulatory liabilities arising from removal obligations	1,782	1,725
Asset retirement obligations	758	751
Fixed-price contracts and other derivatives	182	189
Deferred credits and other	415	421
Total deferred credits and other liabilities	<u>6,430</u>	<u>6,215</u>
Commitments and contingencies (Note 11)		
Equity:		
Preferred stock (45 million shares authorized; none issued)	—	—
Common stock (255 million shares authorized; 117 million shares outstanding; no par value)	1,338	1,338
Retained earnings	4,440	4,311
Accumulated other comprehensive income (loss)	(8)	(8)
Total SDG&E shareholder's equity	<u>5,770</u>	<u>5,641</u>
Noncontrolling interest	34	37
Total equity	<u>5,804</u>	<u>5,678</u>
Total liabilities and equity	<u>\$ 18,708</u>	<u>\$ 17,719</u>

(1) Derived from audited financial statements.

See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in millions)

	Six months ended June 30,	
	2017	2016(1)
	(unaudited)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	\$ 310	\$ 224
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	329	317
Deferred income taxes and investment tax credits	98	19
Fixed-price contracts and other derivatives	(1)	(1)
Other	(20)	(21)
Net change in other working capital components	6	—
Changes in other assets	(49)	(39)
Changes in other liabilities	17	9
Net cash provided by operating activities	<u>690</u>	<u>508</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Expenditures for property, plant and equipment	(763)	(602)
Purchases of nuclear decommissioning trust assets	(823)	(203)
Proceeds from sales by nuclear decommissioning trusts	823	204
Increases in restricted cash	(20)	(21)
Decreases in restricted cash	18	24
Decrease (increase) in loans to affiliate, net	31	(172)
Net cash used in investing activities	<u>(734)</u>	<u>(770)</u>
CASH FLOWS FROM FINANCING ACTIVITIES		
Common dividends paid	(175)	—
Issuances of debt (maturities greater than 90 days)	398	498
Payments on debt (maturities greater than 90 days)	(163)	(128)
Increase (decrease) in short-term debt, net	5	(114)
Capital distributions made by VIE, net	(13)	(3)
Debt issuance costs	(4)	(3)
Net cash provided by financing activities	<u>48</u>	<u>250</u>
Increase (decrease) in cash and cash equivalents	4	(12)
Cash and cash equivalents, January 1	8	20
Cash and cash equivalents, June 30	<u>\$ 12</u>	<u>\$ 8</u>
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Interest payments, net of amounts capitalized	\$ 94	\$ 92
Income tax payments, net	13	125
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES		
Accrued capital expenditures	\$ 152	\$ 124
Increase in capital lease obligations for investment in property, plant and equipment	500	—
Dividends declared but not paid	—	175

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016.
See Notes to Condensed Consolidated Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED STATEMENTS OF OPERATIONS

(Dollars in millions)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016(1)
	(unaudited)			
Operating revenues	\$ 770	\$ 617	\$ 2,011	\$ 1,650
Operating expenses				
Cost of natural gas	179	147	587	400
Operation and maintenance	336	318	689	644
Depreciation and amortization	126	112	252	234
Franchise fees and other taxes	34	30	73	67
Impairment losses	—	21	—	22
Total operating expenses	675	628	1,601	1,367
Operating income (loss)	95	(11)	410	283
Other income, net	9	6	20	16
Interest expense	(26)	(24)	(51)	(46)
Income (loss) before income taxes	78	(29)	379	253
Income tax (expense) benefit	(19)	29	(117)	(54)
Net income	59	—	262	199
Preferred dividend requirements	(1)	(1)	(1)	(1)
Earnings (losses) attributable to common shares	\$ 58	\$ (1)	\$ 261	\$ 198

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016.

See Notes to Condensed Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in millions)

	Pretax amount	Income tax (expense) benefit	Net-of-tax amount
Three months ended June 30, 2017 and 2016 (unaudited)			
2017:			
Net income	\$ 78	\$ (19)	\$ 59
Other comprehensive income (loss):			
Pension and other postretirement benefits	1	—	1
Total other comprehensive income	1	—	1
Comprehensive income	\$ 79	\$ (19)	\$ 60
2016:			
Net loss/Comprehensive loss	\$ (29)	\$ 29	\$ —
Six months ended June 30, 2017 and 2016 (unaudited)			
2017:			
Net income	\$ 379	\$ (117)	\$ 262
Other comprehensive income (loss):			
Pension and other postretirement benefits	1	—	1
Total other comprehensive income	1	—	1
Comprehensive income	\$ 380	\$ (117)	\$ 263
2016(1):			
Net income/Comprehensive income	\$ 253	\$ (54)	\$ 199

*(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016.
See Notes to Condensed Financial Statements.*

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED BALANCE SHEETS

(Dollars in millions)

	June 30, 2017	December 31, 2016(1)
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 38	\$ 12
Accounts receivable – trade, net	377	608
Accounts receivable – other, net	67	77
Due from unconsolidated affiliates	56	8
Income taxes receivable	6	2
Inventories	45	58
Regulatory assets	8	8
Other	48	63
Total current assets	645	836
Other assets:		
Regulatory assets arising from pension obligations	757	742
Other regulatory assets	679	589
Insurance receivable for Aliso Canyon costs	554	606
Sundry	439	399
Total other assets	2,429	2,336
Property, plant and equipment:		
Property, plant and equipment	15,889	15,344
Less accumulated depreciation and amortization	(5,220)	(5,092)
Property, plant and equipment, net	10,669	10,252
Total assets	\$ 13,743	\$ 13,424

(1) Derived from audited financial statements.
See Notes to Condensed Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED BALANCE SHEETS (CONTINUED)

(Dollars in millions)

	June 30, 2017	December 31, 2016(1)
	(unaudited)	
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Short-term debt	\$ —	\$ 62
Accounts payable – trade	330	481
Accounts payable – other	69	74
Due to unconsolidated affiliates	1	28
Accrued compensation and benefits	124	150
Regulatory balancing accounts – net overcollected	204	122
Current portion of long-term debt	501	—
Customer deposits	74	76
Reserve for Aliso Canyon costs	63	53
Other	205	195
Total current liabilities	<u>1,571</u>	<u>1,241</u>
Long-term debt	<u>2,484</u>	<u>2,982</u>
Deferred credits and other liabilities:		
Customer advances for construction	94	99
Pension obligation, net of plan assets	777	762
Deferred income taxes	1,875	1,709
Deferred investment tax credits	11	12
Regulatory liabilities arising from removal obligations	964	972
Asset retirement obligations	1,643	1,616
Deferred credits and other	552	521
Total deferred credits and other liabilities	<u>5,916</u>	<u>5,691</u>
Commitments and contingencies (Note 11)		
Shareholders' equity:		
Preferred stock (11 million shares authorized; 1 million shares outstanding)	22	22
Common stock (100 million shares authorized; 91 million shares outstanding; no par value)	866	866
Retained earnings	2,905	2,644
Accumulated other comprehensive income (loss)	(21)	(22)
Total shareholders' equity	<u>3,772</u>	<u>3,510</u>
Total liabilities and shareholders' equity	<u>\$ 13,743</u>	<u>\$ 13,424</u>

(1) Derived from audited financial statements.
See Notes to Condensed Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED STATEMENTS OF CASH FLOWS

(Dollars in millions)

	Six months ended June 30,	
	2017	2016(1)
	(unaudited)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	\$ 262	\$ 199
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	252	234
Deferred income taxes and investment tax credits	96	28
Impairment losses	—	22
Other	(13)	(15)
Net change in other working capital components	253	190
Insurance receivable for Aliso Canyon costs	52	(354)
Changes in other assets	(40)	(54)
Changes in other liabilities	(7)	12
Net cash provided by operating activities	<u>855</u>	<u>262</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Expenditures for property, plant and equipment	(682)	(650)
(Increase) decrease in loans to affiliate, net	(84)	50
Net cash used in investing activities	<u>(766)</u>	<u>(600)</u>
CASH FLOWS FROM FINANCING ACTIVITIES		
Preferred dividends paid	(1)	(1)
Issuances of long-term debt	—	499
Payments on long-term debt	—	(3)
Decrease in short-term debt, net	(62)	—
Debt issuance costs	—	(4)
Net cash (used in) provided by financing activities	<u>(63)</u>	<u>491</u>
Increase in cash and cash equivalents	26	153
Cash and cash equivalents, January 1	12	58
Cash and cash equivalents, June 30	<u>\$ 38</u>	<u>\$ 211</u>
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Interest payments, net of amounts capitalized	\$ 49	\$ 43
Income tax payments, net	22	35
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING ACTIVITY		
Accrued capital expenditures	\$ 155	\$ 140

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016.
See Notes to Condensed Financial Statements.

SEMPRA ENERGY AND SUBSIDIARIES

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. GENERAL

PRINCIPLES OF CONSOLIDATION

Sempra Energy

Sempra Energy's Condensed Consolidated Financial Statements include the accounts of Sempra Energy, a California-based Fortune 500 energy-services holding company, and its consolidated subsidiaries and VIEs. Sempra Energy's operating units are

- Sempra Utilities, which includes our SDG&E, SoCalGas and Sempra South American Utilities reportable segments; and
- Sempra Infrastructure, which includes our Sempra Mexico, Sempra Renewables and Sempra LNG & Midstream reportable segments.

We refer to SDG&E and SoCalGas collectively as the California Utilities, which do not include our South American utilities or the utilities in our Sempra Infrastructure operating unit. Sempra Global is the holding company for most of our subsidiaries that are not subject to California utility regulation. All references in these Notes to "Sempra Utilities," "Sempra Infrastructure" and their respective reportable segments are not intended to refer to any legal entity with the same or similar name.

SDG&E

SDG&E's Condensed Consolidated Financial Statements include its accounts and the accounts of a VIE of which SDG&E is the primary beneficiary, as we discuss in Note 5 under "Variable Interest Entities." SDG&E's common stock is wholly owned by Enova Corporation, which is a wholly owned subsidiary of Sempra Energy.

SoCalGas

SoCalGas' common stock is wholly owned by Pacific Enterprises, which is a wholly owned subsidiary of Sempra Energy.

BASIS OF PRESENTATION

This is a combined report of Sempra Energy, SDG&E and SoCalGas. We provide separate information for SDG&E and SoCalGas as required. References in this report to "we," "our" and "Sempra Energy Consolidated" are to Sempra Energy and its consolidated entities, unless otherwise indicated by the context. We have eliminated intercompany accounts and transactions within the consolidated financial statements of each reporting entity.

Throughout this report, we refer to the following as Condensed Consolidated Financial Statements and Notes to Condensed Consolidated Financial Statements when discussed together or collectively:

- the Condensed Consolidated Financial Statements and related Notes of Sempra Energy and its subsidiaries and VIEs;
- the Condensed Consolidated Financial Statements and related Notes of SDG&E and its VIE; and
- the Condensed Financial Statements and related Notes of SoCalGas.

We have prepared the Condensed Consolidated Financial Statements in conformity with U.S. GAAP and in accordance with the interim-period-reporting requirements of Form 10-Q. Results of operations for interim periods are not necessarily indicative of results for the entire year. We evaluated events and transactions that occurred after June 30, 2017 through the date the financial statements were issued and, in the opinion of management, the accompanying statements reflect all adjustments necessary for a fair presentation. These adjustments are only of a normal, recurring nature.

All December 31, 2016 balance sheet information in the Condensed Consolidated Financial Statements has been derived from our audited 2016 Consolidated Financial Statements in the Annual Report. Certain information and note disclosures normally included in annual financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to the interim-period-reporting provisions of U.S. GAAP and the SEC.

We describe our significant accounting policies in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report. We follow the same accounting policies for interim reporting purposes.

You should read the information in this Quarterly Report in conjunction with the Annual Report.

Regulated Operations

The California Utilities and Sempra Mexico's natural gas distribution utility, Ecogas, prepare their financial statements in accordance with the provisions of U.S. GAAP governing rate-regulated operations. We discuss these provisions and revenue recognition at our utilities in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

Sempra South American Utilities has controlling interests in two electric distribution utilities in South America, Chilquinta Energía in Chile and Luz del Sur in Peru. Revenues are based on tariffs that are set by government agencies in their respective countries based on an efficient model distribution company defined by those agencies. Because the tariffs are based on a model and are intended to cover the costs of the model company, but are not based on the costs of the specific utility and may not result in full cost recovery, these utilities do not meet the requirements necessary for, and therefore do not apply, regulatory accounting treatment under U.S. GAAP.

Our Sempra Mexico segment includes the operating companies of our subsidiary, IEnova. Certain business activities at IEnova are regulated by the CRE and meet the regulatory accounting requirements of U.S. GAAP. Pipeline projects currently under construction by IEnova that meet the regulatory accounting requirements of U.S. GAAP record the impact of AFUDC related to equity. We discuss AFUDC in Note 5 below and in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

Sempra LNG & Midstream owned Mobile Gas in southwest Alabama and Willmut Gas in Mississippi until they were sold in September 2016, as we discuss in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report. Mobile Gas and Willmut Gas also prepared their financial statements in accordance with U.S. GAAP provisions governing rate-regulated operations.

NOTE 2. NEW ACCOUNTING STANDARDS

We describe below recent pronouncements that have had or may have a significant effect on our financial condition, results of operations, cash flows or disclosures.

ASU 2014-09, "Revenue from Contracts with Customers," ASU 2015-14, "Deferral of the Effective Date," ASU 2016-08, "Principal versus Agent Considerations (Reporting Revenue Gross versus Net)," ASU 2016-10, "Identifying Performance Obligations and Licensing" and ASU 2016-12, "Narrow-Scope Improvements and Practical Expedients": ASU 2014-09 provides accounting guidance for the recognition of revenue from contracts with customers and affects all entities that enter into contracts to provide goods or services to their customers. The guidance also provides a model for the measurement and recognition of gains and losses on the sale of certain nonfinancial assets, such as property and equipment, including real estate. This guidance must be adopted using either a full retrospective approach for all periods presented in the period of adoption or a modified retrospective approach. Amending ASU 2014-09, ASU 2016-08 clarifies the implementation guidance on principal versus agent considerations, ASU 2016-10 clarifies the determination of whether a good or service is separately identifiable from other promises and revenue recognition related to licenses of intellectual property, and ASU 2016-12 provides guidance on transition, collectability, noncash consideration, and the presentation of sales and other similar taxes.

ASU 2015-14 defers the effective date of ASU 2014-09 by one year for all entities and permits early adoption on a limited basis. For public entities, ASU 2014-09 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted for fiscal years beginning after December 15, 2016, and is effective for interim periods in the year of adoption. We will adopt ASU 2014-09 on January 1, 2018 using the modified retrospective transition method and are currently evaluating the effect on our ongoing financial reporting. As part of our evaluation, we formed multiple working groups with oversight from a steering committee comprised of members from relevant Sempra Energy business units. We separated our various revenue streams into high-level categories, which served as the basis for accounting analysis and documentation of the impact of ASU 2014-09 on our revenue recognition. The majority of Sempra Energy's revenues result from electric and natural gas service to Sempra Utilities' customers. Sempra Energy does not anticipate that the ASUs will materially impact the amount and timing of consolidated revenues. However, we do anticipate changes to the presentation of revenues on our statements of operations and additional disclosures around the nature, amount, timing and uncertainty of our revenues and cash flows arising from contracts with customers. We continue to actively monitor outstanding issues currently being addressed by the American Institute of Certified Public Accountants' Revenue Recognition Working Group and the Financial Accounting Standards Board's Transition Resource Group, since conclusions reached by these groups may impact our application of these ASUs.

ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities": In addition to the presentation and disclosure requirements for financial instruments, ASU 2016-01 requires entities to measure equity investments, other than those accounted for under the equity method, at fair value and recognize changes in fair value in net income. Entities will no longer be able to use the cost method of accounting for equity securities. However, for equity investments without readily determinable fair values

that do not qualify for the practical expedient to estimate fair value using net asset value per share, entities may elect a measurement alternative that will allow those investments to be recorded at cost, less impairment, and adjusted for subsequent observable price changes. Entities must record a cumulative-effect adjustment to the balance sheet as of the beginning of the first reporting period in which the standard is adopted, except for equity investments without readily determinable fair values, for which the guidance will be applied prospectively.

For public entities, ASU 2016-01 is effective for fiscal years beginning after December 15, 2017. We will adopt ASU 2016-01 on January 1, 2018 and do not expect it to materially affect our financial condition, results of operations or cash flows.

ASU 2016-02, "Leases": ASU 2016-02 requires entities to include substantially all leases on the balance sheet by requiring the recognition of right-of-use assets and lease liabilities for all leases. Entities may elect to exclude from the balance sheet those leases with a maximum possible term of less than 12 months. For lessees, a lease is classified as finance or operating, and the asset and liability are initially measured at the present value of the lease payments. For lessors, accounting for leases is largely unchanged from previous provisions of U.S. GAAP, other than certain changes to align lessor accounting to specific changes made to lessee accounting and ASU 2014-09. ASU 2016-02 also requires new qualitative and quantitative disclosures for both lessees and lessors.

For public entities, ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, with early adoption permitted, and is effective for interim periods in the year of adoption. The standard requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The modified retrospective approach includes optional practical expedients that may be elected, which would allow entities to continue to account for leases that commence before the effective date of the standard in accordance with previous U.S. GAAP unless the lease is modified, except for the lessee requirement to begin recognizing right-of-use assets and lease liabilities for all operating leases on the balance sheet at the reporting date. We are currently evaluating the effect of the standard on our ongoing financial reporting and plan to adopt the standard on January 1, 2019. As part of our evaluation, we formed a steering committee comprised of members from relevant Sempra Energy business units and are compiling our population of contracts. Based on our assessment to date, we have determined that we will elect the practical expedients available under the transition guidance described above. We continue to monitor outstanding issues currently being addressed by the Financial Accounting Standards Board, since conclusions it reaches may impact our application of this ASU.

ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting": ASU 2016-09 is intended to simplify several aspects of the accounting for employee share-based payment transactions. Under ASU 2016-09, excess tax benefits and tax deficiencies are required to be recorded in earnings, and the requirement to reclassify excess tax benefits and tax deficiencies from operating to financing activities on the statement of cash flows has been eliminated. ASU 2016-09 also allows entities to withhold taxes up to the maximum individual statutory tax rate without resulting in liability classification of the award and clarifies that cash payments made to taxing authorities in connection with withheld shares should be classified as financing activities in the statement of cash flows.

We early adopted the provisions of ASU 2016-09 during the three months ended September 30, 2016, with an effective date of January 1, 2016. The adoption did not impact the financial statements for the three months ended June 30, 2016, except as noted in the table below. The following financial statement line items for the six months ended June 30, 2016 were affected by the change in accounting principle:

IMPACT FROM ADOPTION OF ASU 2016-09

(Dollars in millions, except per share amounts)

	Six months ended June 30, 2016		
	As previously reported	Effect of adoption	As adjusted
Sempra Energy Consolidated:			
Condensed Consolidated Statement of Operations:			
Income tax expense	\$ (36)	\$ 34	\$ (2)
Net income	357	34	391
Earnings	335	34	369
Basic earnings per common share	\$ 1.34	\$ 0.14	\$ 1.48
Diluted earnings per common share	\$ 1.33	\$ 0.14	\$ 1.47
Weighted-average number of shares outstanding, diluted (thousands)(1)	251,686	89	251,775
Condensed Consolidated Statement of Comprehensive Income (Loss):			
Net income	\$ 357	\$ 34	\$ 391
Comprehensive income	312	34	346
Comprehensive income, after preferred dividends of subsidiary	311	34	345

Condensed Consolidated Statement of Cash Flows:

Cash flows from operating activities:

Net income	\$	357	\$	34	\$	391
Adjustments to reconcile net income to net cash provided by operating activities:						
Deferred income taxes and investment tax credits		(42)		(34)		(76)
Other(2)		11		34		45
Net cash provided by operating activities		882		34		916
Cash flows from financing activities:						
Tax benefit related to share-based compensation		34		(34)		—
Net cash provided by financing activities		916		(34)		882

SDG&E:

Condensed Consolidated Statement of Operations:

Income tax expense	\$	(120)	\$	7	\$	(113)
Net income		217		7		224
Earnings attributable to common shares		229		7		236

Condensed Consolidated Statement of Comprehensive Income (Loss):

Net income	\$	217	\$	7	\$	224
Comprehensive income		216		7		223

Condensed Consolidated Statement of Cash Flows:

Cash flows from operating activities:

Net income	\$	217	\$	7	\$	224
Adjustments to reconcile net income to net cash provided by operating activities:						
Deferred income taxes and investment tax credits		26		(7)		19

SoCalGas:

Condensed Statement of Operations:

Income tax expense	\$	(58)	\$	4	\$	(54)
Net income		195		4		199
Earnings attributable to common shares		194		4		198

Condensed Statement of Comprehensive Income (Loss):

Net income/Comprehensive income	\$	195	\$	4	\$	199
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Condensed Statement of Cash Flows:

Cash flows from operating activities:

Net income	\$	195	\$	4	\$	199
Adjustments to reconcile net income to net cash provided by operating activities:						
Deferred income taxes and investment tax credits		32		(4)		28

(1) For the three months ended June 30, 2016, we previously reported 251,938 shares; the effect of adoption of the ASU resulted in an "as adjusted" 252,036 shares.

(2) For the six months ended June 30, 2016, we previously reported \$33 million in Other, which was reduced to \$11 million, as \$22 million was reclassified to Impairment Losses to conform to current year presentation.

ASU 2016-13, "Measurement of Credit Losses on Financial Instruments": ASU 2016-13 changes how entities will measure credit losses for most financial assets and certain other instruments. The standard introduces an "expected credit loss" impairment model that requires immediate recognition of estimated credit losses expected to occur over the remaining life of most financial assets measured at amortized cost, including trade and other receivables, loan commitments and financial guarantees. ASU 2016-13 also requires use of an allowance to record estimated credit losses on available-for-sale debt securities and expands disclosure requirements regarding an entity's assumptions, models and methods for estimating the credit losses.

For public entities, ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted for fiscal years beginning after December 15, 2018. We are currently evaluating the effect of the standard on our ongoing financial reporting and have not yet selected the year in which we will adopt the standard.

ASU 2016-15, "Classification of Certain Cash Receipts and Cash Payments": ASU 2016-15 provides guidance on how certain cash receipts and cash payments are to be presented and classified in the statement of cash flows in order to reduce diversity in practice.

For public entities, ASU 2016-15 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted, and is effective for interim periods in the year of adoption. An entity that elects early adoption must adopt all of the amendments in the same period. Entities must apply the guidance retrospectively to all periods presented, but may apply it prospectively if retrospective application would be impracticable. We plan to adopt the standard in the fourth quarter of 2017. If we had adopted ASU 2016-15 effective January 1, 2017, there would have been no impact to the Sempra Energy, SDG&E or SoCalGas Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2017, based on the timing of cash receipts and cash payments impacted by the ASU.

ASU 2016-18, “Restricted Cash”: ASU 2016-18 requires amounts described as restricted cash and restricted cash equivalents to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. A reconciliation between the balance sheet and the statement of cash flows must be disclosed when the balance sheet includes more than one line item for cash, cash equivalents, restricted cash and restricted cash equivalents.

For public entities, ASU 2016-18 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years, with early adoption permitted. We plan to adopt the standard in the fourth quarter of 2017. If we had adopted ASU 2016-18 effective January 1, 2017, cash and cash equivalents at the beginning of the period would have included restricted cash of \$76 million and \$12 million, and cash and cash equivalents at the end of the period would have included restricted cash of \$87 million and \$14 million in Sempra Energy’s and SDG&E’s Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2017, respectively.

ASU 2017-04, “Simplifying the Test for Goodwill Impairment”: ASU 2017-04 removes the second step of the goodwill impairment test, which requires a hypothetical purchase price allocation. An entity will be required to apply a one-step quantitative test and record the amount of goodwill impairment as the excess of a reporting unit’s carrying amount over its fair value, not to exceed the carrying amount of goodwill. For public entities, ASU 2017-04 is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019, with early adoption permitted. The amendments are to be applied on a prospective basis. We have not yet selected the year in which we will adopt the standard.

ASU 2017-05, “Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets”: ASU 2017-05 clarifies the scope of accounting for the derecognition or partial sale of nonfinancial assets to exclude all businesses and nonprofit activities. ASU 2017-05 also provides a definition for in-substance nonfinancial assets and additional guidance on partial sales of nonfinancial assets. For public entities, ASU 2017-05 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, with early adoption permitted. Entities may apply a full retrospective or modified retrospective approach. Under a modified retrospective approach, entities are required to apply the guidance to any transactions that are not completed as of the adoption date. We will adopt the standard in conjunction with our adoption of ASU 2014-09 on January 1, 2018 using the modified retrospective transition method.

ASU 2017-07, “Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost”: ASU 2017-07 requires the service cost component of net periodic benefit costs to be presented in the same income statement line item as other employee compensation costs arising from services rendered during the period and the other components of net periodic benefit costs to be presented separately outside of operating income. The guidance also allows only the service cost component to be eligible for capitalization. For public entities, ASU 2017-07 is effective for annual reporting periods beginning after December 15, 2017, with early adoption permitted as of the beginning of an annual period for which financial statements have not been issued or made available for issuance. Amendments are to be applied retrospectively for presentation of costs and prospectively for capitalization of service costs. The guidance allows a practical expedient that permits use of previously disclosed service costs and other costs from the pension and other postretirement benefit plan note in the comparative periods as appropriate estimates when retrospectively changing the presentation of these costs in the statements of operations. We are currently evaluating the effect of the standard on our ongoing financial reporting and will adopt the standard on January 1, 2018. Based on our assessment to date, we have determined that we will elect the practical expedient available under the transition guidance.

NOTE 3. ACQUISITION AND DIVESTITURE ACTIVITY

We consolidate assets acquired and liabilities assumed as of the purchase date and include earnings from acquisitions in consolidated earnings after the purchase date. We did not complete any acquisitions during the six months ended June 30, 2017 or 2016. At June 30, 2017, the purchase price allocations for the acquisitions of Ventika in December 2016 and IEnova Pipelines (formerly known as GdC) in September 2016 were preliminary and subject to completion. Adjustments to the fair value estimates may occur as various valuations and assessments are finalized, primarily related to tax assets, liabilities and other attributes.

ACQUISITION

Sempra Renewables

On July 10, 2017, Sempra Renewables paid \$124 million in cash for an asset acquisition of a solar project located near Fresno, California, which is currently under construction. We expect to place the project into service in phases during the fourth quarter of 2017 and the first half of 2018 and, when fully constructed, it will be capable of producing up to 200 MW of solar power. The solar project is fully contracted under four long-term PPAs, with an average contract term of 18 years.

ASSETS HELD FOR SALE

We classify assets as held for sale when management approves and commits to a formal plan to actively market an asset for sale and we expect the sale to close within the next 12 months. Upon classifying an asset as held for sale, we record the asset at the lower of its carrying value or its estimated fair value reduced for selling costs.

Sempra Mexico

Termoeléctrica de Mexicali

In February 2016, management approved a plan to market and sell Sempra Mexico's TdM, a 625-MW natural gas-fired power plant located in Mexicali, Baja California, Mexico, as we discuss in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report. As a result, we stopped depreciating the plant and classified it as held for sale.

In connection with the sales process, Sempra Mexico received new market information indicating that the fair value of TdM at June 30, 2017 is lower than previously estimated. As a result, and after further analysis, Sempra Mexico further reduced the carrying value of TdM by recognizing a noncash impairment charge of \$71 million in the three months and six months ended June 30, 2017, recorded in Impairment Losses on Sempra Energy's Condensed Consolidated Statements of Operations. We discuss non-recurring fair value measures and the associated accounting impact on TdM in Note 8.

In connection with TdM's classification as held for sale, we recognized a \$3 million and \$8 million tax benefit for the three months and six months ended June 30, 2017, respectively, and \$3 million and \$32 million in tax expense for the three months and six months ended June 30, 2016, respectively, related to a deferred Mexican income tax liability related to the excess of carrying value over the tax basis. As the Mexican income tax on this outside basis difference is based on current carrying value, foreign exchange rates and inflation, such amount could change in future periods until the date of sale. We are actively pursuing the sale of TdM, which we expect to be completed in the second half of 2017.

At June 30, 2017, the carrying amounts of the major classes of assets and related liabilities held for sale associated with TdM are as follows:

ASSETS HELD FOR SALE AT JUNE 30, 2017

(Dollars in millions)

	Termoeléctrica de Mexicali
Inventories	\$ 10
Other current assets	19
Property, plant and equipment, net	55
Other noncurrent assets	25
Total assets held for sale	<u>\$ 109</u>
Accounts payable	\$ 11
Other current liabilities	4
Asset retirement obligations	5
Other noncurrent liabilities	27
Total liabilities held for sale	<u>\$ 47</u>

DIVESTITURE

Sempra LNG & Midstream

Investment in Rockies Express Pipeline LLC

In March 2016, Sempra LNG & Midstream entered into an agreement to sell its 25-percent interest in Rockies Express for cash consideration of \$440 million, subject to adjustment at closing. The transaction closed in May 2016 for total cash proceeds of \$443 million.

At the date of the agreement, the carrying value of Sempra LNG & Midstream's investment in Rockies Express was \$484 million. Following the execution of the agreement, Sempra LNG & Midstream measured the fair value of its equity method investment at \$440 million, and recognized a \$44 million (\$27 million after-tax) impairment in Equity Earnings (Losses), Before Income Tax, on the Sempra Energy Condensed Consolidated Statement of Operations in the first quarter of 2016. We discuss non-recurring fair value measures and the associated accounting impact on our investment in Rockies Express in Note 10 of the Notes to Consolidated Financial Statements in the Annual Report.

NOTE 4. INVESTMENTS IN UNCONSOLIDATED ENTITIES

Sempra Energy uses the equity method to account for investments in affiliated companies over which we have the ability to exercise significant influence, but not control. We provide additional information concerning our equity method investments in Note 3 above and in Notes 3 and 4 of the Notes to Consolidated Financial Statements in the Annual Report.

SEMPRA SOUTH AMERICAN UTILITIES

In February 2017, Sempra South American Utilities recorded the equitization of its \$19 million note receivable due from Eletrans, resulting in an increase in its investment in this unconsolidated joint venture.

SEMPRA MEXICO

Sempra Mexico invested cash of \$72 million in its unconsolidated joint venture, IMG, in the six months ended June 30, 2017.

SEMPRA RENEWABLES

Sempra Renewables invested cash of \$18 million in its unconsolidated joint ventures in the six months ended June 30, 2016.

SEMPRA LNG & MIDSTREAM

Sempra LNG & Midstream capitalized \$24 million of interest during both the six months ended June 30, 2017 and 2016 related to its investment in Cameron LNG JV, which has not commenced planned principal operations. During the six months ended June 30, 2017, Sempra LNG & Midstream invested cash of \$1 million in this unconsolidated joint venture.

In May 2016, Sempra LNG & Midstream sold its 25-percent interest in Rockies Express, as we discuss in Note 3.

GUARANTEES

At June 30, 2017, we had outstanding guarantees aggregating a maximum of \$4.7 billion with an aggregate carrying value of \$44 million. We discuss these guarantees below and in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report.

Sempra Mexico

IMG is a joint venture between a subsidiary of IEnova and a subsidiary of TransCanada. IEnova has an indirect 40-percent ownership interest and TransCanada has an indirect 60-percent ownership interest in IMG. IEnova and TransCanada have each provided guarantees to third parties associated with construction of IMG's Sur de Texas - Tuxpan natural gas marine pipeline. The aggregate amount of the obligations guaranteed by IEnova shall not exceed \$288 million and will terminate upon completion of all guaranteed obligations. IEnova expects the construction giving rise to these guarantees to be completed by the end of 2018.

NOTE 5. OTHER FINANCIAL DATA

INVENTORIES

The components of inventories by segment are as follows:

INVENTORY BALANCES								
<i>(Dollars in millions)</i>								
	Natural gas		Liquefied natural gas		Materials and supplies		Total	
	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016
SDG&E	\$ 1	\$ 2	\$ —	\$ —	\$ 88	\$ 78	\$ 89	\$ 80
SoCalGas(1)	—	11	—	—	45	47	45	58
Sempra South American Utilities	—	—	—	—	33	27	33	27
Sempra Mexico	—	—	12	6	2	1	14	7
Sempra Renewables	—	—	—	—	4	4	4	4
Sempra LNG & Midstream	51	79	3	3	—	—	54	82
Sempra Energy Consolidated	\$ 52	\$ 92	\$ 15	\$ 9	\$ 172	\$ 157	\$ 239	\$ 258

(1) At June 30, 2017 and December 31, 2016, SoCalGas' natural gas inventory for core customers is net of an inventory loss related to the Aliso Canyon natural gas leak, which we discuss in Note 11.

GREENHOUSE GAS ALLOWANCES

The Condensed Consolidated Balance Sheets include the following amounts associated with GHG allowances and obligations.

GHG ALLOWANCES AND OBLIGATIONS						
<i>(Dollars in millions)</i>						
	Sempra Energy Consolidated		SDG&E		SoCalGas	
	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016
Assets:						
Other current assets	\$ 40	\$ 40	\$ 16	\$ 16	\$ 24	\$ 24
Sundry	334	295	190	182	140	109
Total assets	\$ 374	\$ 335	\$ 206	\$ 198	\$ 164	\$ 133
Liabilities:						
Other current liabilities	\$ 40	\$ 40	\$ 16	\$ 16	\$ 24	\$ 24
Deferred credits and other	202	171	88	72	111	96
Total liabilities	\$ 242	\$ 211	\$ 104	\$ 88	\$ 135	\$ 120

GOODWILL

We discuss goodwill in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report. The increase in goodwill from \$2,364 million at December 31, 2016 to \$2,379 million at June 30, 2017 is due to foreign currency translation at Sempra South American Utilities. We record the offset of this fluctuation in OCI.

VARIABLE INTEREST ENTITIES

We consolidate a VIE if we are the primary beneficiary of the VIE. Our determination of whether we are the primary beneficiary is based on qualitative and quantitative analyses, which assess

- the purpose and design of the VIE;
- the nature of the VIE's risks and the risks we absorb;
- the power to direct activities that most significantly impact the economic performance of the VIE; and
- the obligation to absorb losses or right to receive benefits that could be significant to the VIE.

SDG&E

SDG&E's power procurement is subject to reliability requirements that may require SDG&E to enter into various power purchase arrangements which include variable interests. SDG&E evaluates the respective entities to determine if variable interests exist and, based on the qualitative and quantitative analyses described above, if SDG&E, and thereby Sempra Energy, is the primary beneficiary.

Tolling Agreements

SDG&E has agreements under which it purchases power generated by facilities for which it supplies all of the natural gas to fuel the power plant (i.e., tolling agreements). SDG&E's obligation to absorb natural gas costs may be a significant variable interest. In addition, SDG&E has the power to direct the dispatch of electricity generated by these facilities. Based upon our analysis, the ability to direct the dispatch of electricity may have the most significant impact on the economic performance of the entity owning the generating facility because of the associated exposure to the cost of natural gas, which fuels the plants, and the value of electricity produced. To the extent that SDG&E (1) is obligated to purchase and provide fuel to operate the facility, (2) has the power to direct the dispatch, and (3) purchases all of the output from the facility for a substantial portion of the facility's useful life, SDG&E may be the primary beneficiary of the entity owning the generating facility. SDG&E determines if it is the primary beneficiary in these cases based on a qualitative approach in which we consider the operational characteristics of the facility, including its expected power generation output relative to its capacity to generate and the financial structure of the entity, among other factors. If we determine that SDG&E is the primary beneficiary, SDG&E and Sempra Energy consolidate the entity that owns the facility as a VIE.

Otay Mesa VIE

SDG&E has an agreement to purchase power generated at OMEC, a 605-MW generating facility. In addition to tolling, the agreement provides SDG&E with the option to purchase OMEC at the end of the contract term in 2019, or upon earlier termination of the PPA, at a predetermined price subject to adjustments based on performance of the facility. If SDG&E does not exercise its option, under certain circumstances, it may be required to purchase the power plant for \$280 million, which we refer to as the put option.

The facility owner, OMEC LLC, is a VIE, which we refer to as Otay Mesa VIE, of which SDG&E is the primary beneficiary. SDG&E has no OMEC LLC voting rights, holds no equity in OMEC LLC and does not operate OMEC. In addition to the risks absorbed under the tolling agreement, SDG&E absorbs separately through the put option a significant portion of the risk that the value of Otay Mesa VIE could decline. Accordingly, SDG&E and Sempra Energy consolidate Otay Mesa VIE. Otay Mesa VIE's equity of \$34 million at June 30, 2017 and \$37 million at December 31, 2016 is included on the Condensed Consolidated Balance Sheets in Other Noncontrolling Interests for Sempra Energy and in Noncontrolling Interest for SDG&E.

OMEC LLC has a loan outstanding of \$300 million at June 30, 2017, the proceeds of which were used for the construction of OMEC. The loan is with third party lenders and is collateralized by OMEC's assets. SDG&E is not a party to the loan agreement and does not have any additional implicit or explicit financial responsibility to OMEC LLC. The loan fully matures in April 2019 and bears interest at rates varying with market rates. In addition, OMEC LLC has entered into interest rate swap agreements to moderate its exposure to interest rate changes. We provide additional information concerning the interest rate swaps in Note 7.

The Condensed Consolidated Statements of Operations of Sempra Energy and SDG&E include the following amounts associated with Otay Mesa VIE. The amounts are net of eliminations of transactions between SDG&E and Otay Mesa VIE. The captions in the table below correspond to SDG&E's Condensed Consolidated Statements of Operations.

AMOUNTS ASSOCIATED WITH OTAY MESA VIE*(Dollars in millions)*

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Operating expenses				
Cost of electric fuel and purchased power	\$ (21)	\$ (17)	\$ (39)	\$ (34)
Operation and maintenance	5	15	9	19
Depreciation and amortization	7	10	14	17
Total operating expenses	(9)	8	(16)	2
Operating income (loss)	9	(8)	16	(2)
Interest expense	(5)	(5)	(10)	(10)
Income (loss) before income taxes/Net income (loss)	4	(13)	6	(12)
(Earnings) losses attributable to noncontrolling interest	(4)	13	(6)	12
Earnings attributable to common shares	\$ —	\$ —	\$ —	\$ —

SDG&E has determined that no contracts, other than the one relating to Otay Mesa VIE mentioned above, result in SDG&E being the primary beneficiary of a VIE at June 30, 2017. In addition to the tolling agreements described above, other variable interests involve various elements of fuel and power costs, and other components of cash flow expected to be paid to or received by our counterparties. In most of these cases, the expectation of variability is not substantial, and SDG&E generally does not have the power to direct activities that most significantly impact the economic performance of the other VIEs. In addition, SDG&E is not exposed to losses or gains as a result of these other VIEs, because all such variability would be recovered in rates. If our ongoing evaluation of these VIEs were to conclude that SDG&E becomes the primary beneficiary and consolidation by SDG&E becomes necessary, the effects could be significant to the financial position and liquidity of SDG&E and Sempra Energy. We provide additional information about PPAs with power plant facilities that are VIEs of which SDG&E is not the primary beneficiary in Note 11 below and in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

We provide additional information regarding Otay Mesa VIE in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

Sempra Renewables

Effective December 2016, certain of Sempra Renewables' wind and solar power generation projects are held by limited liability companies whose members are Sempra Renewables and financial institutions. The financial institutions are noncontrolling tax equity investors to which earnings, tax attributes and cash flows are allocated in accordance with the respective limited liability company agreements. These entities are VIEs and Sempra Energy is the primary beneficiary, generally due to Sempra Energy's power as the operator of the renewable energy projects to direct the activities that most significantly impact the economic performance of these VIEs.

As the primary beneficiary of these tax equity limited liability companies, we consolidate them. Sempra Energy's Condensed Consolidated Balance Sheets included \$912 million and \$926 million of PP&E, net, and equity of \$454 million and \$468 million included in Other Noncontrolling Interests at June 30, 2017 and December 31, 2016, respectively, associated with these entities. Sempra Energy's Condensed Consolidated Statements of Operations include the following amounts associated with the tax equity limited liability companies. The amounts are net of eliminations of transactions between Sempra Energy and these entities.

AMOUNTS ASSOCIATED WITH TAX EQUITY ARRANGEMENTS*(Dollars in millions)*

	Three months ended June 30, 2017	Six months ended June 30, 2017
REVENUES		
Energy-related businesses	\$ 18	\$ 31
EXPENSES		
Operation and maintenance	(7)	(9)
Depreciation and amortization	(8)	(16)
Income before income taxes	3	6
Income tax expense	(4)	(6)
Net loss	(1)	—
Losses attributable to noncontrolling interests(1)	7	10
Earnings	\$ 6	\$ 10

(1) Net income or loss attributable to the noncontrolling interests is computed using the HLBV method and is not based on ownership percentages.

We provide additional information regarding the tax equity limited liability companies in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

Sempra LNG & Midstream

Sempra Energy's equity method investment in Cameron LNG JV is considered to be a VIE principally due to contractual provisions that transfer certain risks to customers. Sempra Energy is not the primary beneficiary because we do not have the power to direct the most significant activities of Cameron LNG JV. We will continue to evaluate Cameron LNG JV for any changes that may impact our determination of the primary beneficiary. The carrying value of our investment in Cameron LNG JV, including amounts recognized in AOCI related to interest-rate cash flow hedges at Cameron LNG JV, was \$977 million at June 30, 2017 and \$997 million at December 31, 2016. Our maximum exposure to loss includes the carrying value of our investment and the guarantees discussed in Note 4 above and in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report.

Other Variable Interest Entities

Sempra Energy's other businesses also enter into arrangements which could include variable interests. We evaluate these arrangements and applicable entities based on the qualitative and quantitative analyses described above. Certain of these entities are service companies that are VIEs. As the primary beneficiary of these service companies, we consolidate them; however, their financial statements are not material to the financial statements of Sempra Energy. In all other cases, we have determined that these contracts are not variable interests in a VIE and therefore are not subject to the U.S. GAAP requirements concerning the consolidation of VIEs.

PENSION AND OTHER POSTRETIREMENT BENEFITS

Net Periodic Benefit Cost

The following three tables provide the components of net periodic benefit cost:

NET PERIODIC BENEFIT COST – SEMPRA ENERGY CONSOLIDATED

(Dollars in millions)

	Pension benefits		Other postretirement benefits	
	Three months ended June 30,			
	2017	2016	2017	2016
Service cost	\$ 29	\$ 27	\$ 5	\$ 6
Interest cost	37	40	11	11
Expected return on assets	(40)	(41)	(17)	(18)
Amortization of:				
Prior service cost	2	3	—	—
Actuarial loss	8	7	—	—
Regulatory adjustment	(29)	(28)	2	2
Total net periodic benefit cost	\$ 7	\$ 8	\$ 1	\$ 1

	Six months ended June 30,			
	2017	2016	2017	2016
	Service cost	\$ 57	\$ 55	\$ 11
Interest cost	74	80	20	22
Expected return on assets	(80)	(83)	(33)	(35)
Amortization of:				
Prior service cost	5	6	—	—
Actuarial loss (gain)	16	13	(1)	—
Regulatory adjustment	(41)	(56)	4	4
Total net periodic benefit cost	\$ 31	\$ 15	\$ 1	\$ 2

NET PERIODIC BENEFIT COST – SDG&E*(Dollars in millions)*

	Pension benefits		Other postretirement benefits	
	Three months ended June 30,			
	2017	2016	2017	2016
Service cost	\$ 7	\$ 8	\$ 2	\$ 1
Interest cost	10	11	2	2
Expected return on assets	(13)	(13)	(4)	(2)
Amortization of:				
Prior service cost	1	1	1	1
Actuarial loss (gain)	2	2	—	(1)
Regulatory adjustment	(7)	(8)	(1)	(1)
Total net periodic benefit cost	\$ —	\$ 1	\$ —	\$ —

	Pension benefits		Other postretirement benefits	
	Six months ended June 30,			
	2017	2016	2017	2016
Service cost	\$ 15	\$ 15	\$ 3	\$ 2
Interest cost	19	21	4	4
Expected return on assets	(24)	(25)	(7)	(5)
Amortization of:				
Prior service cost	1	1	2	2
Actuarial loss (gain)	4	5	—	(1)
Regulatory adjustment	(14)	(15)	(2)	(2)
Total net periodic benefit cost	\$ 1	\$ 2	\$ —	\$ —

NET PERIODIC BENEFIT COST – SOCALGAS*(Dollars in millions)*

	Pension benefits		Other postretirement benefits	
	Three months ended June 30,			
	2017	2016	2017	2016
Service cost	\$ 18	\$ 18	\$ 3	\$ 3
Interest cost	24	25	8	9
Expected return on assets	(25)	(27)	(13)	(14)
Amortization of:				
Prior service cost (credit)	2	2	—	(1)
Actuarial loss (gain)	4	2	(1)	—
Regulatory adjustment	(22)	(20)	3	3
Total net periodic benefit cost	\$ 1	\$ —	\$ —	\$ —

	Pension benefits		Other postretirement benefits	
	Six months ended June 30,			
	2017	2016	2017	2016
Service cost	\$ 36	\$ 35	\$ 7	\$ 7
Interest cost	48	50	15	17
Expected return on assets	(51)	(52)	(26)	(28)
Amortization of:				
Prior service cost (credit)	4	4	(1)	(2)
Actuarial loss (gain)	8	5	(1)	—
Regulatory adjustment	(27)	(41)	6	6
Total net periodic benefit cost	\$ 18	\$ 1	\$ —	\$ —

Benefit Plan Contributions

The following table shows our year-to-date contributions to pension and other postretirement benefit plans and the amounts we expect to contribute in 2017:

BENEFIT PLAN CONTRIBUTIONS					
<i>(Dollars in millions)</i>					
	Sempra Energy Consolidated		SDG&E		SoCalGas
Contributions through June 30, 2017:					
Pension plans	\$	28	\$	2	\$ 17
Other postretirement benefit plans		1		—	—
Total expected contributions in 2017:					
Pension plans	\$	174	\$	32	\$ 90
Other postretirement benefit plans		8		4	1

RABBI TRUST

In support of its Supplemental Executive Retirement, Cash Balance Restoration and Deferred Compensation Plans, Sempra Energy maintains dedicated assets, including a Rabbi Trust and investments in life insurance contracts, which totaled \$427 million and \$430 million at June 30, 2017 and December 31, 2016, respectively.

EARNINGS PER SHARE

The following table provides EPS computations for the three months and six months ended June 30, 2017 and 2016. Basic EPS is calculated by dividing earnings attributable to common stock by the weighted-average number of common shares outstanding for the period. Diluted EPS includes the potential dilution of common stock equivalent shares that could occur if securities or other contracts to issue common stock were exercised or converted into common stock.

EARNINGS PER SHARE COMPUTATIONS					
<i>(Dollars in millions, except per share amounts; shares in thousands)</i>					
	Three months ended June 30,		Six months ended June 30,		
	2017	2016(1)	2017	2016(1)	
Numerator:					
Earnings/Income attributable to common shares	\$	259	\$	16	\$ 700 \$ 369
Denominator:					
Weighted-average common shares outstanding for basic EPS(2)		251,447		250,096	251,290 249,915
Dilutive effect of stock options, RSAs and RSUs(3)		1,375		1,940	1,319 1,860
Weighted-average common shares outstanding for diluted EPS		252,822		252,036	252,609 251,775
EPS:					
Basic	\$	1.03	\$	0.06	\$ 2.79 \$ 1.48
Diluted		1.03		0.06	2.77 1.47

(1) As adjusted for the adoption of ASU 2016-09 as of January 1, 2016, as we discuss in Note 2.

(2) Includes 608 and 568 average fully vested RSUs held in our Deferred Compensation Plan for the three months ended June 30, 2017 and 2016, respectively, and 604 and 562 for the six months ended June 30, 2017 and 2016, respectively. These fully vested RSUs are included in weighted-average common shares outstanding for basic EPS because there are no conditions under which the corresponding shares will not be issued.

(3) Due to market fluctuations of both Sempra Energy stock and the comparative indices used to determine the vesting percentage of our total shareholder return performance-based RSUs, which we discuss in Note 8 of the Notes to Consolidated Financial Statements in the Annual Report, dilutive RSUs may vary widely from period-to-period.

The potentially dilutive impact from stock options, RSAs and RSUs is calculated under the treasury stock method. Under this method, proceeds based on the exercise price and unearned compensation are assumed to be used to repurchase shares on the open market at the average market price for the period, reducing the number of potential new shares to be issued and sometimes causing an antidilutive effect. The computation of diluted EPS for the three months ended June 30, 2017 and 2016 excludes 3,010 and 1,010 potentially dilutive shares, respectively, because to include them would be antidilutive for the period. The computation of diluted EPS

for the six months ended June 30, 2017 and 2016 excludes 3,010 and 2,408 such potentially dilutive shares, respectively. However, these shares could potentially dilute basic EPS in the future.

Pursuant to our Sempra Energy share-based compensation plans, Sempra Energy's Board of Directors granted 424,760 performance-based RSUs and 93,619 service-based RSUs during the six months ended June 30, 2017, primarily in January. During the six months ended June 30, 2017, IEnova granted 1,034,086 RSUs from the IEnova 2013 Long-Term Incentive Plan, under which awards are cash settled at vesting based on the price of IEnova common stock.

We discuss share-based compensation plans and related awards further in Note 8 of the Notes to Consolidated Financial Statements in the Annual Report.

CAPITALIZED FINANCING COSTS

Capitalized financing costs include capitalized interest costs and AFUDC related to both debt and equity financing of construction projects. We capitalize interest costs incurred to finance capital projects and interest on equity method investments that have not commenced planned principal operations.

Interest capitalized and AFUDC are as follows:

CAPITALIZED FINANCING COSTS				
<i>(Dollars in millions)</i>				
	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Sempra Energy Consolidated	\$ 62	\$ 58	\$ 144	\$ 110
SDG&E	21	17	41	32
SoCalGas	15	14	30	27

COMPREHENSIVE INCOME

The following tables present the changes in AOCI by component and amounts reclassified out of AOCI to net income, excluding amounts attributable to noncontrolling interests:

CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS) BY COMPONENT(1)

(Dollars in millions)

	Foreign currency translation adjustments	Financial instruments	Pension and other postretirement benefits	Total accumulated other comprehensive income (loss)
Three months ended June 30, 2017 and 2016				
Sempra Energy Consolidated:				
Balance as of March 31, 2017	\$ (481)	\$ (121)	\$ (94)	\$ (696)
OCI before reclassifications	3	(26)	—	(23)
Amounts reclassified from AOCI	—	—	1	1
Net OCI	3	(26)	1	(22)
Balance as of June 30, 2017	\$ (478)	\$ (147)	\$ (93)	\$ (718)
Balance as of March 31, 2016	\$ (514)	\$ (221)	\$ (86)	\$ (821)
OCI before reclassifications	11	(48)	—	(37)
Amounts reclassified from AOCI	—	5	1	6
Net OCI	11	(43)	1	(31)
Balance as of June 30, 2016	\$ (503)	\$ (264)	\$ (85)	\$ (852)
SDG&E:				
Balance as of March 31, 2017 and June 30, 2017			\$ (8)	\$ (8)
Balance as of March 31, 2016 and June 30, 2016			\$ (8)	\$ (8)
SoCalGas:				
Balance as of March 31, 2017		\$ (13)	\$ (9)	\$ (22)
Amounts reclassified from AOCI		—	1	1
Net OCI		—	1	1
Balance as of June 30, 2017		\$ (13)	\$ (8)	\$ (21)
Balance as of March 31, 2016 and June 30, 2016		\$ (14)	\$ (5)	\$ (19)

(1) All amounts are net of income tax, if subject to tax, and exclude noncontrolling interests.

CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS) BY COMPONENT(1)
(Dollars in millions)

	Foreign currency translation adjustments	Financial instruments	Pension and other postretirement benefits	Total accumulated other comprehensive income (loss)
Six months ended June 30, 2017 and 2016				
Sempra Energy Consolidated:				
Balance as of December 31, 2016	\$ (527)	\$ (125)	\$ (96)	\$ (748)
OCI before reclassifications	49	(28)	—	21
Amounts reclassified from AOCI	—	6	3	9
Net OCI	49	(22)	3	30
Balance as of June 30, 2017	\$ (478)	\$ (147)	\$ (93)	\$ (718)
Balance as of December 31, 2015	\$ (582)	\$ (137)	\$ (87)	\$ (806)
OCI before reclassifications	79	(130)	—	(51)
Amounts reclassified from AOCI	—	3	2	5
Net OCI	79	(127)	2	(46)
Balance as of June 30, 2016	\$ (503)	\$ (264)	\$ (85)	\$ (852)
SDG&E:				
Balance as of December 31, 2016 and June 30, 2017			\$ (8)	\$ (8)
Balance as of December 31, 2015 and June 30, 2016			\$ (8)	\$ (8)
SoCalGas:				
Balance as of December 31, 2016		\$ (13)	\$ (9)	\$ (22)
Amounts reclassified from AOCI		—	1	1
Net OCI		—	1	1
Balance as of June 30, 2017		\$ (13)	\$ (8)	\$ (21)
Balance as of December 31, 2015 and June 30, 2016		\$ (14)	\$ (5)	\$ (19)

(1) All amounts are net of income tax, if subject to tax, and exclude noncontrolling interests.

RECLASSIFICATIONS OUT OF ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)
(Dollars in millions)

Details about accumulated other comprehensive income (loss) components	Amounts reclassified from accumulated other comprehensive income (loss)		Affected line item on Condensed Consolidated Statements of Operations
	Three months ended June 30,		
	2017	2016	
Sempra Energy Consolidated:			
Financial instruments:			
Interest rate and foreign exchange instruments	\$ (1)	\$ 3	Interest Expense
Interest rate instruments	2	2	Equity Earnings (Losses), Before Income Tax
Interest rate and foreign exchange instruments	3	5	Equity Earnings (Losses), Net of Income Tax
Foreign exchange instruments	(1)	—	Revenues: Energy-Related Businesses
Total before income tax	3	10	
	(1)	(1)	Income Tax (Expense) Benefit
Net of income tax	2	9	
	(2)	(4)	Losses (Earnings) Attributable to Noncontrolling Interests
	\$ —	\$ 5	
Pension and other postretirement benefits:			
Amortization of actuarial loss	\$ 2	\$ 2	See note (1) below
	(1)	(1)	Income Tax (Expense) Benefit
Net of income tax	\$ 1	\$ 1	
Total reclassifications for the period, net of tax	\$ 1	\$ 6	
SDG&E:			
Financial instruments:			
Interest rate instruments	\$ 3	\$ 3	Interest Expense
	(3)	(3)	(Earnings) Losses Attributable to Noncontrolling Interest
Total reclassifications for the period	\$ —	\$ —	
SoCalGas:			
Pension and other postretirement benefits:			
Amortization of actuarial loss	\$ 1	\$ —	See note (1) below
Total reclassifications for the period, net of tax	\$ 1	\$ —	

(1) Amounts are included in the computation of net periodic benefit cost (see "Pension and Other Postretirement Benefits" above).

RECLASSIFICATIONS OUT OF ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)
(Dollars in millions)

Details about accumulated other comprehensive income (loss) components	Amounts reclassified from accumulated other comprehensive income (loss)		Affected line item on Condensed Consolidated Statements of Operations
	Six months ended June 30,		
	2017	2016	
Sempra Energy Consolidated:			
Financial instruments:			
Interest rate and foreign exchange instruments	\$ (4)	\$ 7	Interest Expense
Interest rate instruments	4	5	Equity Earnings (Losses), Before Income Tax
Interest rate and foreign exchange instruments	5	6	Equity Earnings (Losses), Net of Income Tax
Foreign exchange instruments	1	—	Revenues: Energy-Related Businesses
Commodity contracts not subject to rate recovery	9	(7)	Revenues: Energy-Related Businesses
Total before income tax	15	11	
	(5)	(1)	Income Tax (Expense) Benefit
Net of income tax	10	10	
	(4)	(7)	Losses (Earnings) Attributable to Noncontrolling Interests
	\$ 6	\$ 3	
Pension and other postretirement benefits:			
Amortization of actuarial loss	\$ 5	\$ 4	See note (1) below
	(2)	(2)	Income Tax (Expense) Benefit
Net of income tax	\$ 3	\$ 2	
Total reclassifications for the period, net of tax	\$ 9	\$ 5	
SDG&E:			
Financial instruments:			
Interest rate instruments	\$ 6	\$ 6	Interest Expense
	(6)	(6)	(Earnings) Losses Attributable to Noncontrolling Interest
Total reclassifications for the period	\$ —	\$ —	
SoCalGas:			
Pension and other postretirement benefits:			
Amortization of actuarial loss	\$ 1	\$ —	See note (1) below
Total reclassifications for the period, net of tax	\$ 1	\$ —	

(1) Amounts are included in the computation of net periodic benefit cost (see "Pension and Other Postretirement Benefits" above).

SHAREHOLDERS' EQUITY AND NONCONTROLLING INTERESTS

The following tables provide reconciliations of changes in Sempra Energy's, SDG&E's and SoCalGas' shareholders' equity and noncontrolling interests for the six months ended June 30, 2017 and 2016.

SHAREHOLDERS' EQUITY AND NONCONTROLLING INTERESTS – SEMPRA ENERGY CONSOLIDATED

(Dollars in millions)

	Sempra Energy shareholders' equity(1)	Non- controlling interests(2)	Total equity(1)
Balance at December 31, 2016	\$ 12,951	\$ 2,290	\$ 15,241
Comprehensive income	731	8	739
Preferred dividends of subsidiary	(1)	—	(1)
Share-based compensation expense	23	—	23
Common stock dividends declared	(413)	—	(413)
Issuances of common stock	55	—	55
Repurchases of common stock	(14)	—	(14)
Equity contributed by noncontrolling interest	—	1	1
Distributions to noncontrolling interests	—	(26)	(26)
Balance at June 30, 2017	\$ 13,332	\$ 2,273	\$ 15,605
Balance at December 31, 2015	\$ 11,809	\$ 770	\$ 12,579
Cumulative-effect adjustment from change in accounting principle	107	—	107
Comprehensive income	324	22	346
Preferred dividends of subsidiary	(1)	—	(1)
Share-based compensation expense	24	—	24
Common stock dividends declared	(377)	—	(377)
Issuances of common stock	56	—	56
Repurchases of common stock	(54)	—	(54)
Equity contributed by noncontrolling interest	—	1	1
Distributions to noncontrolling interests	—	(11)	(11)
Balance at June 30, 2016	\$ 11,888	\$ 782	\$ 12,670

(1) Amounts for the six months ended June 30, 2016 reflect the adoption of ASU 2016-09 as of January 1, 2016, as we discuss in Note 2.

(2) Noncontrolling interests include the preferred stock of SoCalGas and other noncontrolling interests as listed in the table below under "Other Noncontrolling Interests."

SHAREHOLDER'S EQUITY AND NONCONTROLLING INTEREST – SDG&E

(Dollars in millions)

	SDG&E shareholder's equity(1)	Non- controlling interest	Total equity(1)
Balance at December 31, 2016	\$ 5,641	\$ 37	\$ 5,678
Comprehensive income	304	10	314
Common stock dividends declared	(175)	—	(175)
Equity contributed by noncontrolling interest	—	1	1
Distributions to noncontrolling interest	—	(14)	(14)
Balance at June 30, 2017	\$ 5,770	\$ 34	\$ 5,804
Balance at December 31, 2015	\$ 5,223	\$ 53	\$ 5,276
Cumulative-effect adjustment from change in accounting principle	23	—	23
Comprehensive income (loss)	236	(13)	223
Common stock dividends declared	(175)	—	(175)
Distributions to noncontrolling interest	—	(3)	(3)
Balance at June 30, 2016	\$ 5,307	\$ 37	\$ 5,344

(1) Amounts for the six months ended June 30, 2016 reflect the adoption of ASU 2016-09 as of January 1, 2016, as we discuss in Note 2.

SHAREHOLDERS' EQUITY – SOCALGAS
(Dollars in millions)

	Total equity(1)
Balance at December 31, 2016	\$ 3,510
Comprehensive income	263
Preferred stock dividends declared	(1)
Balance at June 30, 2017	\$ 3,772
Balance at December 31, 2015	\$ 3,149
Cumulative-effect adjustment from change in accounting principle	15
Comprehensive income	199
Preferred stock dividends declared	(1)
Balance at June 30, 2016	\$ 3,362

(1) Amounts for the six months ended June 30, 2016 reflect the adoption of ASU 2016-09 as of January 1, 2016, as we discuss in Note 2.

Ownership interests that are held by owners other than Sempra Energy and SDG&E in subsidiaries or entities consolidated by them are accounted for and reported as noncontrolling interests. As a result, noncontrolling interests are reported as a separate component of equity on the Condensed Consolidated Balance Sheets. Earnings or losses attributable to noncontrolling interests are separately identified on the Condensed Consolidated Statements of Operations, and comprehensive income or loss attributable to noncontrolling interests is separately identified on the Condensed Consolidated Statements of Comprehensive Income (Loss).

Preferred Stock

The preferred stock at SoCalGas is presented at Sempra Energy as a noncontrolling interest. Sempra Energy records charges against income related to noncontrolling interests for preferred stock dividends declared by SoCalGas. We provide additional information regarding preferred stock in Note 11 of the Notes to Consolidated Financial Statements in the Annual Report.

Other Noncontrolling Interests

At June 30, 2017 and December 31, 2016, we reported the following noncontrolling ownership interests held by others (not including preferred shareholders) recorded in Other Noncontrolling Interests in Total Equity on Sempra Energy's Condensed Consolidated Balance Sheets:

OTHER NONCONTROLLING INTERESTS
(Dollars in millions)

	Percent ownership held by noncontrolling interests		Equity held by noncontrolling interests	
	June 30, 2017	December 31, 2016	June 30, 2017	December 31, 2016
SDG&E:				
Otay Mesa VIE	100 %	100 %	\$ 34	\$ 37
Sempra South American Utilities:				
Chilquinta Energía subsidiaries(1)	22.9 – 43.4	23.1 – 43.4	22	22
Luz del Sur	16.4	16.4	184	173
Tecsur S.A.	9.8	9.8	3	4
Sempra Mexico:				
IEnova	33.6	33.6	1,514	1,524
Sempra Renewables:				
Tax equity arrangement – wind(2)	NA	NA	91	92
Tax equity arrangement – solar(2)	NA	NA	363	376
Sempra LNG & Midstream:				
Bay Gas	9.1	9.1	28	27
Liberty Gas Storage, LLC	23.3	23.3	13	14
Southern Gas Transmission Company	49.0	49.0	1	1
Total Sempra Energy			\$ 2,253	\$ 2,270

(1) Chilquinta Energía has four subsidiaries with noncontrolling interests held by others. Percentage range reflects the highest and lowest ownership percentages among these subsidiaries.

(2) Net income or loss attributable to the noncontrolling interests is computed using the HLBV method and is not based on ownership percentages, as we discuss in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

TRANSACTIONS WITH AFFILIATES

Amounts due from and to unconsolidated affiliates at Sempra Energy Consolidated, SDG&E and SoCalGas are as follows:

AMOUNTS DUE FROM (TO) UNCONSOLIDATED AFFILIATES

(Dollars in millions)

	June 30, 2017	December 31, 2016
Sempra Energy Consolidated:		
Total due from various unconsolidated affiliates – current	\$ 26	\$ 26
Sempra South American Utilities(1):		
Eletrans – 4% Note(2)	\$ 90	\$ 96
Other related party receivables	1	1
Sempra Mexico(1):		
IMG – Note due March 15, 2022(3)	177	—
Affiliate of joint venture with Ductos y Energéticos del Norte – Notes due November 14, 2018(4)	92	90
Energía Sierra Juárez – Note(5)	13	14
Total due from unconsolidated affiliates – noncurrent	\$ 373	\$ 201
Total due to various unconsolidated affiliates – current	\$ (11)	\$ (11)
SDG&E:		
Sempra Energy(6)	\$ —	\$ 3
SoCalGas	1	—
Various affiliates	1	1
Total due from various unconsolidated affiliates – current	\$ 2	\$ 4
Sempra Energy	\$ (18)	\$ —
SoCalGas	—	(8)
Various affiliates	(8)	(7)
Total due to various unconsolidated affiliates – current	\$ (26)	\$ (15)
Income taxes due from Sempra Energy(7)	\$ 132	\$ 159
SoCalGas:		
Sempra Energy(8)	\$ 55	\$ —
SDG&E	—	8
Various affiliates	1	—
Total due from unconsolidated affiliates – current	\$ 56	\$ 8
Sempra Energy	\$ —	\$ (28)
SDG&E	(1)	—
Total due to unconsolidated affiliates – current	\$ (1)	\$ (28)
Income taxes due from Sempra Energy(7)	\$ 6	\$ 5

(1) Amounts include principal balances plus accumulated interest outstanding.

(2) U.S. dollar-denominated loan, at a fixed interest rate with no stated maturity date, to provide project financing for the construction of transmission lines at Eletrans, which includes, collectively, joint ventures of Chilquinta Energía.

(3) Mexican peso-denominated revolving line of credit for up to \$9.0 billion Mexican pesos or approximately \$500 million U.S. dollar-equivalent, at a variable interest rate based on the 91-day Interbank Equilibrium Interest Rate plus 220 basis points (9.60 percent at June 30, 2017), to finance construction of the natural gas marine pipeline.

(4) Four U.S. dollar-denominated loans, at variable interest rates based on the 30-day LIBOR plus 450 basis points (5.72 percent at June 30, 2017), to finance the Los Ramones Norte pipeline.

(5) U.S. dollar-denominated loan, at a variable interest rate based on the 30-day LIBOR plus 637.5 basis points (7.60 percent at June 30, 2017) with no stated maturity date, to finance the first phase of the Energía Sierra Juárez wind project, which is a joint venture of IEnova.

(6) At December 31, 2016, net receivable included outstanding advances to Sempra Energy of \$31 million at an interest rate of 0.68 percent.

(7) SDG&E and SoCalGas are included in the consolidated income tax return of Sempra Energy and are allocated income tax expense from Sempra Energy in an amount equal to that which would result from each company having always filed a separate return.

(8) At June 30, 2017, net receivable included outstanding advances to Sempra Energy of \$84 million at an interest rate of 1.23 percent.

Revenues and cost of sales from unconsolidated affiliates are as follows:

REVENUES AND COST OF SALES FROM UNCONSOLIDATED AFFILIATES				
<i>(Dollars in millions)</i>				
	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Revenues:				
Sempra Energy Consolidated	\$ 8	\$ 5	\$ 15	\$ 10
SDG&E	2	—	4	3
SoCalGas	17	18	35	35
Cost of Sales:				
Sempra Energy Consolidated	\$ 14	\$ 20	\$ 28	\$ 50
SDG&E	19	16	39	30

Guarantees

Sempra Energy has provided guarantees to certain of its solar and wind farm joint ventures, entered into guarantees related to the financing of the Cameron LNG JV project and has provided guarantees to IMG, as we discuss in Note 4 above and in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report.

OTHER INCOME, NET

Other Income, Net on the Condensed Consolidated Statements of Operations consists of the following:

OTHER INCOME, NET				
<i>(Dollars in millions)</i>				
	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Sempra Energy Consolidated:				
Allowance for equity funds used during construction	\$ 40	\$ 30	\$ 112	\$ 57
Investment gains(1)	14	10	30	20
Gains (losses) on interest rate and foreign exchange instruments, net	31	(15)	94	(12)
Foreign currency transaction gains (losses)	7	(5)	17	(7)
Electrical infrastructure relocation income(2)	—	2	—	3
Regulatory interest, net(3)	—	1	2	3
Sundry, net	(1)	—	5	8
Total	\$ 91	\$ 23	\$ 260	\$ 72
SDG&E:				
Allowance for equity funds used during construction	\$ 16	\$ 13	\$ 31	\$ 24
Regulatory interest, net(3)	—	1	2	3
Sundry, net	(1)	(1)	—	—
Total	\$ 15	\$ 13	\$ 33	\$ 27
SoCalGas:				
Allowance for equity funds used during construction	\$ 11	\$ 10	\$ 22	\$ 20
Sundry, net	(2)	(4)	(2)	(4)
Total	\$ 9	\$ 6	\$ 20	\$ 16

(1) Represents investment gains on dedicated assets in support of our executive retirement and deferred compensation plans. These amounts are partially offset by corresponding changes in compensation expense related to the plans, recorded in Operation and Maintenance on the Condensed Consolidated Statements of Operations.

(2) Income at Luz del Sur associated with the relocation of electrical infrastructure.

(3) Interest on regulatory balancing accounts.

INCOME TAXES

INCOME TAX EXPENSE AND EFFECTIVE INCOME TAX RATES

(Dollars in millions)

	Income tax expense	Effective income tax rate	Income tax (benefit) expense	Effective income tax rate
	Three months ended June 30,			
	2017		2016	
Sempra Energy Consolidated	\$ 167	40%	\$ (106)	95%
SDG&E	54	26	48	36
SoCalGas	19	24	(29)	100
	Six months ended June 30,			
	2017		2016(1)	
Sempra Energy Consolidated	\$ 462	39%	\$ 2	1%
SDG&E	144	32	113	34
SoCalGas	117	31	54	21

(1) Reflects the adoption of ASU 2016-09 as of January 1, 2016, as we discuss in Note 2.

Sempra Energy, SDG&E and SoCalGas record income taxes for interim periods utilizing a forecasted effective tax rate anticipated for the full year, as required by U.S. GAAP. The income tax effect of items that can be reliably forecasted is factored into the forecasted effective tax rate, and the impact is recognized proportionately over the year. Items that cannot be reliably forecasted (e.g., foreign currency translation and inflation adjustments, remeasurement of deferred tax asset valuation allowances, income tax expense or benefit associated with the gain or loss on sale or impairment of a book investment, resolution of prior years' income tax items, and certain impacts of regulatory matters) are recorded in the interim period in which they actually occur, which can result in variability in the effective income tax rate.

For SDG&E and SoCalGas, the CPUC requires flow-through rate-making treatment for the current income tax benefit or expense arising from certain property-related and other temporary differences between the treatment for financial reporting and income tax, which will reverse over time. Under the regulatory accounting treatment required for these flow-through temporary differences, deferred income tax assets and liabilities are not recorded to deferred income tax expense, but rather to a regulatory asset or liability, which impacts the current effective income tax rate. As a result, changes in the relative size of these items compared to pretax income, from period to period, can cause variations in the effective income tax rate. The following items are subject to flow-through treatment:

- repairs expenditures related to a certain portion of utility plant assets
- the equity portion of AFUDC
- a portion of the cost of removal of utility plant assets
- utility self-developed software expenditures
- depreciation on a certain portion of utility plant assets
- state income taxes

The AFUDC related to equity recorded for regulated construction projects at Sempra Mexico has similar flow-through treatment.

As we discuss in Note 10 below and in Notes 6 and 14 of the Notes to Consolidated Financial Statements in the Annual Report, the 2016 GRC FD issued by the CPUC in June 2016 required SDG&E and SoCalGas to each establish a two-way income tax expense memorandum account to track certain revenue variances resulting from certain differences between the income tax expense forecasted in the GRC and the income tax expense incurred from 2016 through 2018. The tracking accounts will remain open, and the balance in the accounts will be reviewed in subsequent GRC proceedings, until the CPUC decides to close them. We expect that certain amounts recorded in the tracking accounts may give rise to regulatory assets or liabilities.

In the three months and six months ended June 30, 2017, we recorded \$52 million (\$34 million after noncontrolling interests) and \$149 million (\$99 million after noncontrolling interests), respectively, of income tax expense from the transactional effects of foreign currency and inflation as a result of significant appreciation of the Mexican peso. Such effects were partially mitigated by net gains of \$32 million (\$19 million after-tax) and \$97 million (\$58 million after-tax), respectively, recorded in Other Income, Net, on the Condensed Consolidated Statements of Operations, from foreign currency derivatives that are hedging Sempra Mexico parent's exposure to movements in the Mexican peso from its controlling interest in IEnova.

We provide additional information about our accounting for income taxes in Notes 1 and 6 of the Notes to Consolidated Financial Statements in the Annual Report.

NOTE 6. DEBT AND CREDIT FACILITIES

LINES OF CREDIT

At June 30, 2017, Sempra Energy Consolidated had an aggregate of \$4.3 billion in three primary committed lines of credit for Sempra Energy, Sempra Global and the California Utilities to provide liquidity and to support commercial paper. The principal terms of these committed lines of credit, which expire in October 2020, are described below and in Note 5 of the Notes to Consolidated Financial Statements in the Annual Report. Available unused credit on these lines at June 30, 2017 was approximately \$3.1 billion. Our foreign operations have additional general purpose credit facilities aggregating \$1.7 billion at June 30, 2017. Available unused credit on these lines totaled \$1 billion at June 30, 2017.

PRIMARY U.S. COMMITTED LINES OF CREDIT

(Dollars in millions)

	At June 30, 2017		
	Total facility	Commercial paper outstanding(4)	Available unused credit
Sempra Energy(1)	\$ 1,000	\$ —	\$ 1,000
Sempra Global(2)	2,335	(1,236)	1,099
California Utilities(3):			
SDG&E	750	(5)	745
SoCalGas	750	—	750
Less: combined limit of \$1 billion for both utilities	(500)	—	(500)
	1,000	(5)	995
Total	\$ 4,335	\$ (1,241)	\$ 3,094

(1) The facility also provides for issuance of up to \$400 million of letters of credit on behalf of Sempra Energy with the amount of borrowings otherwise available under the facility reduced by the amount of outstanding letters of credit. No letters of credit were outstanding at June 30, 2017.

(2) Sempra Energy guarantees Sempra Global's obligations under the credit facility.

(3) The facility also provides for the issuance of letters of credit on behalf of each utility subject to a combined letter of credit commitment of \$250 million for both utilities. The amount of borrowings otherwise available under the facility is reduced by the amount of outstanding letters of credit. No letters of credit were outstanding at June 30, 2017.

(4) Because the commercial paper programs are supported by these lines, we reflect the amount of commercial paper outstanding as a reduction to the available unused credit.

Sempra Energy, SDG&E and SoCalGas must maintain a ratio of indebtedness to total capitalization (as defined in each agreement) of no more than 65 percent at the end of each quarter. Each entity is in compliance with this and all other financial covenants under its respective credit facility at June 30, 2017.

CREDIT FACILITIES IN SOUTH AMERICA AND MEXICO

(U.S. dollar-equivalent in millions)

	Denominated in	At June 30, 2017		
		Total facility	Amount outstanding	Available unused credit
Sempra South American Utilities(1):				
Peru(2)	Peruvian sol	\$ 379	\$ (147) (3)	\$ 232
Chile	Chilean peso	115	—	115
Sempra Mexico:				
IEnova(4)	U.S. dollar	1,170	(516)	654
Total		\$ 1,664	\$ (663)	\$ 1,001

(1) The credit facilities were entered into to finance working capital and for general corporate purposes and expire between 2017 and 2020.

(2) The Peruvian facilities require a debt to equity ratio of no more than 170 percent, with which we were in compliance at June 30, 2017.

(3) Includes bank guarantees of \$4 million.

(4) Five-year revolver expiring in August 2020 with a syndicate of eight lenders.

WEIGHTED AVERAGE INTEREST RATES

The weighted average interest rates on total short-term debt at Sempra Energy Consolidated were 1.81 percent and 1.51 percent at June 30, 2017 and December 31, 2016, respectively. The weighted average interest rate on total short-term debt at SDG&E was 1.15 percent at June 30, 2017. At December 31, 2016, the weighted average interest rate on total short-term debt at SoCalGas was 0.75 percent.

LONG-TERM DEBT

Sempra Energy

In June 2017, Sempra Energy publicly offered and sold \$750 million of 3.25-percent, fixed rate notes maturing in 2027. Sempra Energy used the proceeds from the offering to repay outstanding commercial paper.

SDG&E

In June 2017, SDG&E publicly offered and sold \$400 million of 3.75-percent, first mortgage bonds maturing in 2047. SDG&E used the proceeds from the offering to repay outstanding commercial paper.

In 2015, SDG&E entered into a CPUC-approved 25-year PPA with a peaker plant facility. Construction of the peaker plant facility was completed and delivery of contracted power commenced in June 2017, at which time we recorded a \$500 million capital lease obligation on SDG&E's and Sempra Energy's Condensed Consolidated Balance Sheets. We discuss commitments related to this capital lease obligation in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

Sempra South American Utilities

In February 2017, Luz del Sur publicly offered and sold \$50 million of corporate bonds at 6.38 percent, maturing in 2023.

INTEREST RATE SWAPS

We discuss our fair value interest rate swaps and interest rate swaps to hedge cash flows in Note 7.

NOTE 7. DERIVATIVE FINANCIAL INSTRUMENTS

We use derivative instruments primarily to manage exposures arising in the normal course of business. Our principal exposures are commodity market risk, benchmark interest rate risk and foreign exchange rate exposures. Our use of derivatives for these risks is integrated into the economic management of our anticipated revenues, anticipated expenses, assets and liabilities. Derivatives may be effective in mitigating these risks (1) that could lead to declines in anticipated revenues or increases in anticipated expenses, or (2) that our asset values may fall or our liabilities increase. Accordingly, our derivative activity summarized below generally represents an impact that is intended to offset associated revenues, expenses, assets or liabilities that are not included in the tables below.

In certain cases, we apply the normal purchase or sale exception to derivative instruments and have other commodity contracts that are not derivatives. These contracts are not recorded at fair value and are therefore excluded from the disclosures below.

In all other cases, we record derivatives at fair value on the Condensed Consolidated Balance Sheets. We designate each derivative as (1) a cash flow hedge, (2) a fair value hedge, or (3) undesignated. Depending on the applicability of hedge accounting and, for the California Utilities and other operations subject to regulatory accounting, the requirement to pass impacts through to customers, the impact of derivative instruments may be offset in other comprehensive income (loss) (cash flow hedge), on the balance sheet (fair value hedges and regulatory offsets), or recognized in earnings. We classify cash flows from the settlements of derivative instruments as operating activities on the Condensed Consolidated Statements of Cash Flows.

HEDGE ACCOUNTING

We may designate a derivative as a cash flow hedging instrument if it effectively converts anticipated cash flows associated with revenues or expenses to a fixed dollar amount. We may utilize cash flow hedge accounting for derivative commodity instruments, foreign currency instruments and interest rate instruments. Designating cash flow hedges is dependent on the business context in which the instrument is being used, the effectiveness of the instrument in offsetting the risk that the future cash flows of a given revenue or expense item may vary, and other criteria.

We may designate an interest rate derivative as a fair value hedging instrument if it effectively converts our own debt from a fixed interest rate to a variable rate. The combination of the derivative and debt instrument results in fixing that portion of the fair value of the debt that is related to benchmark interest rates. Designating fair value hedges is dependent on the instrument being used, the effectiveness of the instrument in offsetting changes in the fair value of our debt instruments, and other criteria.

ENERGY DERIVATIVES

Our market risk is primarily related to natural gas and electricity price volatility and the specific physical locations where we transact. We use energy derivatives to manage these risks. The use of energy derivatives in our various businesses depends on the particular energy market, and the operating and regulatory environments applicable to the business, as follows:

- The California Utilities use natural gas and electricity derivatives, for the benefit of customers, with the objective of managing price risk and basis risks, and stabilizing and lowering natural gas and electricity costs. These derivatives include fixed price natural gas and electricity positions, options, and basis risk instruments, which are either exchange-traded or over-the-counter financial instruments, or bilateral physical transactions. This activity is governed by risk management and transacting activity plans that have been filed with and approved by the CPUC. Natural gas and electricity derivative activities are recorded as commodity costs that are offset by regulatory account balances and are recovered in rates. Net commodity cost impacts on the Condensed Consolidated Statements of Operations are reflected in Cost of Electric Fuel and Purchased Power or in Cost of Natural Gas.
- SDG&E is allocated and may purchase CRRs, which serve to reduce the regional electricity price volatility risk that may result from local transmission capacity constraints. Unrealized gains and losses do not impact earnings, as they are offset by regulatory account balances. Realized gains and losses associated with CRRs, which are recoverable in rates, are recorded in Cost of Electric Fuel and Purchased Power on the Condensed Consolidated Statements of Operations.
- Sempra Mexico, Sempra LNG & Midstream, and Sempra Renewables may use natural gas and electricity derivatives, as appropriate, to optimize the earnings of their assets which support the following businesses: LNG, natural gas transportation and storage, and power generation. Gains and losses associated with undesignated derivatives are recognized in Energy-Related Businesses Revenues or in Cost of Natural Gas, Electric Fuel and Purchased Power on the Condensed Consolidated Statements of Operations. Certain of these derivatives may also be designated as cash flow hedges. Sempra Mexico may also use natural gas energy derivatives with the objective of managing price risk and lowering natural gas prices at its Mexican distribution

operations. These derivatives, which are recorded as commodity costs that are offset by regulatory account balances and recovered in rates, are recognized in Cost of Natural Gas on the Condensed Consolidated Statements of Operations.

- From time to time, our various businesses, including the California Utilities, may use other energy derivatives to hedge exposures such as the price of vehicle fuel.

We summarize net energy derivative volumes at June 30, 2017 and December 31, 2016 as follows:

NET ENERGY DERIVATIVE VOLUMES				
<i>(Quantities in millions)</i>				
Commodity	Unit of measure	June 30, 2017	December 31, 2016	
California Utilities:				
SDG&E:				
Natural gas	MMBtu	44	48	
Electricity	MWh	4	4	
Congestion revenue rights	MWh	42	48	
SoCalGas – natural gas	MMBtu	—	1	
Energy-Related Businesses:				
Sempra LNG & Midstream – natural gas	MMBtu	14	31	
Sempra Mexico – natural gas	MMBtu	3	—	

In addition to the amounts noted above, we frequently use commodity derivatives to manage risks associated with the physical locations of contractual obligations and assets, such as natural gas purchases and sales.

INTEREST RATE DERIVATIVES

We are exposed to interest rates primarily as a result of our current and expected use of financing. The California Utilities, as well as other Sempra Energy subsidiaries and joint ventures, periodically enter into interest rate derivative agreements intended to moderate our exposure to interest rates and to lower our overall costs of borrowing. We may utilize interest rate swaps typically designated as fair value hedges, as a means to achieve our targeted level of variable rate debt as a percent of total debt. In addition, we may utilize interest rate swaps, typically designated as cash flow hedges, to lock in interest rates on outstanding debt or in anticipation of future financings. Separately, Otay Mesa VIE has entered into interest rate swap agreements, designated as cash flow hedges, to moderate its exposure to interest rate changes.

At June 30, 2017 and December 31, 2016, the net notional amounts of our interest rate derivatives, excluding joint ventures, were:

INTEREST RATE DERIVATIVES						
<i>(Dollars in millions)</i>						
	June 30, 2017			December 31, 2016		
	Notional debt	Maturities		Notional debt	Maturities	
Sempra Energy Consolidated:						
Cash flow hedges(1)	\$	897	2017-2032	\$	924	2017-2032
SDG&E:						
Cash flow hedges(1)		300	2017-2019		305	2017-2019

(1) Includes Otay Mesa VIE. All of SDG&E's interest rate derivatives relate to Otay Mesa VIE.

FOREIGN CURRENCY DERIVATIVES

We utilize cross-currency swaps to hedge exposure related to Mexican peso-denominated debt at our Mexican subsidiaries and joint ventures. These cash flow hedges exchange our Mexican peso-denominated principal and interest payments into the U.S. dollar and swap Mexican variable interest rates for U.S. fixed interest rates. From time to time, Sempra Mexico and its joint ventures may use other foreign currency derivatives to hedge exposures related to cash flows associated with revenues from contracts denominated in Mexican pesos that are indexed to the U.S. dollar.

We are also exposed to exchange rate movements at our Mexican subsidiaries and joint ventures, which have U.S. dollar-denominated cash balances, receivables, payables and debt (monetary assets and liabilities) that give rise to Mexican currency

exchange rate movements for Mexican income tax purposes. They also have deferred income tax assets and liabilities denominated in the Mexican peso, which must be translated to U.S. dollars for financial reporting purposes. In addition, monetary assets and liabilities and certain nonmonetary assets and liabilities are adjusted for Mexican inflation for Mexican income tax purposes. We utilize foreign currency derivatives as a means to manage the risk of exposure to significant fluctuations in our income tax expense and equity earnings from these impacts, however we generally do not hedge our deferred income tax assets and liabilities or inflation.

In addition, Sempra South American Utilities and its joint ventures use foreign currency derivatives to manage foreign currency rate risk. We discuss these derivatives at Chilquinta Energía's Eletrans joint venture investment in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report.

At June 30, 2017 and December 31, 2016, the net notional amounts of our foreign currency derivatives, excluding joint ventures, were:

FOREIGN CURRENCY DERIVATIVES				
<i>(Dollars in millions)</i>				
	June 30, 2017		December 31, 2016	
	Notional amount	Maturities	Notional amount	Maturities
Sempra Energy Consolidated:				
Cross-currency swaps	\$ 408	2017-2023	\$ 408	2017-2023
Other foreign currency derivatives(1)	903	2017-2018	86	2017-2018

(1) In the first quarter of 2017, we entered into foreign currency derivatives with notional amounts totaling \$850 million that expire in December 2017.

FINANCIAL STATEMENT PRESENTATION

The Condensed Consolidated Balance Sheets reflect the offsetting of net derivative positions and cash collateral with the same counterparty when a legal right of offset exists. The following tables provide the fair values of derivative instruments on the Condensed Consolidated Balance Sheets at June 30, 2017 and December 31, 2016, including the amount of cash collateral receivables that were not offset, as the cash collateral is in excess of liability positions.

DERIVATIVE INSTRUMENTS ON THE CONDENSED CONSOLIDATED BALANCE SHEETS
(Dollars in millions)

June 30, 2017

	Current assets: Fixed-price contracts and other derivatives(1)	Other assets: Sundry	Current liabilities: Fixed-price contracts and other derivatives(2)	Deferred credits and other liabilities: Fixed-price contracts and other derivatives
Sempra Energy Consolidated:				
Derivatives designated as hedging instruments:				
Interest rate and foreign exchange instruments(3)	\$ 1	\$ —	\$ (56)	\$ (153)
Derivatives not designated as hedging instruments:				
Foreign exchange instruments	130	—	—	—
Commodity contracts not subject to rate recovery	43	8	(33)	(5)
Associated offsetting commodity contracts	(29)	(3)	29	3
Commodity contracts subject to rate recovery	15	71	(59)	(147)
Associated offsetting commodity contracts	(1)	—	1	—
Associated offsetting cash collateral	—	—	15	10
Net amounts presented on the balance sheet	159	76	(103)	(292)
Additional cash collateral for commodity contracts not subject to rate recovery	10	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	17	—	—	—
Total(4)	\$ 186	\$ 76	\$ (103)	\$ (292)
SDG&E:				
Derivatives designated as hedging instruments:				
Interest rate instruments(3)	\$ —	\$ —	\$ (13)	\$ (7)
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	14	71	(58)	(147)
Associated offsetting commodity contracts	(1)	—	1	—
Associated offsetting cash collateral	—	—	15	10
Net amounts presented on the balance sheet	13	71	(55)	(144)
Additional cash collateral for commodity contracts subject to rate recovery	16	—	—	—
Total(4)	\$ 29	\$ 71	\$ (55)	\$ (144)
SoCalGas:				
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	\$ 1	\$ —	\$ (1)	\$ —
Net amounts presented on the balance sheet	1	—	(1)	—
Additional cash collateral for commodity contracts not subject to rate recovery	1	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	1	—	—	—
Total	\$ 3	\$ —	\$ (1)	\$ —

(1) Included in Current Assets: Other for SoCalGas.

(2) Included in Current Liabilities: Other for SoCalGas.

(3) Includes Otay Mesa VIE. All of SDG&E's amounts relate to Otay Mesa VIE.

(4) Normal purchase contracts previously measured at fair value are excluded.

DERIVATIVE INSTRUMENTS ON THE CONDENSED CONSOLIDATED BALANCE SHEETS
(Dollars in millions)

December 31, 2016

	Current assets: Fixed-price contracts and other derivatives(1)	Other assets: Sundry	Current liabilities: Fixed-price contracts and other derivatives(2)	Deferred credits and other liabilities: Fixed-price contracts and other derivatives
Sempra Energy Consolidated:				
Derivatives designated as hedging instruments:				
Interest rate and foreign exchange instruments(3)	\$ 7	\$ 2	\$ (24)	\$ (228)
Commodity contracts not subject to rate recovery	—	—	(14)	—
Derivatives not designated as hedging instruments:				
Commodity contracts not subject to rate recovery	248	36	(254)	(28)
Associated offsetting commodity contracts	(242)	(27)	242	27
Associated offsetting cash collateral	—	(1)	16	1
Commodity contracts subject to rate recovery	37	73	(57)	(150)
Associated offsetting commodity contracts	(9)	(1)	9	1
Associated offsetting cash collateral	—	—	5	13
Net amounts presented on the balance sheet	41	82	(77)	(364)
Additional cash collateral for commodity contracts not subject to rate recovery	10	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	32	—	—	—
Total(4)	\$ 83	\$ 82	\$ (77)	\$ (364)
SDG&E:				
Derivatives designated as hedging instruments:				
Interest rate instruments(3)	\$ —	\$ —	\$ (13)	\$ (12)
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	33	73	(51)	(150)
Associated offsetting commodity contracts	(6)	(1)	6	1
Associated offsetting cash collateral	—	—	3	13
Net amounts presented on the balance sheet	27	72	(55)	(148)
Additional cash collateral for commodity contracts not subject to rate recovery	1	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	30	—	—	—
Total(4)	\$ 58	\$ 72	\$ (55)	\$ (148)
SoCalGas:				
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	\$ 4	\$ —	\$ (6)	\$ —
Associated offsetting commodity contracts	(3)	—	3	—
Associated offsetting cash collateral	—	—	2	—
Net amounts presented on the balance sheet	1	—	(1)	—
Additional cash collateral for commodity contracts not subject to rate recovery	1	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	2	—	—	—
Total	\$ 4	\$ —	\$ (1)	\$ —

(1) Included in Current Assets: Other for SoCalGas.

(2) Included in Current Liabilities: Other for SoCalGas.

(3) Includes Otay Mesa VIE. All of SDG&E's amounts relate to Otay Mesa VIE.

(4) Normal purchase contracts previously measured at fair value are excluded.

The table below includes the effects of derivative instruments designated as fair value hedges on the Condensed Consolidated Statement of Operations for the three months and six months ended June 30, 2016. There were no fair value hedges outstanding during the three months or six months ended June 30, 2017.

FAIR VALUE HEDGE IMPACTS

(Dollars in millions)

		Pretax gain (loss) on derivatives recognized in earnings	
		Three months ended	Six months ended
		June 30, 2016	June 30, 2016
Sempra Energy Consolidated:			
Interest rate instruments	Interest Expense	\$ 1	\$ 3
Interest rate instruments	Other Income, Net	(2)	(2)
Total(1)		\$ (1)	\$ 1

(1) There was no hedge ineffectiveness in either the three months or six months ended June 30, 2016. All other changes in the fair value of the interest rate swap agreements are exactly offset by changes in the fair value of the underlying long-term debt and recorded in Other Income, Net.

The table below includes the effects of derivative instruments designated as cash flow hedges on the Condensed Consolidated Statements of Operations and in OCI and AOCI for the three months and six months ended June 30:

CASH FLOW HEDGE IMPACTS
(Dollars in millions)

	Pretax (loss) gain recognized in OCI				Location	Pretax gain (loss) reclassified from AOCI into earnings			
	Three months ended June 30,					Three months ended June 30,			
	2017		2016			2017		2016	
Sempra Energy Consolidated:									
Interest rate and foreign exchange instruments(1)	\$	(8)	\$	1	Interest Expense	\$	1	\$	(3)
Interest rate instruments		(32)		(70)	Equity Earnings (Losses), Before Income Tax		(2)		(2)
Interest rate and foreign exchange instruments		(9)		(15)	Equity Earnings (Losses), Net of Income Tax		(3)		(5)
Foreign exchange instruments		(1)		—	Revenues: Energy-Related Businesses		1		—
Commodity contracts not subject to rate recovery		—		(5)	Revenues: Energy-Related Businesses		—		—
Total(2)	\$	(50)	\$	(89)		\$	(3)	\$	(10)

SDG&E:

Interest rate instruments(1)(3)	\$	(2)	\$	(2)	Interest Expense	\$	(3)	\$	(3)
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	Six months ended June 30,				Location	Six months ended June 30,			
	2017					2016			
	2017		2016			2017		2016	
Sempra Energy Consolidated:									
Interest rate and foreign exchange instruments(1)	\$	8	\$	(10)	Interest Expense	\$	4	\$	(7)
Interest rate instruments		(37)		(207)	Equity Earnings (Losses), Before Income Tax		(4)		(5)
Interest rate and foreign exchange instruments		(18)		(33)	Equity Earnings (Losses), Net of Income Tax		(5)		(6)
Foreign exchange instruments		(10)		—	Revenues: Energy-Related Businesses		(1)		—
Commodity contracts not subject to rate recovery		3		(4)	Revenues: Energy-Related Businesses		(9)		7
Total(2)	\$	(54)	\$	(254)		\$	(15)	\$	(11)

SDG&E:

Interest rate instruments(1)(3)	\$	(2)	\$	(7)	Interest Expense	\$	(6)	\$	(6)
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(1) Amounts include Otay Mesa VIE. All of SDG&E's interest rate derivative activity relates to Otay Mesa VIE.

(2) There was \$2 million of losses from hedge ineffectiveness related to these cash flow hedges in each of the three months and six months ended June 30, 2017 and negligible amounts for the same periods in 2016.

(3) There was negligible hedge ineffectiveness related to these cash flow hedges in the three months and six months ended June 30, 2017 and 2016.

For Sempra Energy Consolidated, we expect that net gains of \$11 million, which are net of income tax expense, that are currently recorded in AOCI (including \$11 million of losses in noncontrolling interests related to Otay Mesa VIE at SDG&E) related to cash flow hedges will be reclassified into earnings during the next twelve months as the hedged items affect earnings. SoCalGas expects that negligible losses, net of income tax benefit, that are currently recorded in AOCI related to cash flow hedges will be reclassified into earnings during the next twelve months as the hedged items affect earnings. Actual amounts ultimately reclassified into earnings depend on the interest rates in effect when derivative contracts mature.

For all forecasted transactions, the maximum remaining term over which we are hedging exposure to the variability of cash flows at June 30, 2017 is approximately 15 years and 2 years for Sempra Energy Consolidated and SDG&E, respectively. The maximum remaining term for which we are hedging exposure to the variability of cash flows at our equity method investees is 18 years.

The effects of derivative instruments not designated as hedging instruments on the Condensed Consolidated Statements of Operations for the three months and six months ended June 30 were:

UNDESIGNATED DERIVATIVE IMPACTS*(Dollars in millions)*

		Pretax gain (loss) on derivatives recognized in earnings			
		Three months ended		Six months ended	
		June 30,		June 30,	
Location		2017	2016	2017	2016
Sempra Energy Consolidated:					
Foreign exchange instruments	Other Income, Net	\$ 32	\$ (15)	\$ 97	\$ (12)
Foreign exchange instruments	Equity Earnings (Losses), Net of Income Tax	—	—	—	2
Commodity contracts not subject to rate recovery	Revenues: Energy-Related Businesses	16	(24)	30	(29)
Commodity contracts not subject to rate recovery	Operation and Maintenance	—	1	(1)	1
Commodity contracts subject to rate recovery	Cost of Electric Fuel and Purchased Power	6	40	(23)	28
Commodity contracts subject to rate recovery	Cost of Natural Gas	—	(1)	—	(2)
Total		\$ 54	\$ 1	\$ 103	\$ (12)
SDG&E:					
Commodity contracts subject to rate recovery	Cost of Electric Fuel and Purchased Power	\$ 6	\$ 40	\$ (23)	\$ 28
SoCalGas:					
Commodity contracts not subject to rate recovery	Operation and Maintenance	\$ —	\$ —	\$ (1)	\$ —
Commodity contracts subject to rate recovery	Cost of Natural Gas	—	(1)	—	(2)
Total		\$ —	\$ (1)	\$ (1)	\$ (2)

CONTINGENT FEATURES

For Sempra Energy Consolidated and SDG&E, certain of our derivative instruments contain credit limits which vary depending on our credit ratings. Generally, these provisions, if applicable, may reduce our credit limit if a specified credit rating agency reduces our ratings. In certain cases, if our credit ratings were to fall below investment grade, the counterparty to these derivative liability instruments could request immediate payment or demand immediate and ongoing full collateralization.

For Sempra Energy Consolidated, the total fair value of this group of derivative instruments in a net liability position at June 30, 2017 and December 31, 2016 is \$4 million and \$10 million, respectively. At June 30, 2017, if the credit ratings of Sempra Energy were reduced below investment grade, \$6 million of additional assets could be required to be posted as collateral for these derivative contracts.

For SDG&E, the total fair value of this group of derivative instruments in a net liability position is \$1 million at June 30, 2017 and negligible at December 31, 2016. At June 30, 2017, if the credit ratings of SDG&E were reduced below investment grade, \$3 million of additional assets could be required to be posted as collateral for these derivative contracts.

For Sempra Energy Consolidated, SDG&E and SoCalGas, some of our derivative contracts contain a provision that would permit the counterparty, in certain circumstances, to request adequate assurance of our performance under the contracts. Such additional assurance, if needed, is not material and is not included in the amounts above.

NOTE 8. FAIR VALUE MEASUREMENTS

We discuss the valuation techniques and inputs we use to measure fair value and the definition of the three levels of the fair value hierarchy in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

RECURRING FAIR VALUE MEASURES

The three tables below, by level within the fair value hierarchy, set forth our financial assets and liabilities that were accounted for at fair value on a recurring basis at June 30, 2017 and December 31, 2016. We classify financial assets and liabilities in their entirety based on the lowest level of input that is significant to the fair value measurement. Our assessment of the significance of a particular input to the fair value measurement requires judgment, and may affect the valuation of fair value assets and liabilities, and their placement within the fair value hierarchy levels. We have not changed the valuation techniques or types of inputs we use to measure recurring fair value during the six months ended June 30, 2017.

The fair value of commodity derivative assets and liabilities is presented in accordance with our netting policy, as we discuss in Note 7 under “Financial Statement Presentation.”

The determination of fair values, shown in the tables below, incorporates various factors, including but not limited to, the credit standing of the counterparties involved and the impact of credit enhancements (such as cash deposits, letters of credit and priority interests).

Our financial assets and liabilities that were accounted for at fair value on a recurring basis at June 30, 2017 and December 31, 2016 in the tables below include the following:

- Nuclear decommissioning trusts reflect the assets of SDG&E’s NDT, excluding cash balances. A third party trustee values the trust assets using prices from a pricing service based on a market approach. We validate these prices by comparison to prices from other independent data sources. Securities are valued using quoted prices listed on nationally recognized securities exchanges or based on closing prices reported in the active market in which the identical security is traded (Level 1). Other securities are valued based on yields that are currently available for comparable securities of issuers with similar credit ratings (Level 2).
- For commodity contracts, interest rate derivatives and foreign exchange instruments, we primarily use a market approach with market participant assumptions to value these derivatives. Market participant assumptions include those about risk, and the risk inherent in the inputs to the valuation techniques. These inputs can be readily observable, market corroborated, or generally unobservable. We have exchange-traded derivatives that are valued based on quoted prices in active markets for the identical instruments (Level 1). We also may have other commodity derivatives that are valued using industry standard models that consider quoted forward prices for commodities, time value, current market and contractual prices for the underlying instruments, volatility factors, and other relevant economic measures (Level 2). Level 3 recurring items relate to CRRs and long-term, fixed-price electricity positions at SDG&E, as we discuss below in “Level 3 Information.”
- Rabbi Trust investments include marketable securities that we value using a market approach based on closing prices reported in the active market in which the identical security is traded (Level 1). These investments in marketable securities were negligible at both June 30, 2017 and December 31, 2016.

There were no transfers into or out of Level 1, Level 2 or Level 3 for Sempra Energy Consolidated, SDG&E or SoCalGas during the periods presented.

RECURRING FAIR VALUE MEASURES – SEMPRA ENERGY CONSOLIDATED
(Dollars in millions)

	Fair value at June 30, 2017				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Nuclear decommissioning trusts:					
Equity securities	\$ 494	\$ 5	\$ —	\$ —	\$ 499
Debt securities:					
Debt securities issued by the U.S. Treasury and other					
U.S. government corporations and agencies	49	8	—	—	57
Municipal bonds	—	263	—	—	263
Other securities	—	199	—	—	199
Total debt securities	49	470	—	—	519
Total nuclear decommissioning trusts(2)	543	475	—	—	1,018
Interest rate and foreign exchange instruments	—	131	—	—	131
Commodity contracts not subject to rate recovery	7	12	—	10	29
Commodity contracts subject to rate recovery	—	1	84	17	102
Total	\$ 550	\$ 619	\$ 84	\$ 27	\$ 1,280
Liabilities:					
Interest rate and foreign exchange instruments	\$ —	\$ 209	\$ —	\$ —	\$ 209
Commodity contracts not subject to rate recovery	3	3	—	—	6
Commodity contracts subject to rate recovery	25	6	174	(25)	180
Total	\$ 28	\$ 218	\$ 174	\$ (25)	\$ 395

	Fair value at December 31, 2016				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Nuclear decommissioning trusts:					
Equity securities	\$ 508	\$ —	\$ —	\$ —	\$ 508
Debt securities:					
Debt securities issued by the U.S. Treasury and other					
U.S. government corporations and agencies	36	16	—	—	52
Municipal bonds	—	206	—	—	206
Other securities	—	141	—	—	141
Total debt securities	36	363	—	—	399
Total nuclear decommissioning trusts(2)	544	363	—	—	907
Interest rate and foreign exchange instruments	—	9	—	—	9
Commodity contracts not subject to rate recovery	—	15	—	9	24
Commodity contracts subject to rate recovery	1	3	96	32	132
Total	\$ 545	\$ 390	\$ 96	\$ 41	\$ 1,072
Liabilities:					
Interest rate and foreign exchange instruments	\$ —	\$ 252	\$ —	\$ —	\$ 252
Commodity contracts not subject to rate recovery	16	11	—	(17)	10
Commodity contracts subject to rate recovery	19	8	170	(18)	179
Total	\$ 35	\$ 271	\$ 170	\$ (35)	\$ 441

(1) Includes the effect of the contractual ability to settle contracts under master netting agreements and with cash collateral, as well as cash collateral not offset.

(2) Excludes cash balances and cash equivalents.

RECURRING FAIR VALUE MEASURES – SDG&E
(Dollars in millions)

	Fair value at June 30, 2017				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Nuclear decommissioning trusts:					
Equity securities	\$ 494	\$ 5	\$ —	\$ —	\$ 499
Debt securities:					
Debt securities issued by the U.S. Treasury and other					
U.S. government corporations and agencies	49	8	—	—	57
Municipal bonds	—	263	—	—	263
Other securities	—	199	—	—	199
Total debt securities	49	470	—	—	519
Total nuclear decommissioning trusts(2)	543	475	—	—	1,018
Commodity contracts subject to rate recovery	—	—	84	16	100
Total	\$ 543	\$ 475	\$ 84	\$ 16	\$ 1,118
Liabilities:					
Interest rate instruments	\$ —	\$ 20	\$ —	\$ —	\$ 20
Commodity contracts subject to rate recovery	25	5	174	(25)	179
Total	\$ 25	\$ 25	\$ 174	\$ (25)	\$ 199

	Fair value at December 31, 2016				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Nuclear decommissioning trusts:					
Equity securities	\$ 508	\$ —	\$ —	\$ —	\$ 508
Debt securities:					
Debt securities issued by the U.S. Treasury and other					
U.S. government corporations and agencies	36	16	—	—	52
Municipal bonds	—	206	—	—	206
Other securities	—	141	—	—	141
Total debt securities	36	363	—	—	399
Total nuclear decommissioning trusts(2)	544	363	—	—	907
Commodity contracts not subject to rate recovery	—	—	—	1	1
Commodity contracts subject to rate recovery	1	2	96	30	129
Total	\$ 545	\$ 365	\$ 96	\$ 31	\$ 1,037
Liabilities:					
Interest rate instruments	\$ —	\$ 25	\$ —	\$ —	\$ 25
Commodity contracts subject to rate recovery	17	7	170	(16)	178
Total	\$ 17	\$ 32	\$ 170	\$ (16)	\$ 203

(1) Includes the effect of the contractual ability to settle contracts under master netting agreements and with cash collateral, as well as cash collateral not offset.

(2) Excludes cash balances and cash equivalents.

RECURRING FAIR VALUE MEASURES – SOCALGAS

(Dollars in millions)

	Fair value at June 30, 2017				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Commodity contracts not subject to rate recovery	\$ —	\$ —	\$ —	\$ 1	\$ 1
Commodity contracts subject to rate recovery	—	1	—	1	2
Total	\$ —	\$ 1	\$ —	\$ 2	\$ 3
Liabilities:					
Commodity contracts subject to rate recovery	\$ —	\$ 1	\$ —	\$ —	\$ 1
Total	\$ —	\$ 1	\$ —	\$ —	\$ 1

	Fair value at December 31, 2016				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Commodity contracts not subject to rate recovery	\$ —	\$ —	\$ —	\$ 1	\$ 1
Commodity contracts subject to rate recovery	—	1	—	2	3
Total	\$ —	\$ 1	\$ —	\$ 3	\$ 4
Liabilities:					
Commodity contracts subject to rate recovery	\$ 2	\$ 1	\$ —	\$ (2)	\$ 1
Total	\$ 2	\$ 1	\$ —	\$ (2)	\$ 1

(1) Includes the effect of the contractual ability to settle contracts under master netting agreements and with cash collateral, as well as cash collateral not offset.

Level 3 Information

The following table sets forth reconciliations of changes in the fair value of CRRs and long-term, fixed-price electricity positions classified as Level 3 in the fair value hierarchy for Sempra Energy Consolidated and SDG&E:

LEVEL 3 RECONCILIATIONS

(Dollars in millions)

	Three months ended June 30,	
	2017	2016
Balance at April 1	\$ (96)	\$ 11
Realized and unrealized (losses) gains	(3)	8
Settlements	9	5
Balance at June 30	\$ (90)	\$ 24
Change in unrealized gains relating to instruments still held at June 30	\$ 2	\$ 9
	Six months ended June 30,	
	2017	2016
Balance at January 1	\$ (74)	\$ 19
Realized and unrealized (losses) gains	(16)	7
Settlements	—	(2)
Balance at June 30	\$ (90)	\$ 24
Change in unrealized (losses) gains relating to instruments still held at June 30	\$ (14)	\$ 9

SDG&E's Energy and Fuel Procurement department, in conjunction with SDG&E's finance group, is responsible for determining the appropriate fair value methodologies used to value and classify CRRs and long-term, fixed-price electricity positions on an ongoing basis. Inputs used to determine the fair value of CRRs and fixed-price electricity positions are reviewed and compared with market conditions to determine reasonableness. SDG&E expects all costs related to these instruments to be recoverable through customer rates. As such, there is no impact to earnings from changes in the fair value of these instruments.

CRRs are recorded at fair value based almost entirely on the most current auction prices published by the CAISO, an objective source. Annual auction prices are published once a year, typically in the middle of November, and are the basis for valuation for the following year. The impact associated with discounting is negligible. Because these auction prices are a less observable input, these instruments are classified as Level 3. The fair value of these instruments is derived from auction price differences between two locations.

For CRRs settling from January 1, 2017 to December 31, 2017, the auction price inputs ranged from \$(12) per MWh to \$7 per MWh at a given location, and for CRRs settling from January 1, 2016 to December 31, 2016, the auction price inputs ranged from \$(24) per MWh to \$10 per MWh at a given location. Positive values between two locations represent expected future reductions in congestion costs, whereas negative values between two locations represent expected future charges. Valuation of our CRRs is sensitive to a change in auction price. If auction prices at one location increase (decrease) relative to another location, this could result in a higher (lower) fair value measurement. We summarize CRR volumes in Note 7.

Long-term, fixed-price electricity positions that are valued using significant unobservable data are classified as Level 3 because the contract terms relate to a delivery location or tenor for which observable market rate information is not available. The fair value of the net electricity positions classified as Level 3 is derived from a discounted cash flow model using market electricity forward price inputs. These inputs range from \$21.35 per MWh to \$46.35 per MWh at June 30, 2017. A significant increase or decrease in market electricity forward prices would result in a significantly higher or lower fair value, respectively. We summarize long-term, fixed-price electricity position volumes in Note 7.

Realized gains and losses associated with CRRs and long-term electricity positions, which are included in rates, are recorded in Cost of Electric Fuel and Purchased Power on the Condensed Consolidated Statements of Operations. Unrealized gains and losses are recorded as regulatory assets and liabilities and therefore do not affect earnings.

FAIR VALUE OF FINANCIAL INSTRUMENTS

The fair values of certain of our financial instruments (cash, temporary investments, accounts and notes receivable, short-term amounts due to/from unconsolidated affiliates, dividends and accounts payable, short-term debt and customer deposits) approximate their carrying amounts because of the short-term nature of these instruments. Investments in life insurance contracts that we hold in support of our Supplemental Executive Retirement, Cash Balance Restoration and Deferred Compensation Plans are carried at cash surrender values, which represent the amount of cash that could be realized under the contracts. The following table provides the carrying amounts and fair values of certain other financial instruments that are not recorded at fair value on the Condensed Consolidated Balance Sheets at June 30, 2017 and December 31, 2016:

FAIR VALUE OF FINANCIAL INSTRUMENTS

(Dollars in millions)

	June 30, 2017				
	Carrying amount	Fair value			Total
		Level 1	Level 2	Level 3	
Sempra Energy Consolidated:					
Long-term amounts due from unconsolidated affiliates(1)	\$ 345	\$ —	\$ 228	\$ 92	\$ 320
Total long-term debt(2)(3)	15,519	—	15,900	494	16,394
SDG&E:					
Total long-term debt(3)(4)	\$ 4,891	\$ —	\$ 5,032	\$ 300	\$ 5,332
SoCalGas:					
Total long-term debt(5)	\$ 3,009	\$ —	\$ 3,169	\$ —	\$ 3,169
	December 31, 2016				
	Carrying amount	Fair value			Total
		Level 1	Level 2	Level 3	
Sempra Energy Consolidated:					
Long-term amounts due from unconsolidated affiliates(1)	\$ 184	\$ —	\$ 91	\$ 84	\$ 175
Total long-term debt(2)(3)	15,068	—	15,455	492	15,947
SDG&E:					
Total long-term debt(3)(4)	\$ 4,654	\$ —	\$ 4,727	\$ 305	\$ 5,032
SoCalGas:					
Total long-term debt(5)	\$ 3,009	\$ —	\$ 3,131	\$ —	\$ 3,131

- (1) Excluding accumulated interest outstanding of \$22 million and \$17 million at June 30, 2017 and December 31, 2016, respectively, and excluding foreign currency translation of \$6 million on a Mexican peso-denominated loan at June 30, 2017.
- (2) Before reductions for unamortized discount (net of premium) and debt issuance costs of \$114 million and \$109 million at June 30, 2017 and December 31, 2016, respectively, and excluding build-to-suit and capital lease obligations of \$882 million and \$383 million at June 30, 2017 and December 31, 2016, respectively. We discuss our long-term debt in Note 6 above and in Note 5 of the Notes to Consolidated Financial Statements in the Annual Report.
- (3) Level 3 instruments include \$300 million and \$305 million at June 30, 2017 and December 31, 2016, respectively, related to Otay Mesa VIE.
- (4) Before reductions for unamortized discount and debt issuance costs of \$48 million and \$45 million at June 30, 2017 and December 31, 2016, respectively, and excluding capital lease obligations of \$737 million and \$240 million at June 30, 2017 and December 31, 2016, respectively.
- (5) Before reductions for unamortized discount and debt issuance costs of \$25 million and \$27 million at June 30, 2017 and December 31, 2016, respectively, and excluding capital lease obligations of \$1 million at June 30, 2017.

We determine the fair value of certain long-term amounts due from unconsolidated affiliates and long-term debt based on a market approach using quoted market prices for identical or similar securities in thinly-traded markets (Level 2). We value certain other long-term amounts due from unconsolidated affiliates using a perpetuity approach based on the obligation's fixed interest rate, the absence of a stated maturity date and a discount rate reflecting local borrowing costs (Level 3). We value other long-term debt using an income approach based on the present value of estimated future cash flows discounted at rates available for similar securities (Level 3).

We provide the fair values for the securities held in the NDT related to SONGS in Note 9.

NON-RECURRING FAIR VALUE MEASURES

TdM

In February 2016, management approved a plan to market and sell Sempra Mexico's TdM, a natural gas-fired power plant, and classified it as held for sale on the Sempra Energy Consolidated Balance Sheet, as we discuss in Note 3 above and in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report. In connection with the sales process, Sempra Mexico received a purchase price offer resulting from negotiations with an active market participant. This new market information indicates that the fair value of TdM was lower than its carrying value at June 30, 2017. As a result, Sempra Mexico further reduced the carrying value of TdM by recognizing a noncash impairment charge of \$71 million in the three months and six months ended June 30, 2017, recorded in Impairment Losses on Sempra Energy's Consolidated Statements of Operations. The purchase price offer is considered to be a Level 2 input in the fair value hierarchy, as it represents an observable pricing input.

The following table summarizes significant inputs impacting this non-recurring fair value measure:

NON-RECURRING FAIR VALUE MEASURE – SEMPRA ENERGY CONSOLIDATED						
<i>(Dollars in millions)</i>						
	Estimated fair value	Valuation technique	Fair value hierarchy	% of fair value measurement	Inputs used to develop measurement	Range of inputs
TdM	\$ 62 (1)	Market approach	Level 2	100%	Purchase price offer	100%

(1) At measurement date of June 30, 2017.

NOTE 9. SAN ONOFRE NUCLEAR GENERATING STATION

We provide below updates to ongoing matters related to SONGS, a nuclear generating facility near San Clemente, California that ceased operations in June 2013, and in which SDG&E has a 20-percent ownership interest. We discuss SONGS further in Note 13 of the Notes to Consolidated Financial Statements in the Annual Report.

REPLACEMENT STEAM GENERATORS

As part of the Steam Generator Replacement Project, the steam generators were replaced in SONGS Units 2 and 3, and the Units returned to service in 2010 and 2011, respectively. Both Units were shut down in early 2012 after a water leak occurred in the Unit 3 steam generator. Edison, the majority owner and operator of SONGS, concluded that the leak was due to unexpected wear from tube-to-tube contact. At the time the leak was identified, Edison also inspected and tested Unit 2 and subsequently found unexpected tube wear in Unit 2's steam generator. These issues with the steam generators ultimately resulted in Edison's decision to permanently retire SONGS in June 2013.

The replacement steam generators were designed and provided by MHI. In July 2013, SDG&E filed a lawsuit against MHI seeking to recover damages SDG&E has incurred and will incur related to the design defects in the steam generators. In October 2013, Edison instituted arbitration proceedings against MHI seeking recovery of damages. The other SONGS co-owners, SDG&E and the City of Riverside, participated as claimants and respondents.

On March 13, 2017, the Tribunal overseeing the arbitration found MHI liable for breach of contract, subject to a contractual limitation of liability, and rejected claimants' other claims. The Tribunal awarded \$118 million in damages to the SONGS co-owners, but determined that MHI was the prevailing party and awarded it 95 percent of its arbitration costs. The damage award is offset by these costs, resulting in a net award of approximately \$60 million in favor of the SONGS co-owners. SDG&E's specific allocation of the damage award is \$24 million reduced by costs awarded to MHI of approximately \$12 million, resulting in a net damage award of \$12 million, which was paid by MHI to SDG&E in March 2017. These amounts include certain adjustments to calculations supporting the Tribunal's findings. In accordance with the Amended Settlement Agreement discussed below, which may be modified or set aside, SDG&E recorded the proceeds from the MHI arbitration by reducing Operation and Maintenance for previously incurred legal costs of \$11 million, and shared the remaining \$1 million equally between ratepayers and shareholders.

SETTLEMENT AGREEMENT TO RESOLVE THE CPUC'S ORDER INSTITUTING INVESTIGATION INTO THE SONGS OUTAGE

In November 2012, in response to the outage, the CPUC issued the SONGS OII, which was intended to determine the ultimate recovery of the investment in SONGS and the costs incurred since the commencement of this outage.

In November 2014, the CPUC issued a final decision approving an Amended and Restated Settlement Agreement (Amended Settlement Agreement) in the SONGS OII proceeding executed by SDG&E along with Edison, TURN, ORA and two other intervenors. The Amended Settlement Agreement does not affect ongoing or future proceedings before the NRC, or litigation or arbitration related to potential future recoveries from third parties (except for the allocation to ratepayers of any recoveries addressed in the final decision) or proceedings addressing decommissioning activities and costs. We describe the terms and provisions of the Amended Settlement Agreement in Note 13 of the Notes to Consolidated Financial Statements in the Annual Report.

In May 2016, following the filing of petitions for modification by various parties, the CPUC issued a procedural ruling reopening the record of the OII to address the issue of whether the Amended Settlement Agreement is reasonable and in the public interest.

In December 2016, the CPUC issued another procedural ruling directing parties to the SONGS OII to determine whether an agreement could be reached to modify the Amended Settlement Agreement previously approved by the CPUC, to resolve allegations that unreported *ex parte* communications between Edison and the CPUC resulted in an unfair advantage at the time the settlement agreement was negotiated. Pursuant to the December ruling and a subsequent procedural ruling, the parties have met to confer and, as a result of these discussions, the parties engaged a mediator and held confidential mediation discussions in June, July and continuing into August of 2017. Given the mediation, the parties were granted an extension until August 15, 2017 to file their proposed settlement and/or positions for moving forward with the proceeding. If no agreement is reached, the CPUC will consider other options, including entertaining additional testimony, hearings and briefs.

There is no assurance that the Amended Settlement Agreement will not be renegotiated, modified or set aside as a result of the mediation or the larger OII proceedings, which could result in a substantial reduction in our expected recovery and could have a material adverse effect on Sempra Energy's and SDG&E's results of operations, financial condition and cash flows.

Accounting and Financial Impacts

Through June 30, 2017, the cumulative after-tax loss from plant closure recorded by Sempra Energy and SDG&E is \$125 million. The remaining regulatory asset for the expected recovery of SONGS costs, consistent with the Amended Settlement Agreement, is \$166 million (\$34 million current and \$132 million long-term) at June 30, 2017. The amortization period prescribed for the regulatory asset is 10 years, ending in January 2022.

NUCLEAR DECOMMISSIONING AND FUNDING

As a result of Edison's decision to permanently retire SONGS Units 2 and 3, Edison began the decommissioning phase of the plant. Decommissioning of Unit 1, removed from service in 1992, is largely complete. The remaining work for Unit 1 will be done once Units 2 and 3 are dismantled. In December 2016, Edison announced that, following a 10-month competitive bid process, it had contracted with a joint venture of AECOM and EnergySolutions (known as SONGS Decommissioning Solutions) as the general contractor to complete the dismantlement of SONGS. The majority of the dismantlement work is expected to take 10 years. SDG&E is responsible for approximately 20 percent of the total contract price.

In accordance with state and federal requirements and regulations, SDG&E has assets held in the NDT to fund its share of decommissioning costs for SONGS Units 1, 2 and 3. The amounts collected in rates for SONGS' decommissioning are invested in the NDT, which is comprised of externally managed trust funds. Amounts held by the NDT are invested in accordance with CPUC regulations. The NDT assets are presented on the Sempra Energy and SDG&E Condensed Consolidated Balance Sheets at fair value with the offsetting credits recorded in Regulatory Liabilities Arising from Removal Obligations.

In April 2016, the CPUC adopted a decision approving a total decommissioning cost estimate for SONGS Units 2 and 3 of \$4.4 billion (in 2014 dollars), of which SDG&E's share is \$899 million. Except for the use of funds for the planning of decommissioning activities or NDT administrative costs, CPUC approval is required for SDG&E to access the NDT assets to fund SONGS decommissioning costs for Units 2 and 3. SDG&E has received authorization from the CPUC to access NDT funds of up to \$302 million for 2013 through 2017 (2017 forecasted) SONGS decommissioning costs. This includes up to \$84 million authorized by the CPUC in February 2017 to be withdrawn from the NDT for forecasted 2017 SONGS Units 2 and 3 costs as decommissioning costs are incurred.

In December 2016, the IRS and the U.S. Department of the Treasury issued proposed regulations that clarify the definition of "nuclear decommissioning costs," which are costs that may be paid for or reimbursed from a qualified fund. The proposed regulations state that costs related to the construction and maintenance of independent spent fuel management installations are included in the definition of "nuclear decommissioning costs." The proposed regulations will be effective prospectively once they are finalized; however, the IRS has stated that it will not challenge taxpayer positions consistent with the proposed regulations for taxable years ending on or after the date the proposed regulations were issued. SDG&E is seeking further clarification of the proposed regulations to confirm that the proposed regulations will allow SDG&E to access the NDT funds for reimbursement or payment of the spent fuel management costs that were or will be incurred in 2016 and subsequent years. Further clarification of the proposed regulations could enable SDG&E to access the NDT to recover spent fuel management costs before Edison reaches final settlement with the DOE regarding the DOE's reimbursement of these costs. Historically, the DOE's reimbursements of spent fuel storage costs have not resulted in timely or complete recovery of these costs. We discuss the DOE's responsibility for spent nuclear fuel in Note 11. It is unclear when clarification of the proposed regulations might be provided or when the proposed regulations will be finalized.

The following table shows the fair values and gross unrealized gains and losses for the securities held in the NDT. We provide additional fair value disclosures for the NDT in Note 8.

NUCLEAR DECOMMISSIONING TRUSTS

(Dollars in millions)

	Cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
At June 30, 2017:				
Debt securities:				
Debt securities issued by the U.S. Treasury and other				
U.S. government corporations and agencies(1)	\$ 57	\$ —	\$ —	\$ 57
Municipal bonds(2)	256	8	(1)	263
Other securities(3)	197	3	(1)	199
Total debt securities	510	11	(2)	519
Equity securities	196	305	(2)	499
Cash and cash equivalents	11	—	—	11
Total	\$ 717	\$ 316	\$ (4)	\$ 1,029
At December 31, 2016:				
Debt securities:				
Debt securities issued by the U.S. Treasury and other				
U.S. government corporations and agencies	\$ 52	\$ —	\$ —	\$ 52
Municipal bonds	203	4	(1)	206
Other securities	141	2	(2)	141
Total debt securities	396	6	(3)	399
Equity securities	143	366	(1)	508
Cash and cash equivalents	119	—	—	119
Total	\$ 658	\$ 372	\$ (4)	\$ 1,026

(1) Maturity dates are 2018-2047.

(2) Maturity dates are 2017-2047.

(3) Maturity dates are 2017-2066.

The following table shows the proceeds from sales of securities in the NDT and gross realized gains and losses on those sales:

SALES OF SECURITIES

(Dollars in millions)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Proceeds from sales(1)	\$ 466	\$ 111	\$ 823	\$ 204
Gross realized gains	79	5	124	8
Gross realized losses	(3)	(3)	(8)	(11)

(1) Excludes securities that are held to maturity.

Net unrealized gains and losses, as well as realized gains and losses that are reinvested in the NDT, are included in Regulatory Liabilities Arising from Removal Obligations on Sempra Energy's and SDG&E's Condensed Consolidated Balance Sheets. We determine the cost of securities in the trusts on the basis of specific identification. In the three months and six months ended June 30, 2017, sale and purchase activities in our NDT increased significantly compared to the same periods in 2016 as a result of continuing changes to our asset allocations initiated in the fourth quarter of 2016 to reduce our equity volatility, lower our duration risk, and increase exposure to municipal bonds and intermediate credit. This shift in our asset mix is intended to reduce the overall risk profile of the NDT in anticipation of significant cash withdrawals over the next 10 years to fund the SONGS decommissioning.

NOTE 10. REGULATORY MATTERS

We discuss regulatory matters in Note 14 of the Notes to Consolidated Financial Statements in the Annual Report, and provide updates to those discussions and information about new matters below.

CALIFORNIA UTILITIES MATTERS

CPUC General Rate Case

The CPUC uses a GRC proceeding to set sufficient rates to allow the California Utilities to recover their reasonable cost of O&M and to provide the opportunity to realize their authorized rates of return on their investment.

In June 2016, the CPUC issued the 2016 GRC FD, the details of which are discussed in Note 14 of the Notes to Consolidated Financial Statements in the Annual Report. The 2016 GRC FD was effective retroactive to January 1, 2016. SDG&E and SoCalGas recorded \$9 million and \$12 million, respectively, in the second quarter of 2016 for the retroactive after-tax earnings impact related to the first quarter of 2016.

The 2016 GRC FD required the establishment of two-way income tax expense memorandum accounts to track any revenue variances resulting from certain differences between the income tax expense forecasted in the GRC and the income tax expense incurred by SDG&E and SoCalGas from 2016 through 2018. The variances to be tracked include tax expense differences relating to:

- net revenue changes;
- mandatory tax law, tax accounting, tax procedural, or tax policy changes; and
- elective tax law, tax accounting, tax procedural, or tax policy changes.

Starting in the second quarter of 2016, SoCalGas and SDG&E began recording liabilities associated with tracking the differences in the income tax expense forecasted in the GRC proceedings and the income tax expense incurred. At June 30, 2017, the recorded liability associated with these tracked amounts totaled \$41 million and \$20 million for SoCalGas and SDG&E, respectively. The tracking accounts will remain open, and the balance in the accounts will be reviewed in subsequent GRC proceedings, until the CPUC decides to close them. As of June 2017, there have been no mandatory or elective tax law, tax accounting, tax procedural, or tax policy changes that could give rise to a regulatory liability and as such, no amount has been tracked related to these items.

SDG&E and SoCalGas are scheduled to file their next GRC applications (the 2019 GRC) in the third quarter of 2017. The applications, among other matters, will seek test year revenue requirements for 2019 and attrition year adjustments for 2020 and 2021. SDG&E and SoCalGas also expect to request a third attrition year adjustment for 2022. In June 2017, SDG&E and SoCalGas filed their first interim accountability reports comparing authorized and actual spending in 2014 and 2015 for certain safety-related activities. Similar data for 2016 will be provided with the 2019 GRC filings. The stated purpose of the interim accountability reports is to provide data and metrics for key safety and risk mitigation areas that will be reviewed in the 2019 GRC.

Risk Assessment Mitigation Phase Report

In December 2014, the CPUC issued a decision incorporating a risk-based decision-making framework into all future GRC application filings for major natural gas and electric utilities in California. The framework is intended to assist in assessing safety risks and the utilities' plans to help ensure that such risks are adequately addressed. In advance of filing the California Utilities' 2019 GRC applications, two proceedings occurred: the Safety Model Assessment Proceeding and the RAMP. In the Safety Model Assessment Proceeding, the California Utilities demonstrated the models used to prioritize and mitigate risks in order for the CPUC to establish guidelines and standards for these models.

In November 2016, as part of the new framework, SDG&E and SoCalGas filed their first RAMP report presenting a comprehensive assessment of their key safety risks and proposed activities for mitigating such risks. The report details these key safety risks, which include critical operational issues such as natural gas pipeline safety and wildfire safety, and addresses their classification, scoring, mitigation, alternatives, safety culture, quantitative analysis, data collection and lessons learned. As part of the new framework, funding for any incremental projects or activities is not addressed in the RAMP report and would be subsequently requested in the California Utilities' upcoming GRC applications.

In March 2017, the CPUC's Safety and Enforcement Division issued its evaluation report providing generally favorable feedback on the California Utilities' RAMP report, but recommending more detailed analysis of the risks we presented in the report. The new GRC framework does not require the CPUC to adopt the RAMP report. Certain information from the RAMP report, including certain proposed projects and activities outlined therein, will be incorporated in the SDG&E and SoCalGas 2019 GRC applications to be filed in the third quarter of 2017.

CPUC Cost of Capital

On July 13, 2017, the CPUC issued a final decision adopting, with certain modifications, the joint petition filed in February 2017 by SDG&E, SoCalGas, PG&E and Edison, along with ORA and TURN. The final decision provides a two-year extension for each of the utilities to file its next respective cost of capital application, extending the filing date to April 2019 for a 2020 test year. The final decision also reduces the ROE for SDG&E from 10.30 percent to 10.20 percent and for SoCalGas from 10.10 percent to 10.05 percent, effective from January 1, 2018 through December 31, 2019. SDG&E's and SoCalGas' ratemaking capital structures will remain at current levels until modified, if at all, by a future cost of capital decision by the CPUC. Also, the utilities will update their cost of capital for actual cost of long-term debt through August 2017 and forecasted cost through 2018, and update preferred stock costs for anticipated issuances (if any) through 2018. The automatic CCM will be in effect to adjust 2019 cost of capital, if necessary. Unless changed by the operation of the CCM, the updated costs of long-term debt and preferred stock (if applicable) and the new ROEs will remain in effect through December 31, 2019.

NOTE 11. COMMITMENTS AND CONTINGENCIES

LEGAL PROCEEDINGS

We accrue losses for a legal proceeding when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. However, the uncertainties inherent in legal proceedings make it difficult to estimate with reasonable certainty the costs and effects of resolving these matters. Accordingly, actual costs incurred may differ materially from amounts accrued, may exceed applicable insurance coverage and could materially adversely affect our business, cash flows, results of operations, financial condition and prospects. Unless otherwise indicated, we are unable to estimate reasonably possible losses in excess of any amounts accrued.

At June 30, 2017, accrued liabilities for legal proceedings, including associated legal fees and costs of litigation, were \$10 million for Sempra Energy Consolidated, including \$3 million for SDG&E and \$5 million for SoCalGas. Amounts for Sempra Energy and SoCalGas include \$5 million for matters related to the Aliso Canyon natural gas storage facility gas leak, which we discuss below.

SDG&E

2007 Wildfire Litigation

SDG&E has resolved all litigation associated with three wildfires that occurred in October 2007, except one appeal that remains pending after judgment in the trial court. SDG&E does not expect additional plaintiffs to file lawsuits given the applicable statutes of limitation, but could receive additional settlement demands and damage estimates from the remaining plaintiff until the case is resolved. SDG&E maintains reserves for the wildfire litigation and makes adjustments to these reserves as information becomes available and amounts are estimable.

SDG&E continues to conclude that it is probable that it will be permitted to recover in rates a substantial portion of the costs incurred to resolve wildfire claims in excess of its liability insurance coverage and the amounts recovered from third parties. Accordingly, at June 30, 2017, Sempra Energy and SDG&E have recorded assets of \$350 million in Regulatory Assets (long-term) and Other Regulatory Assets (long-term), respectively, on their Condensed Consolidated Balance Sheets related to CPUC-regulated operations. In September 2015, SDG&E filed an application with the CPUC seeking authority to recover these CPUC-related costs in rates over a six- to ten-year period. The requested amount is the net estimated CPUC-related cost incurred by SDG&E after deductions for insurance reimbursement and third party settlement recoveries, and reflects a voluntary 10-percent shareholder contribution applied to the net Wildfire Expense Memorandum Account balance. In April 2016, the CPUC issued a ruling establishing the scope and schedule for the proceeding, which will be managed in two phases. Phase 1 addresses SDG&E's operational and management prudence surrounding the 2007 wildfires. We expect a Phase 1 draft decision from the CPUC in the second half of 2017. Phase 2 will address whether SDG&E's actions and decision-making in connection with settling legal claims in relation to the wildfires were reasonable, with a final CPUC decision expected by early 2019.

Should SDG&E conclude that recovery in rates is no longer probable, SDG&E will record a charge against earnings at the time such conclusion is reached. If SDG&E had concluded that the recovery of regulatory assets related to CPUC-regulated operations was no longer probable or was less than currently estimated at June 30, 2017, the resulting after-tax charge against earnings would have been up to approximately \$207 million. A failure to obtain substantial or full recovery of these costs from customers, or any negative assessment of the likelihood of recovery, would likely have a material adverse effect on SDG&E's and Sempra Energy's results of operations and cash flows.

We discuss how we assess the probability of recovery of our regulatory assets in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

Concluded Matter

SDG&E participated as a claimant and respondent in an arbitration proceeding initiated by Edison in October 2013 against MHI seeking damages stemming from the failure of the MHI replacement steam generators at the SONGS nuclear power plant. In March 2017, the Tribunal found MHI liable for breach of contract, subject to a contractual limitation of liability, but determined that MHI was the prevailing party and awarded it 95 percent of its arbitration costs. We discuss this arbitration and decision further in Note 9.

SoCalGas

Aliso Canyon Natural Gas Storage Facility Gas Leak

On October 23, 2015, SoCalGas discovered a leak at one of its injection-and-withdrawal wells, SS25, at its Aliso Canyon natural gas storage facility, located in the northern part of the San Fernando Valley in Los Angeles County. The Aliso Canyon natural gas storage facility has been operated by SoCalGas since 1972. SS25 is one of more than 100 injection-and-withdrawal wells at the storage facility.

Stopping the Leak, and Local Community Mitigation Efforts. SoCalGas worked closely with several of the world's leading experts to stop the leak, and on February 18, 2016, DOGGR confirmed that the well was permanently sealed.

Pursuant to a stipulation and order by the Los Angeles County Superior Court, SoCalGas provided temporary relocation support to residents in the nearby community who requested it before the well was permanently sealed. Following the permanent sealing of the well, the DPH conducted indoor testing of certain homes in the Porter Ranch community, and concluded that indoor conditions did not present a long-term health risk and that it was safe for residents to return home. In May 2016, the Los Angeles County Superior Court ordered SoCalGas to offer to clean residents' homes at SoCalGas' expense as a condition to ending the relocation program. SoCalGas completed the residential cleaning program and the relocation program ended in July 2016.

Apart from the Los Angeles County Superior Court order, in May 2016, the DPH also issued a directive that SoCalGas professionally clean (in accordance with the proposed protocol prepared by the DPH) the homes of all residents located within the Porter Ranch Neighborhood Council boundary, or who participated in the relocation program, or who are located within a five-mile radius of the Aliso Canyon natural gas storage facility and have experienced symptoms from the natural gas leak (the Directive). SoCalGas disputes the Directive, contending that it is invalid and unenforceable, and has filed a petition for writ of mandate to set it aside.

The total costs incurred to remediate and stop the leak and to mitigate local community impacts are significant and may increase, and we may be subject to potentially significant damages, restitution, and civil, administrative and criminal fines, costs or other penalties. To the extent any of these costs are not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Cost Estimates and Accounting Impact. As of June 30, 2017, SoCalGas recorded estimated costs of \$832 million related to the leak. Of this amount, approximately two-thirds is for the temporary relocation program (including cleaning costs and certain labor costs). Other estimated costs include amounts for efforts to control the well, stop the leak, stop or reduce the emissions, and the estimated cost of the root cause analysis being conducted by an independent third party to investigate the cause of the leak. The remaining portion of the \$832 million includes legal costs incurred to defend litigation, the value of lost gas, the costs to mitigate the actual natural gas released, and other costs. As the value of lost gas reflects the current replacement cost, the value may fluctuate until such time as replacement gas is purchased and injected into storage. SoCalGas adjusts its estimated total liability associated with the leak as additional information becomes available. The \$832 million represents management's best estimate of these costs related to the leak. Of these costs, a substantial portion has been paid and \$63 million is accrued as Reserve for Aliso Canyon Costs as of June 30, 2017 on SoCalGas' and Sempra Energy's Condensed Consolidated Balance Sheets for amounts expected to be paid after June 30, 2017.

As of June 30, 2017, we recorded the expected recovery of the costs described in the immediately preceding paragraph related to the leak of \$554 million as Insurance Receivable for Aliso Canyon Costs on SoCalGas' and Sempra Energy's Condensed Consolidated Balance Sheets. This amount is net of insurance retentions and \$273 million of insurance proceeds we received through June 30, 2017 related to control-of-well expenses and temporary relocation costs. If we were to conclude that this receivable or a portion of it was no longer probable of recovery from insurers, some or all of this receivable would be charged against earnings, which could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

The above amounts do not include any unsettled damage claims, restitution, or civil, administrative or criminal fines, costs or other penalties that may be imposed in connection with the incident or our responses thereto, as it is not possible to predict the outcome of any civil or criminal proceeding or any administrative action in which such damage awards, restitution or civil, administrative or criminal fines, costs or other penalties could be imposed, and any such amounts, if awarded or imposed or otherwise paid, cannot be

reasonably estimated at this time. In addition, the recorded amounts above do not include the costs to clean additional homes pursuant to the Directive, future legal costs necessary to defend litigation, and other potential costs that we currently do not anticipate incurring or that we cannot reasonably estimate.

In March 2016, the CPUC ordered SoCalGas to establish a memorandum account to prospectively track its authorized revenue requirement and all revenues that it receives for its normal, business-as-usual costs to own and operate the Aliso Canyon natural gas storage facility and, in September 2016, approved SoCalGas' request to begin tracking these revenues as of March 17, 2016. The CPUC will determine at a later time whether, and to what extent, the authorized revenues tracked in the memorandum account may be refunded to ratepayers.

Insurance. Excluding directors and officers liability insurance, we have four kinds of insurance policies that together provide between \$1.2 billion to \$1.4 billion in insurance coverage, depending on the nature of the claims. We cannot predict all of the potential categories of costs or the total amount of costs that we may incur as a result of the leak. Subject to various policy limits, exclusions and conditions, based on what we know as of the filing date of this report, we believe that our insurance policies collectively should cover the following categories of costs: costs incurred for temporary relocation (including cleaning costs and certain labor costs), costs to address the leak and stop or reduce emissions, the root cause analysis being conducted to investigate the cause of the leak, the value of lost natural gas, costs incurred to mitigate the actual natural gas released, costs associated with litigation and claims by nearby residents and businesses, any costs to clean additional homes pursuant to the Directive, and, in some circumstances depending on their nature and manner of assessment, fines and penalties. We have been communicating with our insurance carriers and, as discussed above, we have received insurance payments for a portion of control-of-well expenses and a portion of temporary relocation costs. We intend to pursue the full extent of our insurance coverage for the costs we have incurred or may incur. There can be no assurance that we will be successful in obtaining insurance coverage for these costs under the applicable policies, and to the extent we are not successful in obtaining coverage or these costs exceed the amount of our coverage, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Our recorded estimate as of June 30, 2017 of \$832 million of certain costs in connection with the Aliso Canyon natural gas storage facility leak may rise significantly as more information becomes available, and any costs not included in our estimate could be material. To the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Governmental Investigations and Civil and Criminal Litigation. Various governmental agencies, including DOGGR, DPH, SCAQMD, CARB, Los Angeles Regional Water Quality Control Board, California Division of Occupational Safety and Health, CPUC, PHMSA, EPA, Los Angeles County District Attorney's Office and California Attorney General's Office, have investigated or are investigating this incident. Other federal agencies (e.g., the DOE and the U.S. Department of the Interior) investigated the incident as part of the joint interagency task force discussed below. In January 2016, DOGGR and the CPUC selected Blade to conduct an independent analysis under their supervision and to be funded by SoCalGas to investigate the technical root cause of the Aliso Canyon natural gas storage facility gas leak. The timing of the root cause analysis is under the control of Blade, DOGGR and the CPUC.

As of August 3, 2017, 281 lawsuits, including over 25,500 plaintiffs, are pending in the Los Angeles County Superior Court against SoCalGas, some of which have also named Sempra Energy. These various lawsuits assert causes of action for negligence, negligence per se, strict liability, property damage, fraud, public and private nuisance (continuing and permanent), trespass, inverse condemnation, fraudulent concealment, unfair business practices and loss of consortium, among other things, and additional litigation may be filed against us in the future related to this incident. A complaint alleging violations of Proposition 65 was also filed. These complaints seek compensatory and punitive damages, civil penalties, injunctive relief, costs of future medical monitoring and attorneys' fees, and several seek class action status. All of these cases, other than a matter brought by the Los Angeles County District Attorney, the federal securities class action and one of the shareholder derivative actions discussed below, are coordinated before a single court in the Los Angeles County Superior Court for pretrial management.

In addition to the lawsuits described above, a federal securities class action alleging violation of the federal securities laws has been filed against Sempra Energy and certain of its officers and certain of its directors in the SDCA, and six shareholder derivative actions alleging breach of fiduciary duties against certain officers and certain directors of Sempra Energy and/or SoCalGas are pending, one in the SDCA and five in the coordination proceeding in the Los Angeles County Superior Court. In March 2017, the SDCA dismissed the shareholder derivative action pending in that court, ruling that the plaintiff did not have standing to pursue the alleged claims; the plaintiff did not seek to amend his complaint to cure its deficiencies. In June 2017, the SDCA dismissed the federal securities class action on the grounds the plaintiff failed to plead sufficient facts to establish a claim for securities fraud. In July 2017, the plaintiff filed an amended complaint, again alleging violation of the federal securities laws.

Pursuant to the coordination proceeding in the Los Angeles County Superior Court, in March 2017, the individuals and business entities asserting tort and Proposition 65 claims filed a Second Amended Consolidated Master Case Complaint for Individual Actions, through which their separate lawsuits will be managed for pretrial purposes. The consolidated complaint asserts causes of action for

negligence, negligence per se, private and public nuisance (continuing and permanent), trespass, inverse condemnation, strict liability, negligent and intentional infliction of emotional distress, fraudulent concealment, loss of consortium and violations of Proposition 65 against SoCalGas, with certain causes also naming Sempra Energy. The consolidated complaint seeks compensatory and punitive damages for personal injuries, lost wages and/or lost profits, property damage and diminution in property value, injunctive relief, costs of future medical monitoring, civil penalties (including penalties associated with Proposition 65 claims alleging violation of requirements for warning about certain chemical exposures), and attorneys' fees.

In January 2017, pursuant to the coordination proceeding, two consolidated class action complaints were filed against SoCalGas and Sempra Energy, one on behalf of a putative class of persons and businesses who own or lease real property within a five-mile radius of the well (the Property Class Action), and a second on behalf of a putative class of all persons and entities conducting business within five miles of the facility (the Business Class Action). Both complaints assert claims for strict liability for ultra-hazardous activities, negligence and violation of California Unfair Competition Law. The Property Class Action also asserts claims for negligence per se, trespass, permanent and continuing public and private nuisance, and inverse condemnation. The Business Class Action also asserts a claim for negligent interference with prospective economic advantage. Both complaints seek compensatory, statutory and punitive damages, injunctive relief and attorneys' fees.

Three actions filed by public entities are pending, as follows. These lawsuits are also included in the coordination proceeding in the Los Angeles County Superior Court. First, in July 2016, the County of Los Angeles, on behalf of itself and the people of the State of California, filed a complaint against SoCalGas in the Los Angeles County Superior Court for public nuisance, unfair competition, breach of franchise agreement, breach of lease, and damages. This suit alleges that the four natural gas storage fields operated by SoCalGas in Los Angeles County require safety upgrades, including the installation of a sub-surface safety shut-off valve on every well. It additionally alleges that SoCalGas failed to comply with the DPH Directive. It seeks preliminary and permanent injunctive relief, civil penalties, and damages for the County's costs to respond to the leak, as well as punitive damages and attorneys' fees.

Second, in August 2016, the California Attorney General, acting in an independent capacity and on behalf of the people of the State of California and the CARB, together with the Los Angeles City Attorney, filed a third amended complaint on behalf of the people of the State of California against SoCalGas alleging public nuisance, violation of the California Unfair Competition Law, violations of California Health and Safety Code sections 41700, prohibiting discharge of air contaminants that cause annoyance to the public, and 25510, requiring reporting of the release of hazardous material, as well as California Government Code section 12607 for equitable relief for the protection of natural resources. The complaint seeks an order for injunctive relief, to abate the public nuisance, and to impose civil penalties.

Third, in March 2017, the County of Los Angeles filed a petition for writ of mandate against DOGGR and its State Oil and Gas Supervisor, as to which SoCalGas is the real party in interest. In July 2017, the County amended the petition to add the CPUC and its Executive Director. The petition alleges that in issuing its July 19, 2017 determination that the requirements for the resumption of injection operations have been met, discussed under "Natural Gas Storage Operations and Reliability" below, DOGGR failed to comply with the provisions of SB 380, which requires a comprehensive safety review of the Aliso Canyon natural gas storage facility before injection of natural gas may resume. The County alleges, among other things, that DOGGR failed to comply with the provisions of SB 380 in declaring the safety review complete and authorizing the resumption of injection of natural gas into the facility before the root cause analysis was complete, failing to make its safety-review documents available to the public and failing to address seismic risks to the field as part of its safety review. The County further alleges that CEQA requires DOGGR to perform an Environmental Impact Review before the resumption of injection of natural gas at the facility may be approved. The petition seeks a writ of mandate requiring DOGGR and the State Oil and Gas Supervisor to comply with SB 380 and CEQA, and to produce records in response to the County's Public Records Act request; as well as, declaratory and injunctive relief against any authorization to inject natural gas and attorneys' fees. On July 24, 2017, the County filed an application for an immediate stay of DOGGR's order, a temporary restraining order and order to show cause why a preliminary injunction should not be issued to stop the reopening of the facility. On July 28, 2017, the Superior Court denied the application on the ground that, pursuant to Public Utilities Code sections 714 and 1759(a), the CPUC has jurisdiction over regulating injections at the Aliso Canyon natural gas storage facility, and the Court therefore lacks jurisdiction to rule on the County's application. On July 31, 2017, the County filed a petition for writ of mandate, prohibition, stay or other appropriate relief and a request for immediate stay in the Court of Appeal, seeking review of the Superior Court's order denying the County's application for a temporary restraining order. Later the same day, the Court of Appeal denied the County's request for an immediate stay on injections.

A complaint filed by the SCAQMD against SoCalGas seeking civil penalties for alleged violations of several nuisance-related statutory provisions arising from the leak and delays in stopping the leak was settled in February 2017, pursuant to which SoCalGas paid \$8.5 million, of which \$1 million is to be used to pay for a health study. The SCAQMD's complaint was dismissed in February 2017.

Separately, in February 2016, the Los Angeles County District Attorney's Office filed a misdemeanor criminal complaint against SoCalGas seeking penalties and other remedies for alleged failure to provide timely notice of the leak pursuant to California Health and Safety Code section 25510(a), Los Angeles County Code section 12.56.030, and Title 19 California Code of Regulations section

2703(a), and for allegedly violating California Health and Safety Code section 41700 prohibiting discharge of air contaminants that cause annoyance to the public. In September 2016, SoCalGas entered into a settlement agreement with the Los Angeles County District Attorney's Office in which it agreed to plead no contest to the notice charge under Health and Safety Code section 25510(a) and agreed to pay the maximum fine of \$75,000, penalty assessments of approximately \$233,500, and operational commitments estimated to cost approximately \$5 million, reimbursement and assessments in exchange for the Los Angeles County District Attorney's Office moving to dismiss the remaining counts at sentencing and settling the complaint (collectively referred to as the District Attorney Settlement). In November 2016, SoCalGas completed the commitments and obligations under the District Attorney Settlement, and on November 29, 2016, the Court approved the settlement and entered judgment on the notice charge. Certain individuals residing near the Aliso Canyon natural gas storage facility who objected to the settlement have filed a notice of appeal of the judgment, as well as a petition asking the Los Angeles County Superior Court to set aside the November 29, 2016 order and grant them restitution. The Los Angeles County Superior Court dismissed the petition in January 2017, ruling that the petitioners have a remedy at law via their direct appeal.

The costs of defending against these civil and criminal lawsuits, cooperating with these investigations, and any damages, restitution, and civil, administrative and criminal fines, costs and other penalties, if awarded or imposed, as well as the costs of mitigating the actual natural gas released, could be significant and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Regulatory Proceedings. In February 2017, the CPUC opened a proceeding pursuant to SB 380 to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility, while still maintaining energy and electric reliability for the region. The proceeding will be conducted in two phases, with Phase 1 undertaking a comprehensive effort to develop the appropriate analyses and scenarios to evaluate the impact of reducing or eliminating the use of the Aliso Canyon natural gas storage facility and Phase 2 evaluating the impacts of reducing or eliminating the use of the Aliso Canyon natural gas storage facility using the scenarios and models adopted in Phase 1. In accordance with the Phase 1 schedule, public participation hearings began in April 2017, and workshops and additional public participation hearings are expected to occur later in 2017.

The order establishing the scope of the proceeding expressly excludes issues with respect to air quality, public health, causation, culpability or cost responsibility regarding the Aliso Canyon natural gas storage facility gas leak.

Section 455.5 of the California Public Utilities Code, among other things, directs regulated utilities to notify the CPUC if all or any portion of a major facility has been out of service for nine consecutive months. Although SoCalGas does not believe the Aliso Canyon natural gas storage facility or any portion of that facility has been out of service for nine consecutive months, SoCalGas provided notification in an abundance of caution to demonstrate commitment to regulatory compliance and transparency, and because the process for obtaining authorization to resume injection operations at the facility required longer to complete than initially contemplated. In response, and as required by section 455.5, the CPUC issued an OII to address whether the Aliso Canyon natural gas storage facility or any portion of that facility has been out of service for nine consecutive months pursuant to section 455.5, and if it is determined to have been out of service, whether the CPUC should adjust SoCalGas' rates to reflect the period the facility is deemed to have been out of service. As required under section 455.5, if hearings on the investigation are necessary, they will be consolidated with SoCalGas' next GRC proceeding. In the event that the CPUC determines that all or any portion of the facility has been out of service for nine consecutive months, the amount of any refund to ratepayers and the inability to earn a return on those assets could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Governmental Orders and Additional Regulation. In January 2016, the Governor of the State of California issued an Order (the Governor's Order) proclaiming a state of emergency to exist in Los Angeles County due to the natural gas leak at the Aliso Canyon natural gas storage facility. The Governor's Order imposes various orders with respect to: stopping the leak; protecting public health and safety; ensuring accountability; and strengthening oversight. Most of the directives in the Governor's Order have been fulfilled, with the following remaining open items: (1) applicable agencies must convene an independent panel of scientific and medical experts to review public health concerns stemming from the natural gas leak and evaluate whether additional measures are needed to protect public health; (2) the CPUC must ensure that SoCalGas covers costs related to the natural gas leak and its response, while protecting ratepayers, and CARB was ordered to develop a program to fully mitigate the leak's emissions of methane by March 31, 2016, with such program to be funded by SoCalGas; and (3) DOGGR, CPUC, CARB and the CEC must submit to the Governor's Office a report that assesses the long-term viability of natural gas storage facilities in California.

In December 2015, SoCalGas made a commitment to mitigate the actual natural gas released from the leak and has been working on a plan to accomplish the mitigation. In March 2016, pursuant to the Governor's Order, the CARB issued its *Aliso Canyon Methane Leak Climate Impacts Mitigation Program*, which sets forth its recommended approach to achieve full mitigation of the emissions from the Aliso Canyon natural gas storage facility gas leak. The CARB program requires that reductions in short-lived climate pollutants and other greenhouse gases be at least equivalent to the amount of the emissions from the leak, and that the global warming potential to be

used in deriving the amount of reductions required is based on a 20-year term (rather than the 100-year term the CARB and other state and federal agencies use in regulating emissions), resulting in a target of approximately 9,000,000 metric tons of carbon dioxide equivalent. CARB's program also provides that all of the mitigation is to occur in California over the next five to ten years without the use of allowances or offsets. In October 2016, CARB issued its final report concluding that the incident resulted in total emissions from 90,350 to 108,950 metric tons of methane, and asserting that SoCalGas should mitigate 109,000 metric tons of methane to fully mitigate the greenhouse gas impacts of the leak. We have not agreed with CARB's estimate of methane released and continue to work with CARB on developing a mitigation plan.

In January 2016, the Hearing Board of the SCAQMD ordered SoCalGas to take various actions in connection with injecting and withdrawing natural gas at the Aliso Canyon natural gas storage facility, sealing the well, monitoring, reporting, safety and funding a health impact study, among other things (the Abatement Order). SoCalGas fulfilled its obligations under the Abatement Order to the satisfaction of the SCAQMD and its Hearing Board, except for the condition that SoCalGas agree to fund the reasonable costs of a study of the health impacts of the leak. Pursuant to the settlement agreement between the SCAQMD and SoCalGas described above, the SCAQMD agreed that the health study condition was satisfied and, in March 2017, the Hearing Board terminated the Abatement Order.

PHMSA, DOGGR, SCAQMD, EPA and CARB have each commenced separate rulemaking proceedings to adopt further regulations covering natural gas storage facilities and injection wells. DOGGR issued new regulations following the Governor's Order as described above, and in 2016, the California Legislature enacted four separate bills providing for additional regulation of natural gas storage facilities. Additional hearings in the California Legislature, as well as with various other federal and state regulatory agencies, have been or may be scheduled, additional legislation has been proposed in the California Legislature, and additional laws, orders, rules and regulations may be adopted. The Los Angeles County Board of Supervisors has formed a task force to review and potentially implement new, more stringent land use (zoning) requirements and associated regulations and enforcement protocols for oil and gas activities, including natural gas storage field operations, which could materially affect new or modified uses of the Aliso Canyon natural gas storage facility and other natural gas storage fields located in Los Angeles County.

Higher operating costs and additional capital expenditures incurred by SoCalGas as a result of new laws, orders, rules and regulations arising out of this incident or our responses thereto could be significant and may not be recoverable in customer rates, and such new laws, orders, rules and regulations could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operation.

Natural Gas Storage Operations and Reliability. Natural gas withdrawn from storage is important for service reliability during peak demand periods, including peak electric generation needs in the summer and heating needs in the winter. The Aliso Canyon natural gas storage facility, with a storage capacity of 86 Bcf (which represents 63 percent of SoCalGas' natural gas storage inventory capacity), is the largest SoCalGas storage facility and an important element of SoCalGas' delivery system. SoCalGas calculated that approximately 4.62 Bcf of natural gas was released from the Aliso Canyon natural gas storage facility as a result of the leak. SoCalGas did not inject natural gas into the Aliso Canyon natural gas storage facility after October 25, 2015, pursuant to orders by DOGGR and the Governor, and in accordance with SB 380. Limited withdrawals of natural gas from the Aliso Canyon natural gas storage facility have been made in 2017 to augment natural gas supplies during critical demand periods.

The process to begin limited injection operations at the Aliso Canyon natural gas storage facility was initiated in November 2016, when SoCalGas submitted a request to DOGGR seeking authorization to resume injection operations at the Aliso Canyon natural gas storage facility. In accordance with SB 380, DOGGR held public meetings in the affected community to provide the public an opportunity to comment on the safety review findings (the comment period has expired). Also, in April and June of 2017, SoCalGas advised the CAISO, CEC, CPUC and PHMSA of its concerns that the inability to inject natural gas into the Aliso Canyon natural gas storage facility poses a risk to energy reliability in Southern California.

On July 19, 2017, DOGGR issued its determination that the requirements of SB 380 for the resumption of injection operations, including all safety requirements, have been met. On the same date, the CPUC's Executive Director issued his concurrence with that determination, and DOGGR issued its *Order to: Test and Take Temporary Actions Upon Resuming Injection: Aliso Canyon Gas Storage Facility*. The order lifted the prohibition on injection at the Aliso Canyon natural gas storage facility, subject to its requirements that SoCalGas conduct and report results of a leak survey and measurement of total site methane emissions before resuming injection operations, as well as other requirements after injection resumes. The CPUC additionally issued a directive to SoCalGas to maintain a range of working gas in the Aliso Canyon natural gas storage facility at a target of 23.6 Bcf (approximately 28 percent of its maximum capacity), and at all times above 14.8 Bcf. DOGGR's findings require SoCalGas to continue to operate the facility under restrictions that limit the rate at which it is able to withdraw natural gas from the field. The County of Los Angeles has filed a petition for writ of mandate seeking declaratory and injunctive relief and stay of DOGGR's order lifting the prohibition against injecting natural gas at the facility. On July 28, 2017, the Superior Court denied the County's application for a temporary restraining order to block DOGGR's order on the ground that, pursuant to Public Utilities Code sections 714 and 1759(a), the CPUC has jurisdiction over regulating injections at the Aliso Canyon natural gas storage facility, and the Court therefore lacks jurisdiction to rule on the County's application. On July 31, 2017, the County filed a petition for a writ of mandate, prohibition, stay or other appropriate relief and a request for immediate stay in the Court of Appeal, seeking review of the Superior Court's order denying the County's applica

tion for a temporary restraining order. Later the same day, the Court of Appeal denied the County's request for an immediate stay on injections. We provide further detail regarding the County of Los Angeles' suit above in "Governmental Investigations and Civil and Criminal Litigation." Also on July 19, 2017, the CEC released a letter to the CPUC indicating that its staff is prepared to work with the CPUC and other agencies on a plan to phase out the use of the Aliso Canyon natural gas storage facility within ten years. The CEC and other stakeholders will be providing input into the SB 380 proceeding underway at the CPUC that addresses the future of the Aliso Canyon natural gas storage facility. Having completed the steps outlined by state agencies in order to safely begin injections at the Aliso Canyon natural gas storage facility, as of July 31, 2017, SoCalGas resumed limited injections.

If the Aliso Canyon natural gas storage facility were determined to be out of service for any meaningful period of time or permanently closed, or if future cash flows were otherwise insufficient to recover its carrying value, it could result in an impairment of the facility and significantly higher than expected operating costs and/or additional capital expenditures, and natural gas reliability and electric generation could be jeopardized. At June 30, 2017, the Aliso Canyon natural gas storage facility has a net book value of \$582 million, including \$237 million of construction work in progress for the project to construct a new compression station. Any significant impairment of this asset could have a material adverse effect on SoCalGas' and Sempra Energy's results of operations for the period in which it is recorded. Higher operating costs and additional capital expenditures incurred by SoCalGas may not be recoverable in customer rates, and could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Sempra Mexico

Property Disputes and Permit Challenges

Sempra Mexico has been engaged in a long-running land dispute relating to property adjacent to its Energía Costa Azul LNG terminal near Ensenada, Mexico. A claimant to the adjacent property filed complaints in the federal Agrarian Court challenging the refusal of the SEDATU in 2006 to issue a title to him for the disputed property. In November 2013, the federal Agrarian Court ordered that SEDATU issue the requested title and cause it to be registered. Both SEDATU and Sempra Mexico challenged the ruling, due to lack of notification of the underlying process. Both challenges are pending to be resolved by a Federal Court in Mexico. Sempra Mexico expects additional proceedings regarding the claims.

The property claimant also filed a lawsuit in July 2010 against Sempra Energy in Federal District Court in San Diego seeking compensatory and punitive damages as well as the earnings from the Energía Costa Azul LNG terminal based on his allegations that he was wrongfully evicted from the adjacent property and that he has been harmed by other allegedly improper actions. In September 2015, the Court granted Sempra Energy's motion for summary judgment and closed the case. The claimant appealed the summary judgment and an earlier order dismissing certain of his causes of action. In July 2017, the Ninth Circuit Court of Appeal issued a ruling affirming the summary judgment and dismissal of his other causes of action, except one alleging theft of personal property in connection with the alleged eviction.

Additionally, several administrative challenges are pending in Mexico before the Mexican environmental protection agency and the Federal Tax and Administrative Courts seeking revocation of the environmental impact authorization issued to Energía Costa Azul in 2003. These cases generally allege that the conditions and mitigation measures in the environmental impact authorization are inadequate and challenge findings that the activities of the terminal are consistent with regional development guidelines.

Two real property cases have been filed against Energía Costa Azul. In one, the plaintiffs seek to annul the recorded property title for a parcel on which the Energía Costa Azul LNG terminal is situated and to obtain possession of a different parcel that allegedly sits in the same place. A second complaint was served in April 2013 seeking to invalidate the contract by which Energía Costa Azul purchased another of the terminal parcels, on the grounds the purchase price was unfair. In January 2016, the second complaint was dismissed by the Federal Agrarian Court. Sempra Mexico expects further proceedings on these two matters.

In 2015, the Yaqui tribe, with the exception of some members living in the Bâcum community, granted its consent and a right-of-way easement agreement for the construction of the Guaymas-El Oro segment of IEnova's Sonora natural gas pipeline that crosses its territory. Representatives of the Bâcum community filed an amparo in Mexican Federal Court demanding the right to withhold consent for the project, the stoppage of work in the Yaqui territory and damages. The judge granted a suspension order that prohibited the construction through the Bâcum community territory. Because the pipeline does not pass through the Bâcum community, IEnova does not believe the order prohibited construction in the remainder of the Yaqui territory. As a result of the dispute, however, IEnova was delayed in the construction of the approximately 14 kilometers of pipeline that pass through territory of the Yaqui tribe. The CFE agreed to extend the deadline for commercial operations until the second quarter of 2017. Construction of the pipeline is complete, and commercial operations began in May 2017. The amparo remains pending.

In December 2012, Backcountry Against Dumps, Donna Tisdale and the Protect Our Communities Foundation filed a complaint in the SDCA seeking to invalidate the presidential permit issued by the DOE for Energía Sierra Juárez's cross-border generation tie line

connecting the Energía Sierra Juárez wind project in Mexico to the electric grid in the United States. The suit alleged violations of the NEPA, the Endangered Species Act, the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Plaintiffs filed a motion for summary judgment, which the court largely denied in September 2015. One NEPA claim, however, was not resolved – whether the Environmental Impact Statement’s assessment of alleged extraterritorial impacts of the generation tie line in the United States on the environment in Mexico was inadequate (the “extraterritorial impact issue”) – and was the subject of additional briefing in 2016. On January 30, 2017, the Court issued a ruling on the extraterritorial impact issue and, contrary to its prior ruling, ruled that the Environmental Impact Statement was deficient for not considering the effects in Mexico of both the U.S. and Mexican portion of the generation tie line and the wind farm itself. The Court has not yet made a decision on the ultimate remedy, and a final judgment has not been entered.

Other Litigation

Sempra Energy holds a noncontrolling interest in RBS Sempra Commodities, a limited liability partnership in the process of being liquidated. RBS, our partner in the joint venture, paid an £86 million assessment in October 2014 to HMRC for denied VAT refund claims filed in connection with the purchase of carbon credit allowances by RBS SEE, a subsidiary of RBS Sempra Commodities. RBS SEE has since been sold to JP Morgan and later to Mercuria Energy Group, Ltd. HMRC asserted that RBS was not entitled to reduce its VAT liability by VAT paid on certain carbon credit purchases during 2009 because RBS knew or should have known that certain vendors in the trading chain did not remit their own VAT to HMRC. After paying the assessment, RBS filed a Notice of Appeal of the assessment with the First-Tier Tribunal. The First-Tier Tribunal held a preliminary hearing in September 2016 to determine whether HMRC’s assessment was time-barred. In January 2017, the First-Tier Tribunal issued a decision in favor of HMRC concluding that the assessment was not time-barred. RBS has decided not to appeal the First-Tier Tribunal’s decision to the Upper Tribunal. There will be a hearing on the substantive matter regarding whether RBS knew or should have known that certain vendors in the trading chain did not remit their VAT to HMRC.

During 2015, liquidators, acting on behalf of ten companies (the Companies) that engaged in carbon credit trading via chains that included a company that RBS SEE traded with directly, filed a claim in the High Court of Justice asserting damages of £160 million against RBS and Mercuria Energy Europe Trading Limited (the Defendants). The claim alleges that the Defendants’ participation in the purchase and sale of carbon credits resulted in the Companies’ carbon credit trading transactions creating a VAT liability they were unable to pay. Trial of the matter has been set for the summer of 2018. JP Morgan has notified us that Mercuria Energy Group, Ltd. has sought indemnity for the claim, and JP Morgan has in turn sought indemnity from us and RBS.

Our remaining investment in RBS Sempra Commodities of \$67 million at June 30, 2017 is accounted for under the equity method and reflects remaining distributions expected to be received from the partnership as it is liquidated. The timing and amount of distributions may be impacted by these matters.

We are also defendants in ordinary routine litigation incidental to our businesses, including personal injury, employment litigation, product liability, property damage and other claims. Juries have demonstrated an increasing willingness to grant large awards, including punitive damages, in these types of cases.

CONTRACTUAL COMMITMENTS

We discuss below significant changes in the first six months of 2017 to contractual commitments discussed in Notes 1 and 15 of the Notes to Consolidated Financial Statements in the Annual Report.

Natural Gas Contracts

Sempra LNG & Midstream’s natural gas purchase and transportation commitments have decreased by \$130 million since December 31, 2016, primarily due to payments on existing contracts and changes in forward natural gas prices in the first six months of 2017. Net future payments are expected to decrease by \$133 million in 2017 and increase by \$2 million in 2018 and \$1 million thereafter compared to December 31, 2016.

In May 2016, Sempra LNG & Midstream permanently released certain pipeline capacity that it held with Rockies Express and others, which we discuss in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report. In May 2017, Sempra LNG & Midstream received settlement proceeds of \$57 million from a breach of contract claim against a counterparty in bankruptcy court. Of the total proceeds, \$47 million related to the charge we recorded in 2016 resulting from the permanent release of certain pipeline capacity. Sempra LNG & Midstream recorded the settlement proceeds as a reduction to Other Cost of Sales on Sempra Energy’s Condensed Consolidated Statement of Operations in the second quarter of 2017.

LNG Purchase Agreement

Sempra LNG & Midstream has a purchase agreement for the supply of LNG to the Energía Costa Azul terminal. The commitment amount is calculated using a predetermined formula based on estimated forward prices of the index applicable from 2017 to 2029. At

June 30, 2017, the commitment amount is expected to decrease by \$321 million in 2017, \$42 million in 2018, \$20 million in 2019, \$21 million in 2020, \$24 million in 2021 and \$432 million thereafter (through contract termination in 2029) compared to December 31, 2016, reflecting changes in estimated forward prices since December 31, 2016 and actual transactions for the first six months of 2017. These LNG commitment amounts are based on the assumption that all cargoes, less those already confirmed to be diverted, under the agreement are delivered. Although this agreement specifies a number of cargoes to be delivered, under its terms, the customer may divert certain cargoes, which would reduce amounts paid under the agreement by Sempra LNG & Midstream. Actual LNG purchases in the current and prior years have been significantly lower than the maximum amount provided under the agreement due to the customer electing to divert cargoes as allowed by the agreement.

Capital Leases – Power Purchase Agreements

In 2015, SDG&E entered into a CPUC-approved 25-year PPA with a peaker power plant facility. Construction of the peaker power plant facility was completed and delivery of contracted power commenced in June 2017, at which time we recorded a \$500 million capital lease obligation on SDG&E's and Sempra Energy's Condensed Consolidated Balance Sheets. We discuss commitments related to this capital lease obligation in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

In the first quarter of 2017, SDG&E satisfied all of the conditions precedent for a CPUC-approved 20-year PPA with a 500-MW power plant facility that is under construction. Beginning with the initial delivery of the contracted power, scheduled in 2018, the PPA will be accounted for as a capital lease. Future minimum lease payments under the new PPA are as follows:

FUTURE MINIMUM PAYMENTS – POWER PURCHASE AGREEMENT	
<i>(Dollars in millions)</i>	
2017	\$ —
2018	88
2019	105
2020	105
2021	105
Thereafter	1,706
Total minimum lease payments(1)	<u>2,109</u>
Less: interest(2)	<u>(1,559)</u>
Present value of net minimum lease payments	<u>\$ 550</u>

(1) This amount will be recorded over the life of the lease as Cost of Electric Fuel and Purchased Power on Sempra Energy's and SDG&E's Condensed Consolidated Statements of Operations. This expense will receive ratemaking treatment consistent with purchased-power costs, which are recovered in rates.

(2) Amount necessary to reduce net minimum lease payments to estimated present value at the inception of the lease.

The entities that own the peaker plant facilities are VIEs of which SDG&E is not the primary beneficiary. SDG&E does not have any additional implicit or explicit financial responsibility related to these VIEs.

Construction and Development Projects

SDG&E

In the first six months of 2017, significant net increases to contractual commitments at SDG&E were \$41 million, primarily for construction and infrastructure improvements for transmission systems. Net future payments under these contractual commitments are expected to increase by \$21 million in 2017 and \$26 million in 2018, decrease by \$8 million in 2019, increase by \$7 million in 2020 and \$2 million in 2021, and decrease by \$7 million thereafter compared to December 31, 2016.

NUCLEAR INSURANCE

SDG&E and the other owners of SONGS have insurance to cover claims from nuclear liability incidents arising at SONGS. This insurance provides \$450 million in coverage limits, the maximum amount available, including coverage for acts of terrorism. In addition, the Price-Anderson Act provides for up to \$13 billion of SFP. If a nuclear liability loss occurring at any U.S. licensed/commercial reactor exceeds the \$450 million insurance limit, all nuclear reactor owners could be required to contribute to the SFP. In such case, SDG&E's contribution would be up to \$50.9 million. This amount is subject to an annual maximum of \$7.6 million, unless a default occurs by any other SONGS owner. If the SFP is insufficient to cover the liability loss, SDG&E could be subject to an additional assessment.

The SONGS owners, including SDG&E, also maintain nuclear property damage insurance that exceeds the minimum federal requirements of \$1.06 billion. This insurance coverage is provided through NEIL. The NEIL policies have specific exclusions and limitations that can result in reduced or eliminated coverage. Insured members as a group are subject to retrospective premium assessments to cover losses sustained by NEIL under all issued policies. SDG&E could be assessed up to \$10.4 million of retrospective premiums based on overall member claims. All of SONGS' insurance claims arising out of the failures of the MHI

replacement steam generators have been settled with NEIL, as we discuss in Note 13 of the Notes to Consolidated Financial Statements in the Annual Report.

The nuclear property insurance program includes an industry aggregate loss limit for non-certified acts of terrorism (as defined by the Terrorism Risk Insurance Act). The industry aggregate loss limit for property claims arising from non-certified acts of terrorism is \$3.24 billion. This is the maximum amount that will be paid to insured members who suffer losses or damages from these non-certified terrorist acts.

U.S. DEPARTMENT OF ENERGY NUCLEAR FUEL DISPOSAL

The Nuclear Waste Policy Act of 1982 made the DOE responsible for accepting, transporting, and disposing of spent nuclear fuel. However, it is uncertain when the DOE will begin accepting spent nuclear fuel from SONGS. This delay will lead to increased costs for spent fuel storage. SDG&E will continue to support Edison in its pursuit of claims on behalf of the SONGS co-owners against the DOE for its failure to timely accept the spent nuclear fuel. In April 2016, Edison executed a spent fuel settlement agreement with the DOE for \$162 million covering damages incurred from January 1, 2006 through December 31, 2013. In May 2016, Edison refunded SDG&E \$32 million for its respective share of the damage award paid. In applying this refund, SDG&E recorded a \$23 million reduction to the SONGS regulatory asset, an \$8 million reduction of its nuclear decommissioning balancing account and a \$1 million reduction in its SONGS O&M cost balancing account.

In September 2016, Edison filed claims with the DOE for \$56 million in spent fuel management costs incurred in 2014 and 2015 on behalf of the SONGS co-owners under the terms of the 2016 spent fuel settlement agreement. In February 2017, the DOE reduced the request to approximately \$43 million primarily due to reductions to the claimed fuel canister costs. SDG&E received its \$9 million respective share of the claim from Edison in May 2017 and recorded the proceeds in balancing accounts or as reductions to regulatory assets for the benefit of ratepayers.

In October 2015, the California Coastal Commission approved Edison's application for the proposed expansion of an ISFSI at SONGS. The ISFSI expansion began construction in 2016 and is expected to be fully loaded with spent fuel by 2019 and to operate until 2049, when it is assumed that the DOE will have taken custody of all the SONGS spent fuel. The ISFSI would then be decommissioned, and the site restored to its original environmental state.

We provide additional information about SONGS in Note 9 above and in Notes 13 and 15 of the Notes to Consolidated Financial Statements in the Annual Report.

CONCENTRATION OF CREDIT RISK

We maintain credit policies and systems designed to manage our overall credit risk. These policies include an evaluation of potential counterparties' financial condition and an assignment of credit limits. These credit limits are established based on risk and return considerations under terms customarily available in the industry. We grant credit to utility customers and counterparties, substantially all of whom are located in our service territory, which covers most of Southern California and a portion of central California for SoCalGas, and all of San Diego County and an adjacent portion of Orange County for SDG&E. We also grant credit to utility customers and counterparties of our other companies providing natural gas or electric services in Mexico, Chile and Peru.

As they become operational, projects owned or partially owned by Sempra LNG & Midstream, Sempra Renewables, Sempra South American Utilities and Sempra Mexico place significant reliance on the ability of their suppliers, customers and partners to perform on long-term agreements and on our ability to enforce contract terms in the event of nonperformance. We consider many factors, including the negotiation of supplier and customer agreements, when we evaluate and approve development projects.

NOTE 12. SEGMENT INFORMATION

We have six separately managed, reportable segments, as follows:

- *SDG&E* provides electric service to San Diego and southern Orange counties and natural gas service to San Diego County.
- *SoCalGas* is a natural gas distribution utility, serving customers throughout most of Southern California and part of central California.
- *Sempra South American Utilities* develops, owns and operates, or holds interests in, electric transmission, distribution and generation infrastructure in Chile and Peru.
- *Sempra Mexico* develops, owns and operates, or holds interests in, natural gas, electric, LNG, LPG, ethane and liquid fuels infrastructure, and has marketing operations for the purchase of LNG and the purchase and sale of natural gas in Mexico. In February 2016, management approved a plan to market and sell the TdM natural gas-fired power plant located in Mexicali, Baja California, as we discuss in Note 3.
- *Sempra Renewables* develops, owns and operates, or holds interests in, wind and solar energy generation facilities serving wholesale electricity markets in the United States.
- *Sempra LNG & Midstream* develops, owns and operates, or holds interests in, a terminal for the import and export of LNG and sale of natural gas, and natural gas pipelines and storage facilities, all within the United States. In September 2016, Sempra LNG & Midstream sold EnergySouth, the parent company of Mobile Gas and Willmut Gas, and in May 2016, sold its 25-percent interest in Rockies Express. We discuss these divestitures in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report.

We evaluate each segment's performance based on its contribution to Sempra Energy's reported earnings. The California Utilities operate in essentially separate service territories, under separate regulatory frameworks and rate structures set by the CPUC. The California Utilities' operations are based on rates set by the CPUC and the FERC. We describe the accounting policies of all of our segments in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

Common services shared by the business segments are assigned directly or allocated based on various cost factors, depending on the nature of the service provided. Interest income and expense is recorded on intercompany loans. The loan balances and related interest are eliminated in consolidation.

The following tables show selected information by segment from our Condensed Consolidated Statements of Operations and Condensed Consolidated Balance Sheets. Amounts labeled as "All other" in the following tables consist primarily of parent organizations.

SEGMENT INFORMATION*(Dollars in millions)*

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
REVENUES				
SDG&E	\$ 1,058	\$ 992	\$ 2,115	\$ 1,983
SoCalGas	770	617	2,011	1,650
Sempra South American Utilities	381	385	793	785
Sempra Mexico	273	147	537	285
Sempra Renewables	26	6	48	13
Sempra LNG & Midstream	122	90	254	220
Intersegment revenues(1)	(97)	(81)	(194)	(158)
Total	\$ 2,533	\$ 2,156	\$ 5,564	\$ 4,778
INTEREST EXPENSE				
SDG&E	\$ 49	\$ 48	\$ 98	\$ 96
SoCalGas	26	24	51	46
Sempra South American Utilities	11	11	20	20
Sempra Mexico	20	4	52	8
Sempra Renewables	4	—	8	—
Sempra LNG & Midstream	9	10	20	22
All other	67	74	135	146
Intercompany eliminations	(27)	(29)	(56)	(53)
Total	\$ 159	\$ 142	\$ 328	\$ 285
INTEREST INCOME				
Sempra South American Utilities	\$ 6	\$ 5	\$ 11	\$ 10
Sempra Mexico	3	1	5	3
Sempra Renewables	2	—	3	1
Sempra LNG & Midstream	12	17	29	33
Intercompany eliminations	(15)	(17)	(34)	(35)
Total	\$ 8	\$ 6	\$ 14	\$ 12
DEPRECIATION AND AMORTIZATION				
SDG&E	\$ 166	\$ 158	\$ 329	\$ 317
SoCalGas	126	112	252	234
Sempra South American Utilities	13	14	26	27
Sempra Mexico	37	15	73	32
Sempra Renewables	10	2	19	3
Sempra LNG & Midstream	11	12	21	25
All other	5	1	8	4
Total	\$ 368	\$ 314	\$ 728	\$ 642
INCOME TAX EXPENSE (BENEFIT)(2)				
SDG&E	\$ 54	\$ 48	\$ 144	\$ 113
SoCalGas	19	(29)	117	54
Sempra South American Utilities	20	15	39	29
Sempra Mexico	102	(12)	244	28
Sempra Renewables	(5)	(9)	(16)	(22)
Sempra LNG & Midstream	18	(99)	19	(128)
All other	(41)	(20)	(85)	(72)
Total	\$ 167	\$ (106)	\$ 462	\$ 2

SEGMENT INFORMATION (CONTINUED)*(Dollars in millions)*

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
EQUITY EARNINGS (LOSSES)				
Earnings (losses) recorded before tax:				
Sempra Renewables	\$ 16	\$ 11	\$ 18	\$ 18
Sempra LNG & Midstream	2	3	3	(26)
Total	\$ 18	\$ 14	\$ 21	\$ (8)
Earnings (losses) recorded net of tax:				
Sempra South American Utilities	\$ —	\$ —	\$ 1	\$ 2
Sempra Mexico	—	33	(9)	48
Total	\$ —	\$ 33	\$ (8)	\$ 50
EARNINGS (LOSSES)⁽²⁾				
SDG&E	\$ 149	\$ 100	\$ 304	\$ 236
SoCalGas ⁽³⁾	58	(1)	261	198
Sempra South American Utilities	45	43	92	81
Sempra Mexico	(9)	57	39	75
Sempra Renewables	23	12	34	26
Sempra LNG & Midstream	27	(149)	28	(181)
All other	(34)	(46)	(58)	(66)
Total	\$ 259	\$ 16	\$ 700	\$ 369

EXPENDITURES FOR PROPERTY, PLANT & EQUIPMENT

SDG&E		\$ 763	\$ 602
SoCalGas		682	650
Sempra South American Utilities		77	82
Sempra Mexico		155	140
Sempra Renewables		100	457
Sempra LNG & Midstream		12	68
All other		13	7
Total		\$ 1,802	\$ 2,006

	June 30, 2017	December 31, 2016
ASSETS		
SDG&E	\$ 18,708	\$ 17,719
SoCalGas	13,743	13,424
Sempra South American Utilities	3,750	3,591
Sempra Mexico	7,835	7,542
Sempra Renewables	2,349	3,644
Sempra LNG & Midstream	4,861	5,564
All other	660	475
Intersegment receivables	(2,530)	(4,173)
Total	\$ 49,376	\$ 47,786

EQUITY METHOD AND OTHER INVESTMENTS

Sempra South American Utilities	\$ 20	\$ —
Sempra Mexico	234	180
Sempra Renewables	825	844
Sempra LNG & Midstream	977	997
All other	78	76
Total	\$ 2,134	\$ 2,097

(1) Revenues for reportable segments include intersegment revenues of \$3 million, \$17 million, \$26 million and \$51 million for the three months ended June 30, 2017; \$4 million, \$35 million, \$51 million and \$104 million for the six months ended June 30, 2017; a negligible amount, \$18 million, \$27 million and \$36 million for the three months ended June 30, 2016; and \$3 million, \$35 million, \$54 million and \$66 million for the six months ended June 30, 2016 for SDG&E, SoCalGas, Sempra Mexico and Sempra LNG & Midstream, respectively.

(2) Amounts for the six months ended June 30, 2016 reflect the adoption of ASU 2016-09 as of January 1, 2016, as we discuss in Note 2.

(3) After preferred dividends.

ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion in conjunction with the Condensed Consolidated Financial Statements and the Notes thereto contained in this Form 10-Q, and the Consolidated Financial Statements and the Notes thereto, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors” contained in our Annual Report.

OVERVIEW

Sempra Energy is a Fortune 500 energy-services holding company whose operating units invest in, develop and operate energy infrastructure, and provide gas and electricity services to their customers in North and South America. Additional information about our operating units, Sempra Utilities and Sempra Infrastructure, and their respective reportable segments is provided below and in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Annual Report.

This report includes information for the following separate registrants:

- Sempra Energy and its consolidated entities
- SDG&E and its consolidated VIE
- SoCalGas

References to “we,” “our” and “Sempra Energy Consolidated” are to Sempra Energy and its consolidated entities, collectively, unless otherwise indicated by its context. We refer to SDG&E and SoCalGas collectively as the California Utilities, which do not include our South American utilities or the utilities in our Sempra Infrastructure operating unit. All references to “Sempra Utilities” and “Sempra Infrastructure,” and to their respective reportable segments, are not intended to refer to any legal entity with the same or similar name.

Throughout this report, we refer to the following as Condensed Consolidated Financial Statements and Notes to Condensed Consolidated Financial Statements when discussed together or collectively:

- the Condensed Consolidated Financial Statements and related Notes of Sempra Energy and its subsidiaries and VIEs;
- the Condensed Consolidated Financial Statements and related Notes of SDG&E and its VIE; and
- the Condensed Financial Statements and related Notes of SoCalGas.

Below are summary descriptions of our operating units and their reportable segments.

SEMPRA ENERGY OPERATING UNITS AND REPORTABLE SEGMENTS

SEMPRA UTILITIES		
Business summary	Market	Service territory
SDG&E A regulated public utility; infrastructure supports electric generation, transmission and distribution, and natural gas distribution	<ul style="list-style-type: none"> ▪ Provides electricity to a population of 3.6 million (1.4 million meters) ▪ Provides natural gas to a population of 3.3 million (0.9 million meters) 	Serves the county of San Diego, California (electric and natural gas) and an adjacent portion of southern Orange County (electric only) covering 4,100 square miles
SOCALGAS A regulated public utility; infrastructure supports natural gas distribution, transmission and storage	<ul style="list-style-type: none"> ▪ Provides natural gas to a population of 21.7 million (5.9 million meters) 	Southern California and portions of central California (excluding San Diego County, the city of Long Beach and the desert area of San Bernardino County) covering 20,000 square miles
SEMPRA SOUTH AMERICAN UTILITIES Develops, owns and operates, or holds interests in electric transmission, distribution and generation infrastructure	<ul style="list-style-type: none"> ▪ Provides electricity to a population of approximately 2 million (approximately 0.7 million meters) in Chile and approximately 4.9 million (approximately 1.1 million meters) in Peru 	<ul style="list-style-type: none"> ▪ Region of Valparaiso in central Chile ▪ Southern zone of metropolitan Lima, Peru

SEMPRA INFRASTRUCTURE

Business summary	Market	Geographic area
<p>SEMPRA MEXICO Develops, owns and operates, or holds interests in:</p> <ul style="list-style-type: none"> ▪ natural gas transmission pipelines ▪ LPG and ethane systems ▪ a natural gas distribution utility ▪ electric generation facilities, including wind, solar and a natural gas-fired power plant (presently held for sale) ▪ a terminal for the import of LNG ▪ a terminal for the storage of LPG ▪ a marine terminal for the receipt, storage and delivery of liquid fuels ▪ marketing operations for the purchase of LNG and the purchase and sale of natural gas 	<ul style="list-style-type: none"> ▪ Natural gas ▪ Wholesale electricity ▪ LNG ▪ LPG ▪ Liquid fuels 	<ul style="list-style-type: none"> ▪ Mexico
<p>SEMPRA RENEWABLES Develops, owns and operates, or holds interests in renewable energy generation projects</p>	<ul style="list-style-type: none"> ▪ Wholesale electricity 	<ul style="list-style-type: none"> ▪ Arizona ▪ California ▪ Colorado ▪ Hawaii ▪ Indiana ▪ Kansas ▪ Michigan ▪ Minnesota ▪ Nebraska ▪ Nevada ▪ Pennsylvania
<p>SEMPRA LNG & MIDSTREAM Develops, owns and operates, or holds interests in LNG and natural gas midstream assets:</p> <ul style="list-style-type: none"> ▪ a terminal in the U.S. for the import and export of LNG and sale of natural gas ▪ natural gas pipelines and storage facilities ▪ marketing operations 	<ul style="list-style-type: none"> ▪ LNG ▪ Natural gas 	<ul style="list-style-type: none"> ▪ Alabama ▪ Louisiana ▪ Mississippi ▪ Texas

RESULTS OF OPERATIONS

We discuss the following in Results of Operations:

- Overall results of our operations
- Segment results
- Adjusted earnings and adjusted earnings per share
- Significant changes in revenues, costs and earnings between periods
- Impact of foreign currency and inflation rates on our results of operations

OVERALL RESULTS OF OPERATIONS OF SEMPRA ENERGY

Our earnings increased by \$243 million to \$259 million in the three months ended June 30, 2017, while diluted EPS increased by \$0.97 per share to \$1.03 per share. For the six months ended June 30, 2017, our earnings increased by \$331 million to \$700 million, while diluted EPS increased by \$1.30 per share to \$2.77 per share. Our earnings and diluted EPS were impacted by variances discussed in “Segment Results” below and by the items included in the table “Sempra Energy Adjusted Earnings and Adjusted Earnings Per Share,” also below.

SEGMENT RESULTS

The following section presents earnings (losses) by Sempra Energy segment, as well as Parent and other, and the related discussion of the changes in segment earnings (losses). Variance amounts presented are the after-tax earnings impact (based on applicable statutory tax rates), unless otherwise noted, and before noncontrolling interests, where applicable.

SEMPRA ENERGY EARNINGS (LOSSES) BY SEGMENT

(Dollars in millions)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016(1)
Sempra Utilities:				
SDG&E	\$ 149	\$ 100	\$ 304	\$ 236
SoCalGas(2)	58	(1)	261	198
Sempra South American Utilities	45	43	92	81
Sempra Infrastructure:				
Sempra Mexico	(9)	57	39	75
Sempra Renewables	23	12	34	26
Sempra LNG & Midstream	27	(149)	28	(181)
Parent and other(3)	(34)	(46)	(58)	(66)
Earnings	\$ 259	\$ 16	\$ 700	\$ 369

(1) Reflects the adoption of ASU 2016-09, as we discuss in Note 2 of the Notes to Condensed Consolidated Financial Statements herein.

(2) After preferred dividends.

(3) Includes after-tax interest expense (\$40 million and \$44 million for the three months ended June 30, 2017 and 2016, respectively, and \$81 million and \$87 million for the six months ended June 30, 2017 and 2016, respectively), intercompany eliminations recorded in consolidation and certain corporate costs.

SDG&E

The increase in earnings of \$49 million (49%) in the three months ended June 30, 2017 was primarily due to:

- \$31 million charge in 2016 associated with prior years’ income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD;
- \$16 million higher CPUC base operating margin authorized for 2017 and lower non-refundable operating costs;
- \$8 million favorable impact in 2017 from the resolution of prior years’ income tax items;
- \$5 million higher earnings from electric transmission operations primarily due to higher rate base; and
- \$3 million increase in AFUDC related to equity; **offset by**
- \$9 million favorable impact in 2016 from the retroactive application of the 2016 GRC FD for the first quarter of 2016.

The increase in earnings of \$68 million (29%) in the first six months of 2017 was primarily due to:

- \$31 million charge in 2016 associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD;
- \$22 million higher CPUC base operating margin authorized for 2017 and lower non-refundable operating costs;
- \$8 million favorable impact in 2017 from the resolution of prior years' income tax items;
- \$7 million higher earnings from electric transmission operations primarily due to higher rate base;
- \$7 million increase in AFUDC related to equity; and
- \$6 million reimbursement of litigation costs associated with the arbitration ruling over the SONGS replacement steam generators, as we discuss in Note 9 of the Notes to Condensed Consolidated Financial Statements herein; **offset by**
- \$7 million income tax benefit in 2016 associated with excess tax benefits related to share-based compensation.

SoCalGas

The increase in earnings of \$59 million in the three months ended June 30, 2017 was primarily due to:

- \$49 million of charges in 2016 associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD;
- \$13 million impairment of assets in 2016 related to the Southern Gas System Reliability Project (also referred to as the North-South Pipeline); and
- \$5 million higher earnings associated with the PSEP and advanced metering assets; **offset by**
- \$12 million favorable impact in 2016 from the retroactive application of the 2016 GRC FD for the first quarter of 2016.

The increase in earnings of \$63 million (32%) in the first six months of 2017 was primarily due to:

- \$49 million of charges in 2016 associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD;
- \$13 million impairment of assets in 2016 related to the Southern Gas System Reliability Project; and
- \$10 million higher earnings associated with the PSEP and advanced metering assets; **offset by**
- \$4 million income tax benefit in 2016 associated with excess tax benefits related to share-based compensation.

Sempra South American Utilities

Because our operations in South America use their local currency as their functional currency, revenues and expenses are translated into U.S. dollars at average exchange rates for the period for consolidation in Sempra Energy Consolidated's results of operations. The year-to-year variances discussed below are as adjusted for the difference in foreign currency translation rates between years. We discuss these and other foreign currency effects below in "Impact of Foreign Currency and Inflation Rates on Results of Operations."

Earnings for the three months ended June 30, 2017 were consistent with earnings for the same period in 2016.

The increase in earnings of \$11 million (14%) in the first six months of 2017 was primarily due to higher earnings from operations at Luz del Sur, mainly driven by an increase in rates, and lower operating expenses, offset by lower volumes.

Sempra Mexico

Losses of \$9 million in the three months ended June 30, 2017 compared to earnings of \$57 million for the same period in 2016 was primarily due to:

- \$71 million impairment in 2017, net of a \$12 million income tax benefit that has been fully reserved, of the TdM natural gas-fired power plant assets held for sale, as we discuss in Note 3 of the Notes to Condensed Consolidated Financial Statements herein;
- \$29 million unfavorable impact in 2017 from foreign currency and inflation effects, net of related hedging activities, as follows:
 - \$52 million from income tax expense (\$34 million after noncontrolling interests), and
 - \$9 million in equity losses from our joint ventures, *offset by*
 - \$8 million favorable transactional effects.

The net effects of the items above were partially mitigated, as we discuss below in "Other Income, Net," by a \$24 million gain (\$40 million pretax) from foreign currency derivatives, which are hedging Sempra Mexico's foreign currency exposure from its controlling interest in IEnova. We discuss these effects below in "Impact of Foreign Currency and Inflation Rate on Results of Operations;"

- \$22 million favorable impact in 2016 from foreign currency and inflation effects, net of related hedging activities, as follows:
 - \$22 million from income tax benefit (\$18 million after noncontrolling interests), and
 - \$15 million in equity earnings from our joint ventures, *offset by*
 - \$6 million unfavorable transactional effects.

The net effects of the items above were partially offset by a \$9 million loss (\$15 million pretax) from foreign currency derivatives, which were used to hedge Sempra Mexico's foreign currency exposure from its controlling interest in IEnova;

- \$13 million valuation allowance against TdM's deferred tax assets;
- \$7 million higher interest expense, including \$4 million at Ventika and \$2 million at IEnova Pipelines (formerly known as GdC) related to debt assumed in their acquisitions; and
- \$7 million lower operating results at TdM, mainly due to higher operating expenses related to major maintenance; **offset by**
- \$35 million higher pipeline operational earnings, primarily attributable to the increase in our ownership interest in IEnova Pipelines from 50 percent to 100 percent in September 2016 and from other pipeline assets placed in service;
- \$15 million losses attributable to noncontrolling interests in 2017 compared to \$16 million earnings attributable to noncontrolling interests in 2016 at IEnova, as we discuss below in "Changes in Revenues, Costs and Earnings – Losses (Earnings) Attributable to Noncontrolling Interests;"
- \$8 million operational earnings in 2017 from the Ventika wind power generation facilities, which we acquired in December 2016;
- \$3 million tax benefit in 2017 from a reduction to the outside basis deferred tax liability compared to \$3 million tax expense in 2016 on our investment in TdM that is held for sale; and
- \$4 million higher earnings from the recognition of AFUDC related to equity primarily associated with the Ojinaga pipeline project.

The decrease in earnings of \$36 million (48%) in the first six months of 2017 was primarily due to:

- \$86 million unfavorable impact in 2017 from foreign currency and inflation effects, net of related hedging activities, as follows:
 - \$149 million from income tax expense (\$99 million after noncontrolling interests), and
 - \$22 million in equity losses from our joint ventures, *offset by*
 - \$17 million favorable transactional effects.

The net effects of the items above were partially mitigated, as we discuss below in "Other Income, Net," by a \$68 million gain (\$113 million pretax) from foreign currency derivatives, which are hedging Sempra Mexico's foreign currency exposure from its controlling interest in IEnova. We discuss these effects below in "Impact of Foreign Currency and Inflation Rate on Results of Operations;"

- \$25 million favorable impact in 2016 from foreign currency and inflation effects, net of related hedging activities, as follows:
 - \$22 million from income tax benefit (\$18 million after noncontrolling interests), and
 - \$15 million in equity earnings from our joint ventures, *offset by*
 - \$5 million net unfavorable transactional and translation effects.

The net effects of the items above were partially offset by a \$7 million loss (\$12 million pretax) from foreign currency derivatives, which were used to hedge Sempra Mexico's foreign currency exposure from its controlling interest in IEnova;

- \$71 million impairment in 2017, net of a \$12 million income tax benefit that has been fully reserved, of the TdM assets held for sale;
- \$15 million higher interest expense, including \$8 million at Ventika and \$4 million at IEnova Pipelines; and
- \$13 million valuation allowance against TdM's deferred tax assets; **offset by**
- \$57 million higher pipeline operational earnings, primarily attributable to the increase in ownership in IEnova Pipelines and from other pipeline assets placed in service;
- \$8 million tax benefit in 2017 from a reduction to the outside basis deferred tax liability compared to \$32 million tax expense in 2016 on our investment in TdM that is held for sale;
- \$32 million higher earnings from the recognition of AFUDC related to equity primarily associated with the Ojinaga and San Isidro pipeline projects;
- \$10 million losses attributable to noncontrolling interests in 2017 compared to \$21 million earnings attributable to noncontrolling interests in 2016 at IEnova; and
- \$18 million operational earnings in 2017 from Ventika.

Sempra Renewables

The increase in earnings of \$11 million (92%) and \$8 million (31%) in the three months and six months ended June 30, 2017, respectively, was due to the attribution of losses of \$7 million and \$10 million, respectively, to tax equity investors reflected in noncontrolling interests, primarily due to solar assets placed in service during 2016. For the three months ended June 30, 2017, the higher earnings were also due to increased production at our wind and solar assets.

Sempra LNG & Midstream

Earnings of \$27 million for the three months ended June 30, 2017 compared to losses of \$149 million for the same period in 2016, was primarily due to:

- \$123 million loss in 2016 on permanent release of certain pipeline capacity, as we discuss in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report;
- \$34 million settlement proceeds from a breach of contract claim against a counterparty in bankruptcy court, of which \$28 million is related to the charge in 2016 from the permanent release of certain pipeline capacity, as we discuss in Note 11 of the Notes to Condensed Consolidated Financial Statements herein;
- \$18 million primarily due to mark-to-market losses in 2016 from natural gas marketing activities; and
- \$5 million higher results from LNG marketing activities primarily driven by changes in natural gas prices.

Earnings of \$28 million in the first six months of 2017 compared to losses of \$181 million for the same period in 2016, was primarily due to:

- \$123 million loss in 2016 on permanent release of certain pipeline capacity;
- \$39 million improved results primarily due to mark-to-market losses in 2016 from natural gas marketing activities;
- \$34 million settlement proceeds from a breach of contract claim against a counterparty in bankruptcy court, of which \$28 million is related to the charge in 2016 from the permanent release of certain pipeline capacity;
- \$27 million impairment charge in the first quarter of 2016 related to our investment in Rockies Express, which we discuss further in Note 3 of the Notes to Condensed Consolidated Financial Statements herein; and
- \$9 million higher results from LNG marketing activities primarily driven by changes in natural gas prices; **offset by**
- \$11 million lower equity earnings resulting from the sale of our investment in Rockies Express in May 2016; and
- \$7 million lower earnings due to the sale of EnergySouth in September 2016, as we discuss in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report.

Parent and Other

The decrease in losses of \$12 million (26%) in the three months ended June 30, 2017 was primarily due to:

- \$14 million higher income tax benefits in 2017, including:
 - \$2 million income tax benefit in 2017 compared to \$8 million income tax expense in 2016 due to the interim period application of an annual forecasted consolidated effective tax rate, and
 - \$4 million U.S. income tax expense in 2016 on planned repatriation of earnings from certain non-U.S. subsidiaries;
- \$5 million higher investment gains on dedicated assets in support of our executive retirement and deferred compensation plans, and a decrease in deferred compensation expense associated with the investments; and
- \$5 million lower net interest expense in 2017; **offset by**
- \$6 million higher proportion of operating costs retained at Parent; and
- \$5 million (\$8 million pretax) of costs in 2017 associated with foreign currency derivatives.

The decrease in losses of \$8 million (12%) in the first six months of 2017 was primarily due to:

- \$10 million higher investment gains on dedicated assets in support of our executive retirement and deferred compensation plans;
- \$9 million lower net interest expense in 2017; and
- \$6 million higher income tax benefits in 2017, including:
 - \$3 million income tax benefit in 2017 compared to \$6 million income tax expense in 2016 due to the interim period application of an annual forecasted consolidated effective tax rate,
 - \$9 million U.S. income tax expense in 2016 on planned repatriation of earnings from certain non-U.S. subsidiaries, and
 - \$7 million income tax benefit in 2017 related to a deferred income tax liability on an outside basis difference in a subsidiary investment, *offset by*
 - \$1 million income tax expense in 2017 compared to \$17 million income tax benefit in 2016 associated with excess tax deficiencies/benefits related to share-based compensation; **offset by**
- \$10 million (\$16 million pretax) of costs in 2017 associated with foreign currency derivatives; and
- \$4 million higher proportion of operating costs retained at Parent.

ADJUSTED EARNINGS AND ADJUSTED EARNINGS PER SHARE

We prepare the Condensed Consolidated Financial Statements in conformity with U.S. GAAP. However, management may use earnings and EPS adjusted to exclude certain items (referred to as adjusted earnings and adjusted EPS) internally for financial planning, for analysis of performance and for reporting of results to the Board of Directors. We may also use adjusted earnings and adjusted EPS when communicating our financial results and earnings outlook to analysts and investors. Adjusted earnings and adjusted EPS are non-GAAP financial measures. Because of the significance and/or nature of the excluded items, management believes that these non-GAAP financial measures provide a meaningful comparison of the performance of business operations to prior and future periods. Non-GAAP financial measures are supplementary information that should be considered in addition to, but not as a substitute for, the information prepared in accordance with U.S. GAAP.

The table below reconciles adjusted earnings and adjusted EPS to Sempra Energy Earnings and Diluted Earnings Per Common Share, which we consider to be the most directly comparable financial measures calculated in accordance with U.S. GAAP, for the three months and six months ended June 30, 2017 and 2016.

SEMPRA ENERGY ADJUSTED EARNINGS AND ADJUSTED EPS

(Dollars in millions, except per share amounts)

	Pretax amount	Income tax (benefit) expense(1)	Non-controlling interests	Earnings	Diluted EPS
Three months ended June 30, 2017					
Sempra Energy GAAP Earnings				\$ 259	\$ 1.03
Excluded items:					
Impairment of TdM assets held for sale	\$ 71	\$ —	\$ (24)	47	0.19
Deferred income tax benefit associated with TdM	—	(3)	1	(2)	(0.01)
Recoveries related to 2016 permanent release of pipeline capacity	(47)	19	—	(28)	(0.11)
Sempra Energy Adjusted Earnings				<u>\$ 276</u>	<u>\$ 1.10</u>
Weighted-average number of shares outstanding, diluted (thousands)					252,822
Three months ended June 30, 2016(2)					
Sempra Energy GAAP Earnings				\$ 16	\$ 0.06
Excluded items:					
Permanent release of pipeline capacity	\$ 206	\$ (83)	\$ —	123	0.49
SDG&E tax repairs adjustments related to 2016 GRC FD	52	(21)	—	31	0.12
SoCalGas tax repairs adjustments related to 2016 GRC FD	83	(34)	—	49	0.19
SDG&E retroactive impact of 2016 GRC FD for first-quarter 2016	(15)	6	—	(9)	(0.03)
SoCalGas retroactive impact of 2016 GRC FD for first-quarter 2016	(20)	8	—	(12)	(0.05)
Deferred income tax expense associated with TdM	—	3	(1)	2	0.01
Sempra Energy Adjusted Earnings				<u>\$ 200</u>	<u>\$ 0.79</u>
Weighted-average number of shares outstanding, diluted (thousands)					252,036
Six months ended June 30, 2017					
Sempra Energy GAAP Earnings				\$ 700	\$ 2.77
Excluded items:					
Impairment of TdM assets held for sale	\$ 71	\$ —	\$ (24)	47	0.19
Deferred income tax benefit associated with TdM	—	(8)	3	(5)	(0.02)
Recoveries related to 2016 permanent release of pipeline capacity	(47)	19	—	(28)	(0.11)
Sempra Energy Adjusted Earnings				<u>\$ 714</u>	<u>\$ 2.83</u>
Weighted-average number of shares outstanding, diluted (thousands)					252,609
Six months ended June 30, 2016(2)					
Sempra Energy GAAP Earnings				\$ 369	\$ 1.47
Excluded items:					
Permanent release of pipeline capacity	\$ 206	\$ (83)	\$ —	123	0.49
SDG&E tax repairs adjustments related to 2016 GRC FD	52	(21)	—	31	0.12
SoCalGas tax repairs adjustments related to 2016 GRC FD	83	(34)	—	49	0.19
Impairment of investment in Rockies Express	44	(17)	—	27	0.11
Deferred income tax expense associated with TdM	—	32	(6)	26	0.10
Sempra Energy Adjusted Earnings				<u>\$ 625</u>	<u>\$ 2.48</u>
Weighted-average number of shares outstanding, diluted (thousands)					251,775

(1) Income taxes were calculated based on applicable statutory tax rates, except for adjustments that are solely income tax. Income taxes associated with TdM were calculated based on the applicable statutory tax rate, including translation from historic to current exchange rates. An income tax benefit of \$12 million associated with the 2017 TdM impairment has been fully reserved.

(2) Reflects the adoption of ASU 2016-09, as we discuss in Note 2 of the Notes to Condensed Consolidated Financial Statements herein.

The tables below reconcile adjusted earnings to SDG&E's and SoCalGas' Earnings (Losses), which we consider to be the most directly comparable financial measure calculated in accordance with U.S. GAAP, for the three months and six months ended June 30, 2016. SDG&E and SoCalGas had no reconciling adjustments for the three months and six months ended June 30, 2017.

SDG&E ADJUSTED EARNINGS

(Dollars in millions)

	Pretax amount	Income tax (benefit) expense(1)	Earnings
Three months ended June 30, 2016			
SDG&E GAAP Earnings			\$ 100
Excluded items:			
Tax repairs adjustments related to 2016 GRC FD	\$ 52	\$ (21)	31
Retroactive impact of 2016 GRC FD for first-quarter 2016	(15)	6	(9)
SDG&E Adjusted Earnings			\$ 122
Six months ended June 30, 2016(2)			
SDG&E GAAP Earnings			\$ 236
Excluded item:			
Tax repairs adjustments related to 2016 GRC FD	\$ 52	\$ (21)	31
SDG&E Adjusted Earnings			\$ 267

(1) Income taxes were calculated based on applicable statutory tax rates.

(2) Reflects the adoption of ASU 2016-09, as we discuss in Note 2 of the Notes to Condensed Consolidated Financial Statements herein.

SOCALGAS ADJUSTED EARNINGS

(Dollars in millions)

	Pretax amount	Income tax (benefit) expense(1)	Earnings
Three months ended June 30, 2016			
SoCalGas GAAP Losses			\$ (1)
Excluded items:			
Tax repairs adjustments related to 2016 GRC FD	\$ 83	\$ (34)	49
Retroactive impact of 2016 GRC FD for first-quarter 2016	(20)	8	(12)
SoCalGas Adjusted Earnings			\$ 36
Six months ended June 30, 2016(2)			
SoCalGas GAAP Earnings			\$ 198
Excluded item:			
Tax repairs adjustments related to 2016 GRC FD	\$ 83	\$ (34)	49
SoCalGas Adjusted Earnings			\$ 247

(1) Income taxes were calculated based on applicable statutory tax rates.

(2) Reflects the adoption of ASU 2016-09, as we discuss in Note 2 of the Notes to Condensed Consolidated Financial Statements herein.

CHANGES IN REVENUES, COSTS AND EARNINGS

This section contains a discussion of the differences between periods in certain line items of the Condensed Consolidated Statements of Operations for Sempra Energy, SDG&E and SoCalGas.

Utilities Revenues

Our utilities revenues include

Electric revenues at:

- SDG&E
- Sempra South American Utilities' Chilquinta Energia and Luz del Sur

Natural gas revenues at:

- SDG&E
- SoCalGas
- Sempra Mexico's Ecogas
- Sempra LNG & Midstream's Mobile Gas and Willmut Gas (prior to the sale of EnergySouth on September 12, 2016)

Intercompany revenues included in the separate revenues of each utility are eliminated in the Sempra Energy Condensed Consolidated Statements of Operations.

SoCalGas and SDG&E currently operate under a regulatory framework that:

- permits SDG&E to recover the actual cost incurred to generate or procure electricity based on annual estimates of the cost of electricity supplied to customers. The differences in cost between estimates and actual are recovered in subsequent periods through rates.
- permits the cost of natural gas purchased for core customers (primarily residential and small commercial and industrial customers) to be passed through to customers in rates substantially as incurred. However, SoCalGas' GCIM provides SoCalGas the opportunity to share in the savings and/or costs from buying natural gas for its core customers at prices below or above monthly market-based benchmarks. This mechanism permits full recovery of costs incurred when average purchase costs are within a price range around the benchmark price. Any higher costs incurred or savings realized outside this range are shared between the core customers and SoCalGas. We provide further discussion in Note 1 of the Notes to Consolidated Financial Statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations – Our Business" in the Annual Report.
- also permits the California Utilities to recover certain expenses for programs authorized by the CPUC, or "refundable programs."

Because changes in SDG&E's and SoCalGas' cost of electricity and/or natural gas is substantially recovered in rates, changes in these costs are reflected in the changes in revenues, and therefore do not impact earnings. In addition to the change in cost or market prices, electric or natural gas revenues recorded during a period are impacted by customer usage causing a difference between customer billings and recorded or authorized costs. These differences are required to be balanced over time, resulting in over- and undercollected regulatory balancing accounts. We discuss balancing accounts and their effects further in Note 14 of the Notes to Consolidated Financial Statements in the Annual Report.

The table below summarizes revenues and cost of sales for our utilities, net of intercompany activity:

UTILITIES REVENUES AND COST OF SALES				
<i>(Dollars in millions)</i>				
	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Electric revenues:				
SDG&E	\$ 946	\$ 897	\$ 1,821	\$ 1,740
Sempra South American Utilities	362	365	752	743
Eliminations and adjustments	(1)	(1)	(3)	(3)
Total	<u>1,307</u>	<u>1,261</u>	<u>2,570</u>	<u>2,480</u>
Natural gas revenues:				
SoCalGas	770	617	2,011	1,650
SDG&E	112	95	294	243
Sempra Mexico	25	20	55	42
Sempra LNG & Midstream	—	18	—	56
Eliminations and adjustments	(17)	(17)	(35)	(35)
Total	<u>890</u>	<u>733</u>	<u>2,325</u>	<u>1,956</u>
Total utilities revenues	<u>\$ 2,197</u>	<u>\$ 1,994</u>	<u>\$ 4,895</u>	<u>\$ 4,436</u>
Cost of electric fuel and purchased power:				
SDG&E	\$ 316	\$ 314	\$ 577	\$ 562
Sempra South American Utilities	237	247	503	514
Total	<u>\$ 553</u>	<u>\$ 561</u>	<u>\$ 1,080</u>	<u>\$ 1,076</u>
Cost of natural gas:				
SoCalGas	\$ 179	\$ 147	\$ 587	\$ 400
SDG&E	38	25	103	64
Sempra Mexico	15	11	34	23
Sempra LNG & Midstream	—	4	—	15
Eliminations and adjustments	(4)	(4)	(11)	(8)
Total	<u>\$ 228</u>	<u>\$ 183</u>	<u>\$ 713</u>	<u>\$ 494</u>

The table below summarizes electric and natural gas volumes billed by our utilities:

UTILITIES VOLUMES				
<i>(Electric volumes in millions of kilowatt-hours, natural gas volumes in billion cubic feet)</i>				
	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Electric volumes:				
SDG&E:				
Residential	1,388	1,422	3,059	3,111
Commercial	1,632	1,551	3,201	3,130
Industrial	526	519	1,026	1,007
Direct access	786	772	1,573	1,606
Street and highway lighting	19	20	43	37
Total(1)	4,351	4,284	8,902	8,891
Sempra South American Utilities:				
Luz del Sur	1,780	1,887	3,674	3,836
Chilquinta Energía	691	682	1,502	1,481
Total	2,471	2,569	5,176	5,317
Natural gas volumes(2):				
SoCalGas:				
Natural gas sales	61	63	172	162
Transportation	141	138	289	278
Total(1)	202	201	461	440
SDG&E:				
Natural gas sales	10	10	25	24
Transportation	7	6	15	14
Total(1)	17	16	40	38
Sempra Mexico – Ecogas				
	7	7	15	15

(1) Includes intercompany sales.

(2) In September 2016, Sempra LNG & Midstream completed the sale of EnergySouth, the parent company of Mobile Gas and Willmut Gas. Volume information for Mobile Gas and Willmut Gas has been excluded from 2016 due to immateriality.

Electric Revenues and Cost of Electric Fuel and Purchased Power

In the three months ended June 30, 2017, our electric revenues increased by \$46 million (4%) to \$1.3 billion due to:

- \$49 million increase at SDG&E, which included
 - \$52 million of charges in 2016 associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD,
 - \$15 million increase in 2017 due to an increase in rates permitted under the attrition mechanism in the 2016 GRC FD, and
 - \$10 million higher authorized revenues from electric transmission, *offset by*
 - \$14 million favorable impact in 2016 from the retroactive application of the 2016 GRC FD for the first quarter of 2016,
 - \$14 million lower recovery of costs associated with CPUC-authorized refundable programs, which revenues are fully offset in O&M, and
 - \$12 million charge in 2017 associated with tracking the income tax benefit from certain flow-through items in relation to the forecasted amounts in the 2016 GRC FD; **offset by**
- \$3 million decrease at Sempra South American Utilities, which included
 - \$20 million lower volumes at Luz del Sur primarily due to the migration of regulated and non-regulated customers to tolling customers, who pay only a tolling fee and do not contribute to customer load, *offset by*
 - \$10 million due to higher rates at Luz del Sur, and
 - \$7 million due to foreign currency exchange rate effects.

Our utilities' cost of electric fuel and purchased power decreased by \$8 million (1%) to \$553 million in the three months ended June 30, 2017 primarily due to a \$10 million decrease at Sempra South American Utilities, which included

- \$9 million lower costs at Chilquinta Energía; and
- \$5 million from lower volumes at Luz del Sur, net of higher volume at Chilquinta Energía; **offset by**
- \$5 million due to foreign currency exchange rate effects.

In the first six months of 2017, our electric revenues increased by \$90 million (4%) to \$2.6 billion primarily due to:

- \$81 million increase at SDG&E, which included
 - \$52 million of charges in 2016 associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD,
 - \$26 million increase in 2017 due to an increase in rates permitted under the attrition mechanism in the 2016 GRC FD,
 - \$16 million higher authorized revenues from electric transmission, and
 - \$15 million higher cost of electric fuel and purchased power, which we discuss below, *offset by*
 - \$24 million lower recovery of costs associated with CPUC-authorized refundable programs, which revenues are fully offset in O&M, and
 - \$10 million charge in 2017 associated with tracking the income tax benefit from certain flow-through items in relation to forecasted amounts in the 2016 GRC FD; and
- \$9 million increase at Sempra South American Utilities, which included
 - \$29 million due to foreign currency exchange rate effects, and
 - \$20 million due to higher rates at Luz del Sur, *offset by*
 - \$37 million lower volumes at Luz del Sur primarily due to the migration of regulated and non-regulated customers to tolling customers, who pay only a tolling fee and do not contribute to customer load.

In the first six months of 2017, our utilities' cost of electric fuel and purchased power increased by \$4 million, remaining at \$1.1 billion due to:

- \$15 million increase at SDG&E mainly due to an increase in the cost of purchased power primarily as a result of higher natural gas prices; **offset by**
- \$11 million decrease at Sempra South American Utilities, which included
 - \$24 million lower volumes at Luz del Sur, and
 - \$9 million lower costs at Chilquinta Energía, *offset by*
 - \$20 million due to foreign currency exchange rate effects.

Natural Gas Revenues and Cost of Natural Gas

The table below summarizes average cost of natural gas sold by the California Utilities and included in Cost of Natural Gas. The average cost of natural gas sold at each utility is impacted by market prices, as well as transportation, tariff and other charges.

CALIFORNIA UTILITIES AVERAGE COST OF NATURAL GAS					
<i>(Dollars per thousand cubic feet)</i>					
	Three months ended June 30,		Six months ended June 30,		
	2017	2016	2017	2016	
SoCalGas	\$ 2.96	\$ 2.37	\$ 3.44	\$ 2.49	
SDG&E	4.07	2.75	4.17	2.70	

In the three months ended June 30, 2017, Sempra Energy's natural gas revenues increased by \$157 million (21%) to \$890 million, and the cost of natural gas increased by \$45 million (25%) to \$228 million. The increase in natural gas revenues was primarily due to:

- \$153 million increase at SoCalGas, which included
 - \$83 million of charges in 2016 associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD,
 - \$32 million increase in cost of natural gas sold, including \$36 million from higher average gas prices offset by \$4 million from lower volumes driven by slightly warmer weather in the second quarter of 2017 compared to the same period in 2016,
 - \$17 million increase due to 2017 attrition,
 - \$13 million decrease in charges in 2017 associated with tracking the income tax benefit from certain flow-through items in relation to forecasted amounts in the 2016 GRC FD, and
 - \$13 million higher revenues primarily associated with the PSEP, *offset by*
 - \$14 million favorable impact in 2016 from the retroactive application of the 2016 GRC FD for the first quarter of 2016; and
- \$17 million increase at SDG&E, which included
 - \$13 million increase in cost of natural gas sold primarily from higher average gas prices, and
 - \$6 million higher revenues primarily associated with the PSEP.

In the three months ended June 30, 2017, natural gas revenues and cost of natural gas at Sempra LNG & Midstream decreased by \$18 million and \$4 million, respectively, due to the sale of EnergySouth in September 2016.

In the first six months of 2017, Sempra Energy's natural gas revenues increased by \$369 million (19%) to \$2.3 billion, and the cost of natural gas increased by \$219 million (44%) to \$713 million. The increase in natural gas revenues was primarily due to:

- \$361 million increase at SoCalGas, which included
 - \$187 million increase in cost of natural gas sold, including \$161 million from higher average gas prices and \$26 million from higher volumes driven mainly by cooler weather in 2017,
 - \$83 million of charges in 2016 associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD,
 - \$33 million increase due to 2017 attrition,
 - \$27 million higher revenues primarily associated with the PSEP,
 - \$18 million higher recovery of costs associated with CPUC-authorized refundable programs, which revenues are fully offset in O&M, and
 - \$5 million GCIM award approved by the CPUC in January 2017; and
- \$51 million increase at SDG&E, which included
 - \$39 million increase in the cost of natural gas sold primarily from higher average gas prices, and
 - \$10 million higher revenues primarily associated with the PSEP.

In the first six months of 2017, natural gas revenues and cost of natural gas at Sempra LNG & Midstream decreased by \$56 million and \$15 million, respectively, due to the sale of EnergySouth in September 2016.

Energy-Related Businesses: Revenues and Cost of Sales

The table below shows revenues and cost of sales for our energy-related businesses:

ENERGY-RELATED BUSINESSES: REVENUES AND COST OF SALES				
<i>(Dollars in millions)</i>				
	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
REVENUES				
Sempra South American Utilities	\$ 19	\$ 20	\$ 41	\$ 42
Sempra Mexico	248	127	482	243
Sempra Renewables	26	6	48	13
Sempra LNG & Midstream	122	72	254	164
Eliminations and adjustments(1)	(79)	(63)	(156)	(120)
Total revenues	\$ 336	\$ 162	\$ 669	\$ 342
COST OF SALES(2)				
Cost of natural gas, electric fuel and purchased power:				
Sempra South American Utilities	\$ 4	\$ 4	\$ 8	\$ 8
Sempra Mexico	49	40	100	75
Sempra LNG & Midstream	85	77	173	151
Eliminations and adjustments(1)	(76)	(59)	(152)	(116)
Total	\$ 62	\$ 62	\$ 129	\$ 118
Other cost of sales:				
Sempra South American Utilities	\$ 12	\$ 14	\$ 27	\$ 29
Sempra Mexico	—	3	3	5
Sempra LNG & Midstream	(50)	211	(43)	231
Eliminations and adjustments(1)	—	(2)	(3)	(4)
Total	\$ (38)	\$ 226	\$ (16)	\$ 261

(1) Includes eliminations of intercompany activity.

(2) Excludes depreciation and amortization, which are shown separately on Sempra Energy's Condensed Consolidated Statements of Operations.

In the three months ended June 30, 2017, revenues from our energy-related businesses increased by \$174 million to \$336 million primarily due to:

- \$121 million increase at Sempra Mexico primarily due to:

- \$88 million due to the acquisition of the remaining 50-percent interest in IEnova Pipelines (formerly known as GdC) in September 2016 and from other pipeline assets placed in service, and
- \$27 million due to the acquisition of Ventika in December 2016;
- \$50 million increase at Sempra LNG & Midstream primarily due to mark-to-market losses in 2016 from natural gas marketing activities and from changes in natural gas prices; and
- \$20 million higher revenues at Sempra Renewables primarily due to solar and wind assets placed in service during 2016; **offset by**
- \$16 million primarily from higher intercompany eliminations associated with sales between Sempra LNG & Midstream and Sempra Mexico.

In the three months ended June 30, 2017, the cost of natural gas, electric fuel and purchased power for our energy-related businesses remained at \$62 million and included

- \$9 million increase at Sempra Mexico primarily due to higher natural gas costs; and
- \$8 million increase at Sempra LNG & Midstream primarily due to higher natural gas costs; **offset by**
- \$17 million primarily from higher intercompany eliminations of costs associated with sales between Sempra LNG & Midstream and Sempra Mexico.

Other cost of sales decreased by \$264 million in three months ended June 30, 2017, primarily due to a \$206 million charge in 2016 related to Sempra LNG & Midstream's permanent release of certain pipeline capacity and \$57 million settlement proceeds in May 2017 from a breach of contract claim against a counterparty, of which \$47 million is related to the charge in 2016 from permanent release of pipeline capacity.

In the first six months of 2017, revenues from our energy-related businesses increased by \$327 million to \$669 million. The increase included

- \$239 million increase at Sempra Mexico primarily due to:
 - \$164 million due to the acquisition of the remaining 50-percent interest in IEnova Pipelines in September 2016 and from other pipeline assets placed in service, and
 - \$53 million due to the acquisition of Ventika in December 2016;
- \$90 million increase at Sempra LNG & Midstream, which included
 - \$75 million primarily due to mark-to-market losses in 2016 from natural gas marketing activities and from changes in natural gas prices, and
 - \$16 million from higher natural gas sales to Sempra Mexico; and
- \$35 million increase at Sempra Renewables primarily due to solar and wind assets placed in service during 2016; **offset by**
- \$36 million from higher intercompany eliminations associated with sales between Sempra LNG & Midstream and Sempra Mexico.

In the first six months of 2017, the cost of natural gas, electric fuel and purchased power for our energy-related businesses increased by \$11 million (9%) to \$129 million primarily due to:

- \$25 million increase at Sempra Mexico primarily due to higher natural gas costs; and
- \$22 million increase at Sempra LNG & Midstream primarily due to higher natural gas costs; **offset by**
- \$36 million from higher intercompany eliminations of costs associated with sales between Sempra LNG & Midstream and Sempra Mexico.

In the first six months of 2017, other cost of sales decreased by \$277 million primarily due to a \$206 million charge in 2016 related to Sempra LNG & Midstream's permanent release of certain pipeline capacity and \$57 million settlement proceeds in May 2017 from a breach of contract claim against a counterparty, of which \$47 million is related to the charge in 2016 from permanent release of pipeline capacity.

Operation and Maintenance

Our O&M increased by \$25 million (4%) to \$731 million in the three months ended June 30, 2017 primarily due to:

- \$30 million increase at Sempra Mexico, primarily at IEnova Pipelines and Ventika, and from scheduled major maintenance at TdM in the second quarter of 2017; and
- \$18 million increase at SoCalGas, which included
 - \$15 million higher non-refundable operating costs, including labor, contract services and administrative and support costs, and
 - \$4 million higher expenses associated with CPUC-authorized refundable programs for which all costs incurred are fully recovered in revenue (refundable program expenses); **offset by**

- \$29 million decrease at SDG&E, which included
 - \$13 million lower expenses associated with CPUC-authorized refundable programs, for which all costs incurred are fully recovered in revenue (refundable program expenses),
 - \$10 million decrease at Otay Mesa VIE primarily due to scheduled major maintenance in 2016 at the OMEC plant, and
 - \$10 million lower non-refundable operating costs, including labor, contract services and administrative and support costs.

During the first six months of 2017, O&M increased by \$39 million (3%) to \$1.4 billion primarily due to:

- \$46 million increase at Sempra Mexico primarily at IEnova Pipelines and Ventika, and from scheduled major maintenance at TdM in the second quarter of 2017; and
- \$45 million increase at SoCalGas, which included
 - \$30 million higher non-refundable operating costs, including labor, contract services and administrative and support costs, and
 - \$18 million higher expenses associated with CPUC-authorized refundable programs for which all costs incurred are fully recovered in revenue (refundable program expenses); **offset by**
- \$48 million decrease at SDG&E, which included
 - \$23 million lower expenses associated with CPUC-authorized refundable programs, for which all costs incurred are fully recovered in revenue (refundable program expenses),
 - \$11 million reimbursement of litigation costs associated with the arbitration ruling over the SONGS replacement steam generators, as we discuss in Note 9 of the Notes to the Condensed Consolidated Financial Statements herein,
 - \$10 million decrease at Otay Mesa VIE primarily due to scheduled major maintenance in 2016 at the OMEC plant, and
 - \$5 million lower non-refundable operating costs, including labor, contract services and administrative and support costs; and
- \$22 million decrease at Sempra LNG & Midstream, primarily from lower costs due to the sale of EnergySouth.

Impairment Losses

In the second quarter of 2017, Sempra Mexico reduced the carrying value of TdM by recognizing a noncash impairment charge of \$71 million, which we discuss in Notes 3 and 8 of the Notes to Condensed Consolidated Financial Statements herein. In the second quarter of 2016, SoCalGas recorded a \$21 million (\$13 million after-tax) impairment of assets related to the Southern Gas System Reliability Project.

Equity Earnings (Losses), Before Income Tax

Equity earnings, before income tax, for the six months ended June 30, 2017 were \$21 million compared to equity losses, before income tax, of \$8 million for the same period in 2016. The change was primarily due to a \$44 million impairment charge in the first quarter of 2016 related to Sempra LNG & Midstream's investment in Rockies Express, offset by \$19 million lower equity earnings in 2017 as a result of the sale of our 25-percent interest in Rockies Express in May 2016. We discuss the impairment charge and sale further in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report.

Other Income, Net

In 2017, as part of our central risk management function, we entered into foreign currency derivatives to hedge Sempra Mexico parent's exposure to movements in the Mexican peso from its controlling interest in IEnova. These foreign currency derivatives have notional amounts totaling \$850 million and expire in December 2017. The gains associated with these derivatives are included in Other Income, Net, as described below, and partially mitigate the transactional effects of foreign currency and inflation included in "Income Taxes" and in earnings from Sempra Mexico's equity method investments. We discuss policies governing our risk management in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Market Risk" in the Annual Report.

Other income, net, increased by \$68 million to \$91 million in the three months ended June 30, 2017 primarily due to:

- \$31 million from net gains in 2017 on foreign currency derivatives compared to \$15 million losses in 2016 primarily as a result of significant appreciation of the Mexican peso;
- \$10 million increase in equity-related AFUDC primarily at Sempra Mexico mainly from the Ojinaga and San Isidro pipeline projects; and
- \$7 million foreign currency transactional gains in 2017 compared to \$5 million losses in 2016.

Other income, net, increased by \$188 million to \$260 million in the first six months of 2017 primarily due to:

- \$94 million from net gains in 2017 on foreign currency derivatives compared to \$12 million losses in 2016 primarily as a result of significant appreciation of the Mexican peso;
- \$55 million increase in equity-related AFUDC primarily at Sempra Mexico mainly from the Ojinaga and San Isidro pipeline projects; and

- \$17 million foreign currency transactional gains in 2017 compared to \$7 million losses in 2016.

Interest Expense

Interest expense increased by \$43 million (15%) to \$328 million in the first six months of 2017 primarily at Sempra Mexico mainly from the recognition of AFUDC for the Ojinaga and San Isidro pipeline projects and from interest on debt assumed in the IEnova Pipelines and Ventika acquisitions in the second half of 2016.

Income Taxes

The table below shows the income tax expense and effective income tax rates for Sempra Energy, SDG&E and SoCalGas.

INCOME TAX EXPENSE AND EFFECTIVE INCOME TAX RATES

(Dollars in millions)

	Income tax expense	Effective income tax rate	Income tax (benefit) expense	Effective income tax rate
	Three months ended June 30,			
	2017		2016	
Sempra Energy Consolidated	\$ 167	40%	\$ (106)	95%
SDG&E	54	26	48	36
SoCalGas	19	24	(29)	100
	Six months ended June 30,			
	2017		2016(1)	
Sempra Energy Consolidated	\$ 462	39%	\$ 2	1%
SDG&E	144	32	113	34
SoCalGas	117	31	54	21

(1) Reflects the adoption of ASU 2016-09, as we discuss in Note 2 of the Notes to Condensed Consolidated Financial Statements herein.

Sempra Energy Consolidated

The income tax expense in the three months ended June 30, 2017 compared to income tax benefit in the same period in 2016 was due to pretax income in 2017 compared to pretax loss in 2016. Pretax loss in 2016 includes the charges associated with prior years' tax repairs deductions as a result of the 2016 GRC FD at the California Utilities and losses from the permanent release of pipeline capacity at Sempra LNG & Midstream. Items affecting the effective income tax rate include:

- \$52 million income tax expense in 2017 compared to \$22 million income tax benefit in 2016 from foreign currency and inflation effects as a result of significant appreciation of the Mexican peso in 2017; and
- \$25 million valuation allowance in 2017 against deferred tax assets at TdM that is held for sale, including \$12 million associated with the 2017 impairment. We discuss the planned sale and the impairment further in Notes 3 and 8 of the Notes to Condensed Consolidated Financial Statements herein; **offset by**
- higher forecasted flow-through items as a percentage of pretax income in 2017;
- \$3 million tax benefit in 2017 from a reduction to the outside basis deferred tax liability, net of valuation allowance, compared to \$3 million tax expense in 2016 on our outside basis difference in TdM that is held for sale; and
- \$9 million favorable resolution of prior years' income tax items in 2017.

The increase in income tax expense in the first six months of 2017 was due to higher pretax income and a higher effective income tax rate. The higher effective income tax rate was primarily due to:

- \$149 million income tax expense in 2017 compared to \$22 million income tax benefit in 2016 from foreign currency and inflation effects as a result of significant appreciation of the Mexican peso in 2017;
- \$25 million valuation allowance in 2017 against deferred tax assets at TdM that is held for sale, including \$12 million associated with the 2017 impairment; and
- \$2 million income tax expense in 2017 compared to \$34 million income tax benefit in 2016 associated with excess tax deficiencies/benefits related to share-based compensation; **offset by**
- \$9 million U.S. income tax expense in 2016 on planned repatriation of earnings from certain non-U.S. subsidiaries. We discuss repatriation in "Results of Operations - Changes in Revenues, Costs and Earnings - Income Taxes" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report;
- \$8 million tax benefit in 2017 from a reduction to the outside basis deferred tax liability, net of valuation allowance, compared to \$32 million tax expense in 2016 on our outside basis difference in TdM that is held for sale; and
- \$9 million favorable resolution of prior years' income tax items in 2017.

SDG&E

The increase in SDG&E's income tax expense in the three months ended June 30, 2017 was due to higher pretax income offset by a lower effective income tax rate. Pretax income in 2016 includes the charges associated with prior years' tax repairs deductions as a result of the 2016 GRC FD. The lower effective income tax rate was primarily due to:

- higher forecasted flow-through items as a percentage of pretax income in 2017; and
- \$8 million favorable resolution of prior years' income tax items in 2017.

The increase in SDG&E's income tax expense in the first six months of 2017 was due to higher pretax income offset by a lower effective income tax rate. The lower effective income tax rate was primarily due to:

- higher forecasted flow-through items as a percentage of pretax income in 2017; and
- \$8 million favorable resolution of prior years' income tax items in 2017; **offset by**
- \$7 million income tax benefit in 2016 associated with excess tax benefits related to share-based compensation.

SoCalGas

SoCalGas' income tax expense in the three months ended June 30, 2017 compared to income tax benefit in the same period in 2016 was due to pretax income in 2017 compared to pretax loss in 2016. The pretax loss in 2016 includes the charges associated with prior years' tax repairs deductions as a result of the 2016 GRC FD.

The increase in SoCalGas' income tax expense in the first six months of 2017 was due to higher pretax income and a higher effective income tax rate. The higher effective income tax rate was primarily due to lower forecasted flow-through deductions as a percentage of pretax income in 2017 and an income tax benefit of \$4 million in 2016 associated with excess tax benefits related to share-based compensation.

We discuss the forecasted effective tax rates anticipated for the full year, excluding the income tax effects that cannot be reliably forecasted, for Sempra Energy, SDG&E and SoCalGas in "Results of Operations – Changes in Revenues, Costs and Earnings – Income Taxes" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report. We discuss the impact of foreign exchange rates and inflation on income taxes below in "Impact of Foreign Currency and Inflation Rates on Results of Operations." See Note 5 of the Notes to Condensed Consolidated Financial Statements herein and Notes 1 and 6 of the Notes to Consolidated Financial Statements in the Annual Report for further details about our accounting for income taxes and items subject to flow-through treatment.

Equity Earnings (Losses), Net of Income Tax

Equity earnings, net of income tax, were negligible for the three months ended June 30, 2017 compared to \$33 million for the same period in 2016. The change was primarily due to \$29 million of equity earnings in 2016 from IEnova Pipelines (formerly known as GdC), including \$11 million from DEN, prior to IEnova's acquisition of the remaining 50-percent interest in IEnova Pipelines in September 2016, as we discuss in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report. In the three months ended June 30, 2017, there was a \$1 million equity loss at DEN, primarily from foreign currency and inflation effects.

Equity losses, net of income tax, were \$8 million for the six months ended June 30, 2017 compared to equity earnings, net of tax, of \$50 million for the same period in 2016. The change was primarily due to:

- \$44 million of equity earnings in 2016 from IEnova Pipelines, including \$12 million from DEN, prior to IEnova's acquisition of the remaining 50-percent interest in IEnova Pipelines in September 2016; and
- \$11 million of equity losses in 2017 at DEN primarily from foreign currency and inflation effects.

Losses (Earnings) Attributable to Noncontrolling Interests

Losses attributable to noncontrolling interests were \$12 million in the three months ended June 30, 2017 compared to earnings of \$10 million in the same period of 2016 primarily due to:

- \$15 million losses attributable to noncontrolling interests in 2017 compared to \$16 million earnings attributable to noncontrolling interest in 2016 at IEnova, including:
 - \$25 million higher losses attributable to noncontrolling interests from foreign currency and inflation effects without the corresponding benefit from foreign currency derivatives that are not subject to noncontrolling interests, as we discuss above in "Other Income, Net,"
 - \$8 million lower earnings attributable to noncontrolling interests as a result of the decrease in earnings, excluding the effects of foreign currency and inflation, as we discuss above in "Segment Results – Sempra Mexico;" *offset by*
 - \$2 million higher earnings attributable to noncontrolling interests, excluding the effects of foreign currency and inflation, from the decrease in our controlling interest from 81.1 percent to 66.4 percent following IEnova's equity offerings in October 2016, which we discuss in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report; and
- \$7 million attribution of losses to tax equity investors at Sempra Renewables; **offset by**

- \$17 million increase in earnings at Otay Mesa VIE primarily as a result of scheduled major maintenance at the OMEC plant in 2016.

Losses attributable to noncontrolling interests were \$1 million for the six months ended June 30, 2017 compared to earnings of \$21 million in the same period of 2016 primarily due to:

- \$10 million losses attributable to noncontrolling interests in 2017 compared to \$21 million earnings attributable to noncontrolling interest in 2016 at IEnova, including:
 - \$57 million higher losses attributable to noncontrolling interests from foreign currency and inflation effects without the corresponding benefit from foreign currency derivatives that are not subject to noncontrolling interests, *offset by*
 - \$18 million higher earnings attributable to noncontrolling interests, excluding the effects of foreign currency and inflation, from the decrease in our controlling interest from 81.1 percent to 66.4 percent following IEnova’s equity offerings in October 2016, and
 - \$8 million higher earnings attributable to noncontrolling interests as a result of the increase in earnings, excluding the effects of foreign currency and inflation, as we discuss above in “Segment Results – Sempra Mexico;” and
- \$10 million attribution of losses to tax equity investors at Sempra Renewables; **offset by**
- \$18 million increase in earnings at Otay Mesa VIE primarily as a result of scheduled major maintenance at the OMEC plant in 2016.

IMPACT OF FOREIGN CURRENCY AND INFLATION RATES ON RESULTS OF OPERATIONS

Because our operations in South America and our natural gas distribution utility in Mexico use their local currency as their functional currency, revenues and expenses are translated into U.S. dollars at average exchange rates for the period for consolidation in Sempra Energy Consolidated’s results of operations. Some income statement activities at our foreign operations and their joint ventures are also impacted by transactional gains and losses. We discuss the impact of foreign currency and inflation rates on results of operations, including impacts on income taxes and related hedging activity, further in “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Impact of Foreign Currency and Inflation Rates on Results of Operations” in the Annual Report.

Foreign Currency Translation

Any difference in average exchange rates used for the translation of income statement activity from year to year can cause a variance in Sempra Energy’s comparative results of operations. Changes in foreign currency translation rates between years impacted our comparative reported results as follows:

TRANSLATION IMPACT FROM CHANGE IN AVERAGE FOREIGN CURRENCY EXCHANGE RATES

(Dollars in millions)

	Second quarter 2017 compared to second quarter 2016	Year-to-date 2017 compared to year-to-date 2016
Higher earnings from foreign currency translation:		
Sempra South American Utilities	\$ 1	\$ 3

Foreign Currency Transactional Impacts

Foreign currency transactional gains and losses included in our reported results are as follows:

TRANSACTIONAL GAINS (LOSSES) FROM FOREIGN CURRENCY AND INFLATION				
<i>(Dollars in millions)</i>				
	Total reported amounts		Transactional gains (losses) included in reported amounts	
	Three months ended June 30,			
	2017	2016	2017	2016
Other income, net	\$ 91	\$ 23	\$ 39	\$ (20)
Income tax (expense) benefit	(167)	106	(52)	23
Equity earnings, net of income tax	—	33	(9)	17
Net income	248	27	(35)	23
Earnings	259	16	(18)	17
	Six months ended June 30,			
	2017	2016(1)	2017	2016
Other income, net	\$ 260	\$ 72	\$ 114	\$ (19)
Income tax expense	(462)	(2)	(149)	24
Equity (losses) earnings, net of income tax	(8)	50	(22)	18
Net income	700	391	(96)	26
Earnings	700	369	(45)	20

(1) Reflects the adoption of ASU 2016-09, as we discuss in Note 2 of the Notes to Condensed Consolidated Financial Statements herein.

CAPITAL RESOURCES AND LIQUIDITY

OVERVIEW

We expect to meet our cash requirements through cash flows from operations, unrestricted cash and cash equivalents, borrowings under our credit facilities, distributions from our equity method investments, issuances of securities, project financing and equity sales, including tax equity and partnering in joint ventures.

Our lines of credit provide liquidity and support commercial paper. As we discuss in Note 6 of the Notes to Condensed Consolidated Financial Statements herein, Sempra Energy, Sempra Global (the holding company for our subsidiaries not subject to California utility regulation) and the California Utilities each have five-year revolving credit facilities expiring in 2020. The table below shows the amount of available funds, including available unused credit on these three credit facilities, at June 30, 2017. Our foreign operations have additional general purpose credit facilities aggregating \$1.7 billion, with \$1 billion available unused credit at June 30, 2017.

AVAILABLE FUNDS AT JUNE 30, 2017

(Dollars in millions)

	Sempra Energy Consolidated	SDG&E	SoCalGas
Unrestricted cash and cash equivalents(1)	\$ 223	\$ 12	\$ 38
Available unused credit(2)(3)	3,094	745	750

(1) Amounts at Sempra Energy Consolidated include \$150 million held in non-U.S. jurisdictions that are unavailable to fund U.S. operations unless repatriated. We discuss repatriation in "Results of Operations – Changes in Revenues, Costs and Earnings – Income Taxes" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report.

(2) Available unused credit is the total available on Sempra Energy's, Sempra Global's and the California Utilities' credit facilities that we discuss in Note 6 of the Notes to Condensed Consolidated Financial Statements herein. Borrowings on the shared line of credit at SDG&E and SoCalGas are limited to \$750 million for each utility and a combined total of \$1 billion.

(3) Because the commercial paper programs are supported by these lines, we reflect the amount of commercial paper outstanding as a reduction to the available unused credit.

Sempra Energy Consolidated

We believe that these available funds, combined with cash flows from operations, distributions from our equity method investments, issuances of securities, project financing and equity sales, including tax equity and partnering in joint ventures, will be adequate to fund operations, including to:

- finance capital expenditures
- meet liquidity requirements
- fund shareholder dividends
- fund new business acquisitions or start-ups
- repay maturing long-term debt
- fund expenditures related to the natural gas leak at SoCalGas' Aliso Canyon natural gas storage facility

Sempra Energy and the California Utilities currently have ready access to the long-term debt markets and are not currently constrained in their ability to borrow at reasonable rates. However, changing economic conditions could affect the availability and cost of both short-term and long-term financing. Also, cash flows from operations may be impacted by the timing of commencement and completion of large projects. If cash flows from operations were to be significantly reduced or we were unable to borrow under acceptable terms, we would likely first reduce or postpone discretionary capital expenditures (not related to safety) and investments in new businesses. If these measures were necessary, they would primarily impact our Sempra Infrastructure businesses before we would reduce funds necessary for the ongoing needs of our utilities. We monitor our ability to finance the needs of our operating, investing and financing activities in a manner consistent with our intention to maintain our investment-grade credit ratings and capital structure.

Our short-term debt is primarily used to meet liquidity requirements, fund shareholder dividends, and temporarily finance capital expenditures and new business acquisitions or start-ups. Our corporate short-term, unsecured promissory notes, or commercial paper, were our primary sources of short-term debt funding in the first six months of 2017. At our California Utilities, short-term debt is used primarily to meet working capital needs.

We have significant investments in several trusts to provide for future payments of pensions and other postretirement benefits, and nuclear decommissioning. Changes in asset values, which are dependent on the activity in the equity and fixed income markets, have not affected the trust funds' abilities to make required payments. However, changes in asset values may, along with a number of other factors such as changes to discount rates, assumed rates of return, mortality tables, and regulations, impact funding requirements for pension and other postretirement benefit plans and SDG&E's NDT. At the California Utilities, funding requirements are generally recoverable in rates. We discuss our employee benefit plans and SDG&E's NDT, including our investment allocation strategies for assets in these trusts, in Notes 7 and 13, respectively, of the Notes to Consolidated Financial Statements in the Annual Report.

Loans to Affiliates

At June 30, 2017, Sempra Energy has provided loans to unconsolidated affiliates totaling \$399 million, which we discuss in Note 5 of the Notes to Condensed Consolidated Financial Statements herein.

California Utilities

SDG&E and SoCalGas expect that the available funds described above, cash flows from operations, and debt issuances will continue to be adequate to fund their respective operations.

SDG&E declared and paid common stock dividends of \$175 million in the year ended December 31, 2016 and an additional \$175 million in the first quarter of 2017. In July 2017, SDG&E declared and paid common stock dividends of \$275 million. SDG&E expects to pay dividends approximating 75 percent of its earnings in 2017, subject to the discretion and approval of its board of directors.

As a result of SoCalGas' large capital investment program, SoCalGas has not declared or paid common stock dividends since 2015. SoCalGas does not anticipate paying common stock dividends in 2017, in order to maintain its authorized capital structure while managing its large capital program of over \$1 billion in 2017.

Changes in balancing accounts for significant costs at SDG&E and SoCalGas, particularly a change in status between over- and under- collected, may have a significant impact on cash flows, as these changes generally represent the difference between when costs are incurred and when they are ultimately recovered in rates through billings to customers. SDG&E uses the ERRA balancing account to record the net of its actual cost incurred for electric fuel and purchased power. SDG&E's ERRA balance was undercollected by \$130 million at June 30, 2017 and \$25 million at December 31, 2016. During the first six months of 2017, the increase in the ERRA undercollected balance was primarily due to lower electric volume in conjunction with seasonalized electric rates. The CPUC authorized an ERRA Trigger mechanism in conjunction with California state law that allows for recovery of ERRA balances that exceed 5 percent of the prior year's electric commodity revenues. To reduce the undercollected ERRA balance, SDG&E filed an ERRA Trigger application with the CPUC in May 2017 requesting recovery of \$120 million to be amortized in rates over a 14-month

period beginning November 2017. In July 2017, the CPUC issued a proposed decision approving the request as filed. We expect the final decision in the third quarter of 2017.

SoCalGas and SDG&E use the CFCA balancing account to record the difference between the authorized margin and other costs allocated to core customers. Because warm weather experienced in 2016 and 2017 resulted in lower natural gas consumption compared to authorized levels, SoCalGas' CFCA balance was undercollected by \$119 million at June 30, 2017 and \$114 million at December 31, 2016. SDG&E's CFCA balance was undercollected by \$24 million at June 30, 2017 and \$66 million at December 31, 2016.

SoCalGas

Aliso Canyon Natural Gas Storage Facility Gas Leak

We provide information on the natural gas leak at the Aliso Canyon natural gas storage facility further in Note 11 of the Notes to Condensed Consolidated Financial Statements herein and in "Factors Influencing Future Performance" below, as well as in Note 15 of the Notes to Consolidated Financial Statements and "Risk Factors" in the Annual Report. The costs of defending against the related civil and criminal lawsuits and cooperating with related investigations, and any damages, restitution, and civil, administrative and criminal fines, costs and other penalties, if awarded or imposed, as well as costs of mitigating the actual natural gas released, could be significant, and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations. Also, higher operating costs and additional capital expenditures incurred by SoCalGas as a result of new laws, orders, rules and regulations arising out of this incident or our responses thereto could be significant and may not be recoverable in customer rates, which may have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

The total costs incurred to remediate and stop the leak and to mitigate local community impacts are significant and may increase, and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Sempra South American Utilities

We expect to fund operations at Chilquinta Energía and Luz del Sur and dividends at Luz del Sur with available funds, including credit facilities, funds internally generated by those businesses, issuances of corporate bonds and other external borrowings.

Sempra Mexico

We expect to fund operations and dividends in Mexico with available funds, including credit facilities, and funds internally generated by the Mexico businesses, securities issuances, project financing, interim funding from the parent or affiliates, and partnering in joint ventures.

In the year ended December 31, 2016, IEnova paid dividends of \$26 million to its minority shareholders. No dividends were paid in the six months ended June 30, 2017. On July 25, 2017, IEnova declared \$67 million in dividends to its minority shareholders, payable in August 2017.

IMG is a joint venture between a subsidiary of IEnova and a subsidiary of TransCanada. In April 2017, IEnova entered into a revolving credit facility agreement, expiring in March 2022, with IMG for up to \$9.0 billion Mexican pesos or approximately \$500 million U.S. dollar-equivalent, to provide financing to IMG for the construction of the Sur de Texas - Tuxpan natural gas marine pipeline and for general corporate purposes, including repayment of other outstanding debt. At June 30, 2017, \$3.2 billion Mexican pesos or approximately \$177 million U.S. dollar-equivalent is outstanding against the line of credit. IEnova also has provided guarantees for certain obligations of IMG not to exceed \$288 million, as we discuss in Note 4 of the Notes to Condensed Consolidated Financial Statements herein.

Sempra Renewables

We expect Sempra Renewables to require funds for the development of and investment in electric renewable energy projects. Projects at Sempra Renewables may be financed through a combination of operating cash flow, project financing, funds from the parent, partnering in joint ventures, and other forms of equity sales, including tax equity. The varying costs and structure of these alternative financing sources impact the projects' returns and their earnings profile.

Sempra LNG & Midstream

We expect Sempra LNG & Midstream to require funding for the development and expansion of its portfolio of projects, which may be financed through a combination of operating cash flow, funding from the parent, project financing and partnering in joint ventures.

Sempra LNG & Midstream, through its interest in Cameron LNG JV, is developing a natural gas liquefaction export facility at the Cameron LNG JV terminal. The majority of the current three-train liquefaction project is project-financed, with most or all of the remainder of the capital requirements to be provided by the project partners, including Sempra Energy, through equity contributions under a joint venture agreement. We expect that our remaining equity requirements to complete the project will be met by a combination of our share of cash generated from each liquefaction train as it comes on line and additional cash contributions. Sempra Energy signed guarantees for 50.2 percent of Cameron LNG JV's obligations under the financing agreements for a maximum amount of \$3.9 billion. The project financing and guarantees became effective on October 1, 2014, the effective date of the joint venture formation. The guarantees will terminate upon satisfaction of certain conditions, including all three trains achieving commercial operation and meeting certain operational performance tests. We anticipate that the guarantees will be terminated approximately nine months after all three trains achieve commercial operation.

We discuss Cameron LNG JV and the joint venture financing further in Notes 3 and 4 of the Notes to Consolidated Financial Statements, in "Risk Factors," and in "Factors Influencing Future Performance" in the Annual Report. We also discuss Cameron LNG JV in "Factors Influencing Future Performance" below.

CASH FLOWS FROM OPERATING ACTIVITIES

CASH PROVIDED BY OPERATING ACTIVITIES

(Dollars in millions)

	Six months ended June 30, 2017	2017 change		Six months ended June 30, 2016(1)
Sempra Energy Consolidated	\$ 1,889	\$ 973	106%	\$ 916
SDG&E	690	182	36	508
SoCalGas	855	593	226	262

(1) Reflects the adoption of ASU 2016-09, as we discuss in Note 2 of the Notes to Condensed Consolidated Financial Statements herein.

Sempra Energy Consolidated

Cash provided by operating activities at Sempra Energy increased in 2017 primarily due to:

- \$713 million higher net income, adjusted for noncash items included in earnings, in 2017 compared to 2016, primarily due to improved results at our operating segments; and
- \$573 million net increase related to the natural gas leak at the Aliso Canyon natural gas storage facility, comprised of:
 - \$52 million net decrease in insurance receivable in 2017 compared to a \$354 million net increase in 2016. The \$52 million net decrease includes \$104 million in insurance proceeds, offset primarily by \$53 million of additional accruals, and
 - \$10 million net increase in reserve for accrued expenditures in 2017 compared to a \$157 million net decrease in 2016. The \$10 million net increase includes \$53 million of additional accruals, offset primarily by \$49 million of cash expenditures; **offset by**
- \$110 million decrease in accounts payable in 2017 compared to a \$25 million decrease in 2016;
- \$63 million increase in income taxes receivable in 2017 compared to a \$7 million decrease in 2016;
- \$261 million decrease in accounts receivable in 2017 compared to a \$328 million decrease in 2016; and
- \$79 million increase in net overcollected regulatory balancing accounts at SoCalGas (including long-term amounts included in regulatory assets) in 2017 compared to a \$140 million increase in 2016.

SDG&E

Cash provided by operating activities at SDG&E increased in 2017 primarily due to:

- \$178 million higher net income, adjusted for noncash items included in earnings, in 2017 compared to 2016; and
- \$35 million decrease in income taxes receivable in 2017 compared to a \$31 million increase in 2016; **offset by**
- \$21 million increase in accounts receivable in 2017 compared to a \$19 million decrease in 2016; and
- \$41 million increase in accounts payable in 2017 compared to a \$63 million increase in 2016.

SoCalGas

Cash provided by operating activities at SoCalGas increased in 2017 primarily due to:

- \$573 million net increase related to the natural gas leak at the Aliso Canyon natural gas storage facility, comprised of:
 - \$52 million net decrease in insurance receivable in 2017 compared to a \$354 million net increase in 2016. The \$52 million net decrease includes \$104 million in insurance proceeds, offset primarily by \$53 million of additional accruals, and

- \$10 million net increase in reserve for accrued expenditures in 2017 compared to a \$157 million net decrease in 2016. The \$10 million net increase includes \$53 million of additional accruals, offset primarily by \$49 million of cash expenditures; and
- \$129 million higher net income, adjusted for noncash items included in earnings, in 2017 compared to 2016; **offset by**
- \$234 million decrease in accounts receivable in 2017 compared to a \$308 million decrease in 2016; and
- \$79 million increase in net overcollected regulatory balancing accounts (including long-term amounts included in regulatory assets) in 2017 compared to a \$140 million increase in 2016.

CASH FLOWS FROM INVESTING ACTIVITIES

CASH USED IN INVESTING ACTIVITIES

(Dollars in millions)

	Six months ended June 30, 2017		2017 change		Six months ended June 30, 2016	
Sempra Energy Consolidated	\$	(2,067)	\$	474	30 %	\$ (1,593)
SDG&E		(734)		(36)	(5)	(770)
SoCalGas		(766)		166	28	(600)

Sempra Energy Consolidated

Cash used in investing activities at Sempra Energy increased in 2017 primarily due to:

- \$443 million of net proceeds received from Sempra LNG & Midstream's sale of its investment in Rockies Express in 2016;
- \$174 million higher advances to unconsolidated affiliates; and
- \$51 million increase in expenditures for investments; **offset by**
- \$204 million decrease in capital expenditures.

SDG&E

Cash used in investing activities at SDG&E decreased in 2017 primarily due to:

- \$31 million decrease in advances to Sempra Energy in 2017 compared to a \$172 million net increase in 2016; **offset by**
- \$161 million increase in capital expenditures.

SoCalGas

Cash used in investing activities at SoCalGas increased in 2017 due to:

- \$84 million increase in net advances to Sempra Energy in 2017 compared to a \$50 million decrease in 2016; and
- \$32 million increase in capital expenditures.

Capital Expenditures

Sempra Energy Consolidated Expenditures for Property, Plant and Equipment

The following table summarizes capital expenditures in 2017 compared to 2016.

EXPENDITURES FOR PP&E (Dollars in millions)	Six months ended June 30,	
	2017	2016
SDG&E:		
Improvements to natural gas, including certain pipeline safety, and electric and generation distribution systems	\$ 503	\$ 360
PSEP	21	65
Improvements to electric transmission systems	229	168
Electric generation plants and equipment	10	9
SoCalGas:		
Improvements to natural gas distribution, transmission and storage systems, and for certain pipeline safety	572	444
PSEP	86	150
Advanced metering infrastructure	24	56
Sempra South American Utilities:		
Improvements to electric transmission and distribution systems and generation projects in Peru	49	57
Improvements to electric transmission and distribution infrastructure in Chile	28	25
Sempra Mexico:		
Construction of the Sonora, Ojinaga and San Isidro pipeline projects	124	128
Construction of other natural gas pipeline and wind projects, and capital expenditures at Ecogas	31	12
Sempra Renewables:		
Construction costs for wind projects	58	27
Construction costs for solar projects/facilities	42	430
Sempra LNG & Midstream:		
Cameron Interstate Pipeline expansion and other LNG liquefaction development costs	10	55
Other	2	13
Parent and other	13	7
Total	\$ 1,802	\$ 2,006

The amounts and timing of capital expenditures are generally subject to approvals by various regulatory and other governmental and environmental bodies, including the CPUC and the FERC. In 2017, we expect to make capital expenditures and investments of approximately \$4 billion, an increase from the \$3.4 billion summarized in “Capital Resources and Liquidity” in the Annual Report. The increase is primarily attributable to an additional solar project at Sempra Renewables and additional capital expenditures at SDG&E.

CASH FLOWS FROM FINANCING ACTIVITIES

CASH FLOWS FROM FINANCING ACTIVITIES (Dollars in millions)	Six months ended June 30, 2017	2017 change	Six months ended June 30, 2016(1)
Sempra Energy Consolidated	\$ 44	\$ (838)	\$ 882
SDG&E	48	(202)	250
SoCalGas	(63)	(554)	491

(1) Reflects the adoption of ASU 2016-09, as we discuss in Note 2 of the Notes to Condensed Consolidated Financial Statements herein.

Sempra Energy Consolidated

At Sempra Energy, cash provided by financing activities decreased in 2017, primarily due to:

- \$493 million decrease in short-term debt in 2017 compared to an \$865 million increase in 2016; **offset by**

- \$548 million higher issuances of debt with maturities greater than 90 days, including:
 - \$350 million for commercial paper and other short-term debt (\$736 million in 2017 compared to \$386 million in 2016), and
 - \$198 million for long-term debt (\$1.2 billion in 2017 compared to \$1 billion in 2016).

SDG&E

At SDG&E, cash provided by financing activities decreased in 2017, primarily due to:

- \$175 million common dividends paid in 2017;
- \$100 million lower issuances of long-term debt; and
- \$35 million higher payments of long-term debt; **offset by**
- \$5 million increase in short-term debt in 2017 compared to a \$114 million decrease in 2016.

SoCalGas

At SoCalGas, financing activities were a use of cash in 2017 compared to a source of cash in 2016, primarily due to:

- \$499 million issuances of long-term debt in 2016; and
- \$62 million decrease in short-term debt in 2017.

COMMITMENTS

We discuss significant changes to contractual commitments since December 31, 2016 at Sempra Energy, SDG&E and SoCalGas in Note 11 of the Notes to Condensed Consolidated Financial Statements herein.

CREDIT RATINGS

The credit ratings of Sempra Energy, SDG&E and SoCalGas remained at investment grade levels during the first six months of 2017. Our credit ratings may affect the rates at which borrowings bear interest and the commitment fees on available unused credit. We provide additional information about our credit ratings at Sempra Energy, SDG&E and SoCalGas in “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Credit Ratings” in the Annual Report.

FACTORS INFLUENCING FUTURE PERFORMANCE

We discuss various factors that we have identified that could influence our future performance in “Factors Influencing Future Performance” in the Annual Report. We discuss below significant, new developments to those factors that have occurred in 2017, as well as any new factors that we have identified in 2017. You should read the information below together with “Factors Influencing Future Performance” and “Risk Factors” contained in the Annual Report.

Capital Project Updates

We summarize below updates regarding certain major capital projects at SDG&E.

CAPITAL PROJECTS – SDG&E

Project description	Estimated capital cost (in millions)	Status
South Orange County Reliability Enhancement		
§ December 2016 CPUC final decision granted a Certificate of Public Convenience and Necessity to replace/upgrade existing electric transmission lines and substation infrastructure to enhance the capacity and reliability of electric service to the south Orange County area.	\$ 381	§ Construction expected to start in the second half of 2017. § Rehearing requests filed by the City of San Juan Capistrano and local opposition group pending with CPUC.
Electric Vehicle Charging		
§ January 2017 application, pursuant to SB 350, to perform various activities and make investments in support of electric vehicle charging. § Estimated implementation cost of \$51 million of O&M.	\$ 298	§ Application pending
Energy Storage		
§ August 2016 CPUC approval to own and operate two energy storage projects totaling 37.5 MW to enhance electric reliability in the San Diego service territory.	Not disclosed	§ Completed in first quarter of 2017.
§ April 2017 application to procure up to 70 MW of utility-owned energy storage to provide local capacity.	Not disclosed	§ Application pending
Utility Billing and Customer Information Systems Software		
§ April 2017 application to replace the software. § Estimated implementation cost of \$67 million of O&M.	\$ 220	§ Application pending § May 2017 ruling authorizes SDG&E to establish a memorandum account to record related costs prior to receiving a final decision on the application.

Sunrise Powerlink Project Cost Cap

In August 2015, SDG&E filed a petition with the CPUC requesting that it revise and confirm the project cost cap for the Sunrise Powerlink, a 500-kV electric transmission line between the Imperial Valley and the San Diego region that was energized and placed in service in June 2012. While post-energization construction activities for the project were completed in 2013, certain matters relating to outstanding claims were not resolved until the first quarter of 2015. The filing requested CPUC approval of the final expenditure report for the project and the proposed revisions to the total project cost cap. As evidenced in the final report, actual expenditures for the project totaled \$1.9 billion (in 2012 dollars, on a net present value basis), which exceeds the total project cost cap approved by the CPUC in 2008 by \$4.4 million.

In June 2017, the CPUC dismissed SDG&E's petition as moot since the Sunrise Powerlink transmission project has been fully constructed and found that, although the CPUC may establish a cost cap for electric transmission projects, the recovery of the associated costs is under FERC jurisdiction. The decision also finds that SDG&E complied with the CPUC's quarterly reporting requirements, resolving the issue of whether the adequacy of such reporting should be further investigated.

Potential Impacts of Community Choice Aggregation and Direct Access

SDG&E provides electric services, including the commodity of electricity, to the majority of its customers ("bundled customers"). SDG&E procures electricity, typically on a long-term basis, on behalf of these bundled customers. However, SDG&E's earnings are "decoupled" from electric sales volumes, one aspect of which is that commodity costs for electricity are directly passed through to bundled customers (see discussion in "Revenues – California Utilities" in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report). SDG&E's bundled customers have the option to purchase the commodity of electricity from alternate suppliers under defined programs, including CCA and DA. In such cases, California law (SB 350) prohibits remaining bundled customers from experiencing any cost increase as a result of electric commodity no longer being consumed by the departing customers. Existing rate mechanisms may not be sufficient to ensure that remaining bundled customers do not experience any cost increase as a result of departing customers. SDG&E, PG&E and Edison filed a joint application with the CPUC in April 2017 to replace these existing mechanisms and ensure compliance with state law. In June 2017, the CPUC initiated a rulemaking proceeding to address this matter and dismissed the joint application without prejudice, since the issues it raised will be addressed in the rulemaking.

Currently, DA in SDG&E's service area is limited by state law and is approximately 17 percent of SDG&E's annual demand, and there are no CCA providers in SDG&E's service area. However, several local political jurisdictions, including the City of San Diego and a few other, smaller municipalities, are considering the formation of a CCA which, if implemented, could result in the departure of more than half of SDG&E's bundled load. State law requires that customers opting to have a CCA procure their energy must also absorb the cost of energy procurement commitments already made by SDG&E on their behalf. If mechanisms to ensure compliance with state law were not in place at the time of these potentially significant reductions in SDG&E's served load, remaining bundled customers of SDG&E could potentially experience large increases in rates for commodity costs under commitments made on behalf of the CCA customers. If legislative, regulatory or legal action were taken to prevent the timely recovery of these procurement costs, the unrecovered costs could have a material adverse effect on SDG&E's and Sempra Energy's cash flows, financial condition and results of operations.

SONGS

SDG&E has a 20-percent ownership interest in SONGS, formerly a 2,150-MW nuclear generating facility near San Clemente, California, that is in the process of being decommissioned by Edison, the majority owner of SONGS. In Notes 9 and 11 of the Notes to Condensed Consolidated Financial Statements herein, and in Notes 13 and 15 of the Notes to Consolidated Financial Statements and in "Risk Factors" in the Annual Report, we discuss regulatory and other matters related to SONGS, including:

- a reopened CPUC proceeding that is considering whether a SONGS-related amended settlement agreement approved in 2014 is reasonable and in the public interest;
- matters concerning the ability to timely withdraw funds from trust accounts for the payment of decommissioning costs; and
- the arbitration decision finding MHI liable for breach of contract in connection with the replacement steam generators at the SONGS nuclear power plant, subject to a contractual limitation of liability, and awarding MHI 95 percent of its arbitration costs as MHI was found to be the prevailing party.

Wildfire Claims Cost Recovery

In September 2015, SDG&E filed an application with the CPUC requesting rate recovery of an estimated \$379 million in costs related to the October 2007 wildfires that have been recorded to the Wildfire Expense Memorandum Account, as we discuss in Note 11 of the Notes to Condensed Consolidated Financial Statements herein and Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

In April 2016, the CPUC issued a ruling establishing the scope and schedule for the proceeding, which will be managed in two phases. Phase 1 addresses SDG&E's operational and management prudence surrounding the 2007 wildfires. We expect a Phase 1 draft decision from the CPUC in the second half of 2017. Phase 2 will address whether SDG&E's actions and decision-making in connection with settling legal claims in relation to the wildfires were reasonable, with a final CPUC decision expected by early 2019. In October 2016, intervening parties submitted Phase 1 testimony raising various concerns with SDG&E's operations and management prior to and during the 2007 wildfires, and SDG&E responded to that testimony in December 2016. Participating parties asked that the CPUC reject SDG&E's request for cost recovery.

Recovery of these costs in rates will require future regulatory approval. SDG&E will continue to assess the likelihood, amount and timing of such recoveries in rates. Should SDG&E conclude that recovery of excess wildfire costs in rates is no longer probable, at that time SDG&E would record a charge against earnings. If SDG&E had concluded that the recovery of regulatory assets related to CPUC-regulated operations was no longer probable or was less than currently estimated, at June 30, 2017, the resulting after-tax charge against earnings would have been up to approximately \$207 million. A failure to obtain substantial or full recovery of the requested amount of these costs from customers, or any negative assessment of the likelihood of recovery, would likely have a material adverse effect on SDG&E's and Sempra Energy's financial condition, cash flows and results of operations. We discuss the October 2007 wildfires and how we assess the probability of recovery of our regulatory assets in Notes 15 and 1, respectively, of the Notes to Consolidated Financial Statements in the Annual Report.

Other SDG&E Matters

See "Factors Influencing Future Performance" in the Annual Report for a discussion about:

- Electric Rate Reform – California Assembly Bill 327
- Distributed Energy Storage – California Assembly Bill 2868
- Renewable Energy Procurement
- Clean Energy and Pollution Reduction Act – California SB 350

SOCALGAS

Aliso Canyon Natural Gas Storage Facility Gas Leak

In October 2015, SoCalGas discovered a leak at one of its injection-and-withdrawal wells, SS25, at its Aliso Canyon natural gas storage facility located in Los Angeles County, which SoCalGas has operated as a gas storage facility since 1972. SoCalGas worked closely with several of the world's leading experts to stop the leak. On February 18, 2016, DOGGR confirmed that the well was permanently sealed.

Local Community Mitigation Efforts

Pursuant to a stipulation and order by the Los Angeles County Superior Court, SoCalGas provided temporary relocation support to residents in the nearby community who requested it before the well was permanently sealed. Following the permanent sealing of the well, the DPH conducted indoor testing of certain homes in the Porter Ranch community, and concluded that indoor conditions did not present a long-term health risk and that it was safe for residents to return home. In May 2016, the Los Angeles County Superior Court ordered SoCalGas to offer to clean residents' homes at SoCalGas' expense as a condition to ending the relocation program. SoCalGas completed the residential cleaning program and the relocation program ended in July 2016.

Apart from the Los Angeles County Superior Court order, in May 2016, the DPH also issued a directive that SoCalGas professionally clean (in accordance with the proposed protocol prepared by the DPH) the homes of all residents located within the Porter Ranch Neighborhood Council boundary, or who participated in the relocation program, or who are located within a five mile radius of the Aliso Canyon natural gas storage facility and have experienced symptoms from the natural gas leak (the Directive). SoCalGas disputes the Directive, contending that it is invalid and unenforceable, and has filed a petition for writ of mandate to set aside the Directive.

The total costs incurred to remediate and stop the leak and to mitigate local community impacts are significant and may increase, and we may be subject to potentially significant damages, restitution, and civil, administrative and criminal fines, costs and other penalties. To the extent any of these costs are not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Litigation

In connection with the natural gas leak at the Aliso Canyon natural gas storage facility, as of August 3, 2017, 281 lawsuits, including over 25,500 plaintiffs, are pending against SoCalGas, some of which have also named Sempra Energy. Derivative and securities claims have also been filed on behalf of Sempra Energy and/or SoCalGas or their shareholders against certain officers and directors of Sempra Energy and/or SoCalGas. We provide further detail on these cases, as well as on complaints filed by the California Attorney General, acting in an independent capacity and on behalf of the people of the State of California and the CARB, together with the Los Angeles City Attorney; the SCAQMD; and the County of Los Angeles, on behalf of itself and the people of the State of California; and on a misdemeanor criminal complaint filed by the Los Angeles County District Attorney's Office; in Note 11 of the Notes to Condensed Consolidated Financial Statements herein. Additional litigation may be filed against us in the future related to the Aliso Canyon natural gas storage facility incident or our responses thereto.

The costs of defending against these civil and criminal lawsuits, cooperating with these investigations, and any damages, restitution, and civil, administrative and criminal fines, costs and other penalties, if awarded or imposed, as well as costs of mitigating the actual natural gas released, could be significant and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Governmental Investigations

Various governmental agencies have investigated or are investigating this incident.

- In January 2016, the Governor of the State of California issued an Order (the Governor's Order) proclaiming a state of emergency to exist in Los Angeles County due to the natural gas leak at the Aliso Canyon natural gas storage facility. The Governor's Order imposes various orders with respect to: stopping the leak; protecting public health and safety; ensuring accountability; and strengthening oversight. We provide further detail regarding the Governor's Order and the CARB's *Aliso Canyon Methane Leak Climate Impacts Mitigation Program*, issued pursuant to the Governor's Order, in Note 11 of the Notes to Condensed Consolidated Financial Statements herein.
- In January 2016, SoCalGas entered into a Stipulated Order for Abatement with the SCAQMD and agreed to take various actions in connection with injecting and withdrawing natural gas at the Aliso Canyon natural gas storage facility, sealing the well, monitoring, reporting, safety and funding a health impact study, among other things. In February 2017, SoCalGas entered into a settlement agreement with the SCAQMD, and in March 2017, the Hearing Board terminated the Abatement Order. We provide further detail regarding the SCAQMD stipulated Abatement Order in Note 11 of the Notes to Condensed Consolidated Financial Statements herein.

- In January 2016, DOGGR and the CPUC selected Blade to conduct an independent analysis under the direction and supervision of DOGGR and the CPUC to be funded by SoCalGas to investigate the technical root cause of the Aliso Canyon natural gas storage facility gas leak. The timing of the root cause analysis is under the control of Blade, DOGGR and the CPUC.
- In February 2017, the CPUC opened a proceeding to determine the feasibility of minimizing or eliminating use of the Aliso Canyon natural gas storage facility, while still maintaining energy and electric reliability for the region, as we discuss below in “Regulatory Proceedings” and “SB 380.”

Natural Gas Storage Operations and Reliability

Natural gas withdrawn from storage is important for service reliability during peak demand periods, including peak electric generation needs in the summer and heating needs in the winter. The Aliso Canyon natural gas storage facility, with a storage capacity of 86 Bcf (which represents 63 percent of SoCalGas’ natural gas storage inventory capacity), is the largest SoCalGas storage facility and an important element of SoCalGas’ delivery system. SoCalGas did not inject natural gas into the Aliso Canyon natural gas storage facility after October 25, 2015, pursuant to orders by DOGGR and the Governor, and in accordance with SB 380. Limited withdrawals of natural gas from the Aliso Canyon natural gas storage facility have been made in 2017 to augment natural gas supplies during critical demand periods. In April and June of 2017, SoCalGas advised the CAISO, CEC, CPUC and PHMSA of its concerns that the inability to inject natural gas into the Aliso Canyon natural gas storage facility poses a risk to energy reliability in Southern California.

On July 19, 2017, DOGGR issued its *Order to: Test and Take Temporary Actions Upon Resuming Injection: Aliso Canyon Gas Storage Facility*, lifting the prohibition on injection at the Aliso Canyon natural gas storage facility, subject to its requirements that SoCalGas conduct and report results of a leak survey and measurement of total site methane emissions before resuming injection operations, as well as other requirements after injection resumes. The CPUC additionally issued a directive to SoCalGas to maintain a range of working gas in the Aliso Canyon natural gas storage facility at a target of 23.6 Bcf (approximately 28 percent of its maximum capacity), and at all times above 14.8 Bcf. On July 24, 2017, the County of Los Angeles filed an application for a temporary restraining order to block DOGGR’s order. On July 28, 2017, the Superior Court denied the application on the ground that, pursuant to Public Utilities Code sections 714 and 1759(a), the CPUC has jurisdiction over regulating injections at the Aliso Canyon natural gas storage facility, and the Court therefore lacks jurisdiction to rule on the County’s application. On July 31, 2017, the County filed a petition for writ of mandate, prohibition, stay or other appropriate relief and a request for immediate stay in the Court of Appeal, seeking review of the Superior Court’s order denying the County’s application for a temporary restraining order. Later the same day, the Court of Appeal denied the County’s request for an immediate stay on injections. We provide further detail regarding DOGGR’s order and the County of Los Angeles’ petition in Note 11 of the Notes to Condensed Consolidated Financial Statements herein. Also on July 19, 2017, the CEC released a letter to the CPUC indicating that its staff is prepared to work with the CPUC and other agencies on a plan to phase out the use of the Aliso Canyon natural gas storage facility within ten years. The CEC and other stakeholders will be providing input into the SB 380 proceeding underway at the CPUC that addresses the future of the Aliso Canyon natural gas storage facility. Having completed the steps outlined by state agencies in order to safely begin injections at the Aliso Canyon natural gas storage facility, as of July 31, 2017, SoCalGas resumed limited injections.

If the Aliso Canyon natural gas storage facility were determined to be out of service for any meaningful period of time or permanently closed, or if future revenues were otherwise insufficient to recover its recorded value, it could result in an impairment of the facility and significantly higher than expected operating costs and/or additional capital expenditures, and natural gas reliability and electric generation could be jeopardized. At June 30, 2017, the Aliso Canyon natural gas storage facility has a net book value of \$582 million, including \$237 million of construction work in progress for the project to construct a new compression station. Any significant impairment of this asset could have a material adverse effect on SoCalGas’ and Sempra Energy’s results of operations for the period in which it is recorded. Higher operating costs and additional capital expenditures incurred by SoCalGas may not be recoverable in customer rates, and could have a material adverse effect on SoCalGas’ and Sempra Energy’s cash flows, financial condition and results of operations.

Regulatory Proceedings

In February 2017, the CPUC opened a proceeding pursuant to SB 380 to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility, while still maintaining energy and electric reliability for the region. The proceeding will be conducted in two phases, with Phase 1 undertaking a comprehensive effort to develop the appropriate analyses and scenarios to evaluate the impact of reducing or eliminating the use of the Aliso Canyon natural gas storage facility and Phase 2 evaluating the impacts of reducing or eliminating the use of the Aliso Canyon natural gas storage facility using the scenarios and models adopted in Phase 1. In accordance with the Phase 1 schedule, public participation hearings began in April 2017, and workshops and additional public participation hearings are expected to occur later in 2017.

Section 455.5 of the California Public Utilities Code, among other things, directs regulated utilities to notify the CPUC if all or any portion of a major facility has been out of service for nine consecutive months. Although SoCalGas does not believe the Aliso Canyon natural gas storage facility or any portion of that facility has been out of service for nine consecutive months, SoCalGas provided notification for transparency, and because the process for obtaining authorization to resume injection operations at the facility is taking

longer to complete than initially contemplated. In response, and as required by Section 455.5, the CPUC issued an OII to address whether the Aliso Canyon natural gas storage facility or any portion of that facility has been out of service for nine consecutive months pursuant to Section 455.5, and if it is determined to have been out of service, whether the CPUC should adjust SoCalGas' rates to reflect the period the facility is deemed to have been out of service. As required under Section 455.5, if hearings on the investigation are necessary, they will be consolidated with SoCalGas' next GRC proceeding. In the event that the CPUC determines that all or any portion of the facility has been out of service for nine consecutive months, the amount of any refund to ratepayers and the inability to earn a return on those assets could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

In March 2016, the CPUC ordered SoCalGas to establish a memorandum account to prospectively track its authorized revenue requirement and all revenues that it receives for its normal, business-as-usual costs to own and operate the Aliso Canyon natural gas storage facility and, in September 2016, approved SoCalGas' request to begin tracking these revenues as of March 17, 2016. The CPUC will determine at a later time whether, and to what extent, the authorized revenues tracked in the memorandum account may be refunded to ratepayers.

Insurance

Excluding directors and officers liability insurance, we have four kinds of insurance policies that together provide between \$1.2 billion to \$1.4 billion in insurance coverage, depending on the nature of the claims. These policies are subject to various policy limits, exclusions and conditions. We have been communicating with our insurance carriers and intend to pursue the full extent of our insurance coverage. Through June 30, 2017, we have received \$273 million of insurance proceeds for a portion of control-of-well expenses and a portion of temporary relocation costs. There can be no assurance that we will be successful in obtaining insurance coverage for costs related to the leak under the applicable policies, and to the extent we are not successful in obtaining coverage or these costs exceed the amount of our coverage, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Our recorded estimate as of June 30, 2017 of \$832 million of certain costs in connection with the Aliso Canyon natural gas storage facility leak may rise significantly as more information becomes available, and any costs not included in our estimate could be material. To the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Regulation

PHMSA, DOGGR, SCAQMD, EPA and CARB have each commenced separate rulemaking proceedings to adopt further regulations covering natural gas storage facilities and injection wells. As we discuss in "Factors Influencing Future Performance" in the Annual Report, DOGGR issued new draft regulations for all storage fields in California, and in 2016, the California Legislature enacted four separate bills providing for additional regulation of natural gas storage facilities. Additional hearings in the California Legislature, as well as with various other federal and state regulatory agencies, have been or may be scheduled, additional legislation has been proposed in the California Legislature, and additional laws, orders, rules and regulations may be adopted. The Los Angeles County Board of Supervisors has formed a task force to review and potentially implement new, more stringent land use (zoning) requirements and associated regulations and enforcement protocols for oil and gas activities, including natural gas storage field operations, which could materially affect new or modified uses of the Aliso Canyon natural gas storage facility and other natural gas storage fields located in Los Angeles County.

We discuss these matters further in Note 11 of the Notes to Condensed Consolidated Financial Statements herein and in Note 15 of the Notes to Consolidated Financial Statements, "Factors Influencing Future Performance" and "Risk Factors" in the Annual Report.

PIPES Act of 2016

In June 2016, the "Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016" or the "PIPES Act of 2016" was enacted. Among other things, the PIPES Act of 2016:

- requires PHMSA to issue, within two years of passage, "minimum safety standards for underground natural gas storage facilities;"
- imposes a "user fee" on underground storage facilities as needed to implement the safety standards;
- grants PHMSA authority to issue emergency orders and impose emergency restrictions, prohibitions and safety measures on owners and operators of gas or hazardous liquid pipeline facilities without prior notice or an opportunity for hearing, if the Secretary of Energy determines that an unsafe condition or practice, or a combination of unsafe conditions and practices, constitutes or is causing an imminent hazard; and
- directs the Secretary of Energy to establish an Interagency Task Force comprised of representatives from various federal agencies and representatives of state and local governments.

In December 2016, PHMSA published an interim final rule pursuant to the PIPES Act of 2016 that revises the federal pipeline safety regulations relating to underground natural gas storage facilities. The interim final rule incorporates consensus safety measures for the construction, maintenance, risk-management, and integrity-management procedures for natural gas storage. SoCalGas began the process of implementing such safety measures prior to formal adoption by PHMSA and is developing the associated documents and procedures required to demonstrate compliance with the standards.

SB 380

In May 2016, SB 380 became law and requires, among other things:

- that natural gas injections into the Aliso Canyon natural gas storage facility be prohibited until a comprehensive review of the safety of the gas storage wells at the facility was completed, as we discuss below;
- that all gas storage wells returning to service at the Aliso Canyon natural gas storage facility inject or produce gas only through the interior metal tubing and not through the annulus between the tubing and the well casing, which allows SoCalGas wells to operate with two complete barriers to mitigate the potential for an uncontrolled release of natural gas; and
- a CPUC proceeding (which was opened in February 2017) to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility, while still maintaining energy and electric reliability for the region, and to consult with various governmental agencies and other entities in making its determination. The order establishing the scope of the proceeding expressly excludes issues with respect to air quality, public health, causation, culpability or cost responsibility regarding the Aliso Canyon natural gas storage facility gas leak.

On July 19, 2017, DOGGR issued an order lifting the prohibition of the injection of natural gas into the Aliso Canyon natural gas storage facility and the CPUC's Executive Director issued his concurrence with that determination, subject to certain conditions. On July 21, 2017, the County of Los Angeles filed a petition for writ of mandate against DOGGR and its State Oil and Gas Supervisor and the CPUC and its Executive Director, as to which SoCalGas is the real party in interest. The petition alleges that DOGGR has failed to properly conduct the comprehensive safety review required by SB 380 and failed to perform an Environmental Impact Review pursuant to CEQA. The petition seeks a writ of mandate requiring DOGGR and the State Oil and Gas Supervisor to comply with SB 380 and CEQA, as well as declaratory and injunctive relief against any authorization to inject natural gas.

On July 28, 2017, the Superior Court denied the County's application for a temporary restraining order to block DOGGR's order on the ground that, pursuant to Public Utilities Code sections 714 and 1759(a), the CPUC has jurisdiction over regulating injections at the Aliso Canyon natural gas storage facility, and the Court therefore lacks jurisdiction to rule on the County's application. On July 31, 2017, the County filed a petition for writ of mandate, prohibition, stay or other appropriate relief and a request for immediate stay in the Court of Appeal, seeking review of the Superior Court's order denying the County's application for a temporary restraining order. Later the same day, the Court of Appeal denied the County's request for an immediate stay on injections. SoCalGas completed the steps outlined by state agencies in order to safely begin injections at the Aliso Canyon natural gas storage facility and, as of July 31, 2017, resumed limited injection. We provide further detail regarding DOGGR's order and the petition filed by the County of Los Angeles above and in Note 11 of the Notes to Condensed Consolidated Financial Statements herein.

SB 888

In September 2016, SB 888 became law, which requires that a penalty assessed against a gas corporation by the CPUC with regard to a natural gas storage facility leak must at least equal the amount necessary to fully offset the impact on the climate from the greenhouse gases emitted by the leak, as determined by the CARB. The CPUC also must consider the extent to which the gas corporation has mitigated or is in the process of mitigating the impact on the climate from greenhouse gas emissions resulting from the leak.

Proposed Legislation – SB 57

Proposed SB 57 seeks to extend the moratorium on natural gas injections at the Aliso Canyon natural gas storage facility until the root cause analysis of the leak that started in October 2015 has been completed. It would also require the CPUC to "act in a manner that will maximize transparency" in the course of completing its analysis regarding the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility. In addition, the bill would enable the Governor to authorize reinjection, production and withdrawal at the Aliso Canyon natural gas storage facility as necessary to respond to or avoid emergencies. The bill did not pass a vote in the California Senate but may be considered again.

Additional Safety Enhancements

In February 2017, SoCalGas notified the CPUC that it is accelerating its well integrity assessments on the natural gas storage wells at its La Goleta, Honor Rancho and Playa del Rey natural gas storage fields consistent with the testing prescribed by SB 380 for the Aliso Canyon natural gas storage facility, proposed new DOGGR regulations, and SoCalGas' Storage Risk Management Plan. In addition, SoCalGas indicated its plan to reconfigure its operating natural gas storage wells such that natural gas will be injected or produced only through the interior metal tubing and not through the annulus between the tubing and the well casing to maintain a double barrier and additional layer of safety, which is consistent with the direction of federal and state regulations. SoCalGas anticipates that this work will reduce the injection and withdrawal capacity of each of these other storage fields. Depending on the volume of natural gas in storage in each field at the time natural gas is injected or withdrawn, the reduction could be significant and could impact natural gas reliability and electric generation. In March 2017, SoCalGas revised its plan, as directed by the CPUC, for converting all wells to tubing-only operation to maintain a prescribed withdrawal capacity.

Higher operating costs and additional capital expenditures incurred by SoCalGas as a result of new laws, orders, rules and regulations arising out of the Aliso Canyon natural gas storage facility incident or our responses thereto could be significant and may not be recoverable in customer rates, and SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations may be materially adversely affected by any such new laws, orders, rules and regulations.

SoCalGas Billing Practices

In May 2017, the CPUC issued an OII to determine whether SoCalGas violated any provisions of the California Public Utilities Code, General Orders, CPUC decisions, or other requirements pertaining to billing practices from 2014 through 2016. In particular, the CPUC is examining the timeliness of monthly bills, extending the billing period for customers, and issuing estimated bills. Under the OII, the CPUC will also examine SoCalGas' gas tariff rules and consider whether to impose penalties or other remedies. We expect a decision on the OII in 2018.

CALIFORNIA UTILITIES – JOINT MATTERS

Capital Project Updates

We summarize below updates regarding certain major joint capital projects at our California Utilities.

CAPITAL PROJECTS – CALIFORNIA UTILITIES

Project description	Estimated capital cost (in millions)	Status
Mobile Home Park Utility Upgrade Program		
§ May 2017 application filed with the CPUC to convert an additional 20 percent of eligible units to direct utility service, for a total of 30 percent of mobile homes.	\$ 471	§ Application pending
	to	
	\$ 508	
§ Estimated implementation cost of \$2 million of O&M at SDG&E and \$3 million to \$4 million of O&M at SoCalGas.		
Pipeline Safety Enhancement Plan		
§ March 2017 application filed with the CPUC to recover forecasted costs associated with twelve Phase 1B and Phase 2A pipeline safety projects.	\$ 198	§ Application pending
§ Estimated implementation cost of \$57 million of O&M at SoCalGas.		

Incentive Mechanisms

Energy Efficiency

The CPUC has established incentive mechanisms that are based on the effectiveness of energy efficiency programs. In March 2017, the CPUC approved the settlement agreements reached with the ORA and TURN regarding the incentive awards for program years 2006 through 2008, wherein the parties agreed that SDG&E and SoCalGas would offset up to a total of approximately \$4 million each against future incentive awards over the next three years beginning in 2017. If the total incentive awards ultimately authorized for 2017 through 2019 are less than approximately \$4 million for either utility, the applicable utility is released from paying any remaining unapplied amount.

Natural Gas Procurement

In June 2017, SoCalGas filed an application for a GCIM award of \$4 million for natural gas procured for its core customers during the 12-month period ended March 31, 2017. A CPUC decision is expected in the first half of 2018.

In June 2016, SoCalGas filed an application for a GCIM award of \$5 million for the 12-month period ended March 31, 2016. The CPUC approved the award in January 2017.

Natural Gas Pipeline Operations Safety Assessments

In 2011, the California Utilities filed implementation plans with the CPUC to implement the CPUC's significant and urgent safety directive to test or replace natural gas transmission pipelines that have not been pressure tested and to reduce the time for valves to stop the flow of gas if a break in a pipeline occurs (referred to as PSEP). In 2014, the CPUC issued a final decision approving the utilities' model for implementing PSEP, and established the criteria to determine the amounts related to PSEP that may be recovered from ratepayers and the processes for recovery of such amounts, including providing that such costs are subject to a reasonableness review. In 2016, the CPUC issued a final decision authorizing SoCalGas and SDG&E to recover, subject to refund pending reasonableness review, 50 percent of the revenue requirements associated with completed Phase 1 projects. The decision also incorporates a forward looking schedule to (1) file two reasonableness review applications for Phase 1 projects completed through 2017, (2) file one forecast application for Phase 2 project costs to be incurred in 2017 and 2018, and (3) include all other PSEP costs in future GRCs.

In September 2016, SoCalGas and SDG&E filed a joint application with the CPUC for its second PSEP reasonableness review and rate recovery of costs of certain pipeline safety projects completed by June 30, 2015 and recorded in their authorized regulatory accounts. The total costs submitted for review are \$195 million (\$180 million for SoCalGas and \$15 million for SDG&E). SoCalGas and SDG&E expect a decision from the CPUC in 2018. This proceeding has been challenged by consumer advocacy groups. However, we believe these costs were prudent, were incurred in accordance with the program, and should be substantially approved for recovery.

In March 2017, SoCalGas and SDG&E filed an application with the CPUC requesting approval of the forecasted revenue requirement necessary to recover the costs associated with twelve Phase 1B and Phase 2A pipeline safety projects. The California Utilities expect to incur total costs for the twelve projects of approximately \$255 million (\$198 million in capital expenditures and \$57 million in O&M) to be effective in rates on January 1, 2019. SoCalGas and SDG&E expect a CPUC decision in the second half of 2018.

As shown in the table below, SoCalGas and SDG&E have made significant pipeline safety investments under this program, and SoCalGas expects to continue making significant investments as approved through various regulatory proceedings. SDG&E's PSEP program is expected to be substantially complete in 2017, with the exception of the Pipeline Safety & Reliability Project that is currently under regulatory review.

PIPELINE SAFETY ENHANCEMENT PLAN – REASONABLENESS REVIEW SUMMARY

(Dollars in millions)

	2011 through June 30, 2017			
	Total invested(1)	CPUC review completed(2)	CPUC review pending(3)	2018 recovery filing(4)(5)
Sempra Energy Consolidated:				
Capital	\$ 1,351	\$ 8	\$ 143	\$ 1,200
Operation and maintenance	173	25	63	85
Total	\$ 1,524	\$ 33	\$ 206	\$ 1,285
SoCalGas:				
Capital	\$ 1,031	\$ 8	\$ 129	\$ 894
Operation and maintenance	164	25	62	77
Total	\$ 1,195	\$ 33	\$ 191	\$ 971
SDG&E:				
Capital	\$ 320	\$ —	\$ 14	\$ 306
Operation and maintenance	9	—	1	8
Total	\$ 329	\$ —	\$ 15	\$ 314

(1) Excludes disallowed costs through June 30, 2017 of \$6 million at SoCalGas and \$1 million at SDG&E for pressure testing or replacing pipelines installed between January 1, 1956 and July 1, 1961.

(2) Approved in December 2016; excludes \$2 million of PSEP-specific insurance costs for which recovery may be requested in a future filing.

(3) Reasonableness Review Application for completed projects totaling \$195 million filed in September 2016. Also includes approximately \$11 million of pre-engineering costs incurred to support projects under development and submitted as part of the Forecast Application filed in March 2017. Both decisions expected in 2018.

(4) Reasonableness Review Application to be filed in late 2018 and expected to include substantially all of these costs. Remaining costs not included in the 2018 application are expected to be filed in a future GRC.

(5) Authorized to recover 50 percent of the revenue requirement annually, subject to refund.

Regulatory Compliance and Safety Enforcement

In October 2016, the CPUC's CPED issued a citation to SoCalGas for alleged violations of certain environmental mitigation measures related to the Aliso Canyon Turbine Replacement Project, and imposed a fine in the amount of \$699,500. SoCalGas subsequently appealed the citation and the resulting fine. In March 2017, SoCalGas and the CPED filed a joint settlement agreement with the CPUC to resolve all matters related to the October 2016 citation. As a part of the settlement agreement, SoCalGas agreed to pay \$250,000 to the state's general fund and to retain an independent firm to conduct compliance training seminars for the benefit of SoCalGas and CPUC personnel at a cost not to exceed \$25,000. The parties agreed that the settlement agreement did not constitute an admission by SoCalGas or denial by CPED with respect to any issue of fact or law, or of any violation or liability by any party. In May 2017, the CPUC issued a decision approving the settlement as filed.

Other California Utilities – Joint Matters

For a discussion about "Future Risk-Based GRC," see "Factors Influencing Future Performance" in the Annual Report.

SEMPRA SOUTH AMERICAN UTILITIES

Chilquinta Energía's most recent review process for distribution rates was completed in November 2016, covering the period from November 2016 through October 2020. We expect a final decree to be released during the second half of 2017 and to be retroactive from November 2016, which we do not expect to have a material impact on our results.

Capital Project Updates

We summarize below updates regarding certain major capital projects at Sempra South American Utilities' joint venture partnerships.

CAPITAL PROJECTS – SEMPRA SOUTH AMERICAN UTILITIES

Project description	Our share of estimated capital cost (in millions)	Status
Chilquinta Energía - Eletrans		
§ 220-kV electric transmission line awarded in June 2017.	\$ 50	§ Estimated completion: 2021
§ Transmission line in the northern region of Chile to extend approximately 133 miles.		
§ Once in operation, will earn a return in U.S. dollars, indexed to the CPI, for 20 years and a regulated return thereafter.		
§ 50-percent equity interest in joint venture.		

Other Sempra South American Utilities Matters

For a discussion about other Sempra South American Utilities matters, see “Factors Influencing Future Performance” in the Annual Report.

SEMPRA MEXICO

Capital Project Updates

We summarize below certain major capital projects that were completed in 2017 at Sempra Mexico.

CAPITAL PROJECTS COMPLETED IN 2017 – SEMPRA MEXICO

Project description	
Sonora Pipeline	
§ Awarded two contracts in October 2012 by the CFE to build and operate a 500-mile pipeline network.	§ First segment completed in stages from fourth quarter of 2014 through August 2015.
§ Comprised of two segments that interconnect to the U.S. interstate pipeline system.	§ Second segment completed in May 2017.
§ Pipeline to transport natural gas from the U.S.-Mexico border south of Tucson, Arizona through the Mexican state of Sonora to the northern part of the Mexican state of Sinaloa along the Gulf of California.	
§ Capacity is fully contracted by the CFE under two 25-year contracts denominated in U.S. dollars.	
Ojinaga Pipeline	
§ December 2014 agreement with CFE for development, construction and operation of the approximately 137-mile pipeline.	§ Pipeline completed in June 2017.
§ Natural gas transportation services agreement for a 25-year term, denominated in U.S. dollars, for 100 percent of the transport capacity, equal to 1.4 Bcf per day.	
San Isidro Pipeline	
§ July 2015 agreement with CFE for development, construction and operation of the approximately 14-mile pipeline.	§ Pipeline completed in March 2017.
§ Natural gas transportation services agreement for a 25-year term, denominated in U.S. dollars, for 100 percent of the transport capacity, equal to 1.1 Bcf per day.	§ Compressor station completed in June 2017.

We summarize below updates regarding certain major capital projects at Sempra Mexico.

CAPITAL PROJECTS – SEMPRA MEXICO

Project description	Estimated capital cost (in millions)	Status
Pima Solar		
§ Awarded 110-MW photovoltaic project located in Sonora, Mexico in March 2017.	\$ 115	§ Construction expected to commence in the fourth quarter of 2017.
§ Entered into a 20-year, U.S. dollar-denominated PPA in March 2017 to provide renewable energy, clean energy certificates and capacity.		§ Estimated completion: fourth quarter of 2018.
Liquid Fuels Terminals at Port of Veracruz, Puebla and Mexico City		
§ Awarded a 20-year concession in July 2017 to build and operate a marine terminal in the Port of Veracruz in Mexico for the receipt, storage and delivery of liquid fuels.	\$ 155	§ Includes marine concession fees totaling \$55 million for concession rights: half to be paid in August 2017 and half to be paid in January 2018.
§ Capacity of 1.4 million barrels of gasoline, diesel and jet fuel to supply the central region of Mexico.		§ Expected completion of marine terminal: end of 2018.
§ IEnova will also build and operate two storage terminals located near Puebla and Mexico City with storage capacities of 500,000 and 800,000 barrels, respectively.	\$ 120	§ Expected completion of two inland storage terminals: first half of 2019.
§ Entered into three, long-term, U.S. dollar-denominated terminal services agreements in July 2017 with Valero Energy for the full capacity of the marine terminal and the two inland storage terminals.		
§ Pursuant to these agreements, Valero Energy has the option to purchase a 50-percent interest in each of the three terminals after commencement of commercial operations, subject to approval by the Port of Veracruz, COFECE and the CRE.		

Energía Costa Azul LNG Terminal

In May 2015, Sempra LNG & Midstream, IEnova, and a subsidiary of PEMEX entered into a project development agreement for the joint development of the proposed natural gas liquefaction project at IEnova's existing regasification terminal at Energía Costa Azul. The agreement specifies how the parties will share costs, and establishes a framework for the parties to work jointly on permitting, design, engineering and commercial activities associated with exploring the development of the liquefaction project. We are sharing costs with PEMEX on the development efforts pursuant to the agreement, and have applied for the primary governmental authorizations for the liquefaction project. Energía Costa Azul has profitable long-term regasification contracts for 100 percent of the regasification facility's capacity, making the decision to pursue a new liquefaction facility dependent in part on whether the investment in a new liquefaction facility would, over the long term, be more beneficial financially than continuing to supply regasification services under our existing contracts.

Development of this project is subject to numerous risks and uncertainties, including the receipt of a number of permits and regulatory approvals; finding suitable partners and customers; obtaining financing; negotiating and completing suitable commercial agreements, including joint venture agreements, LNG sales agreements, gas supply agreements and construction contracts; reaching a final investment decision; and other factors associated with this potential investment. For a discussion of these risks, see "Risk Factors" in the Annual Report.

Termoeléctrica de Mexicali

Our TdM power plant is currently held for sale, as we discuss in Note 3 of the Notes to Condensed Consolidated Financial Statements herein.

Other Sempra Mexico Matters

For a discussion about other Sempra Mexico matters, see "Factors Influencing Future Performance" in the Annual Report.

SEMPRA RENEWABLES

Sempra Renewables' performance is primarily a function of the solar and wind power generated by its assets. Power generation from these assets depends on solar and wind resource levels, weather conditions, and Sempra Renewables' ability to maintain equipment performance.

Sempra Renewables' future performance and the demand for renewable energy is impacted by various market factors, most notably state mandated requirements for utilities to deliver a portion of total energy load from renewable energy sources. Additionally, the phase out or extension of U.S. federal income tax incentives, primarily investment tax credits and production tax credits, and grant programs could significantly impact future renewable energy resource availability and investment decisions.

Capital Project Updates

We summarize below a new solar project at Sempra Renewables.

CAPITAL PROJECT – SEMPra RENEWABLES	
Project description	Status
Solar Project	
<p>§ Capable of producing up to 200 MW of solar power once fully constructed, located in Fresno County, California, acquired in July 2017.</p> <p>§ Fully contracted under four PPAs with an average contract term of 18 years.</p>	<p>§ Expect commercial operation dates and corresponding contracted energy sales to commence in phases beginning in the fourth quarter of 2017 and the first half of 2018.</p>

SEMPRA LNG & MIDSTREAM

Capital Project Updates

We summarize below Sempra LNG & Midstream's completion of the Cameron Interstate Pipeline expansion project.

CAPITAL PROJECT COMPLETED IN 2017 – SEMPRA LNG & MIDSTREAM

Project description	Status
Cameron Interstate Pipeline Expansion	
§ 3.5-mile, 36-inch pipeline addition to existing Cameron Interstate Pipeline, adding bi-directional flow of up to 1.5 Bcf of natural gas per day.	§ Expansion project completed in the second quarter of 2017.
§ Includes construction of a compressor station and construction of and modifications to meter stations.	
§ Authorized by FERC in June 2014 and approved to commence service in April 2017.	

We summarize below updates regarding the Cameron LNG JV three-train liquefaction joint venture project at Sempra LNG & Midstream.

CAPITAL PROJECT – SEMPRA LNG & MIDSTREAM

Project description	Status
Cameron LNG JV Three-Train Liquefaction Project	
§ Sempra Energy contributed Cameron LNG, LLC's existing facilities to Cameron LNG JV, of which Sempra Energy indirectly owns 50.2 percent, and construction began in the second half of 2014.	§ Recently, the EPC contractor notified the Cameron LNG JV that its project schedule had again changed. Based on several factors, we think it is reasonable to expect that the first LNG train could be delayed into 2019, with the second and third LNG trains following throughout 2019.
§ Anticipated incremental investment of approximately \$7 billion by Cameron LNG JV.	
§ Capacity of 13.9 Mtpa of LNG with an expected export capacity of 12 Mtpa of LNG, or approximately 1.7 Bcf per day.	
§ Authorized to export up to 14.95 Mtpa of LNG to both FTA and Non-FTA countries.	
§ 20-year liquefaction and regasification tolling capacity agreements for full nameplate capacity.	

Cameron LNG JV Three-Train Liquefaction Project

Large-scale construction projects like the design, development and construction of the Cameron LNG JV liquefaction facility involve numerous risks and uncertainties, including among others, the potential for unforeseen engineering challenges, substantial construction delays and increased costs. Cameron LNG JV has a turnkey EPC contract, and if the contractor becomes unwilling or unable to perform according to the terms and timetable of the EPC contract, the project could face substantial construction delays and potentially significantly increased costs, which could, if serious enough, require Cameron LNG JV to engage a substitute contractor. In October 2016, the EPC contractor indicated that the Cameron LNG project would not achieve its originally scheduled dates for completion. Recently, the EPC contractor notified the Cameron LNG JV that its project schedule had again changed. This change projected further delays to the Cameron LNG project, which we expect will result in the anticipated earnings and associated cash flows from the Cameron LNG JV project coming in later than originally anticipated. Based on several factors, we think it is reasonable to expect that the first LNG train could be delayed into 2019, with the second and third LNG trains following throughout 2019. These factors include the updated schedule recently received from the EPC contractor, Cameron LNG JV's own review of the project's schedule, and the inherent risks in constructing and testing facilities such as Cameron LNG. We continue to work with the EPC contractor and our Cameron LNG JV partners regarding the project's schedule and the EPC contractor's delays. During the course of construction of large projects like Cameron LNG, contractors often assert that they are owed additional compensation, schedule extensions, or both. Cameron LNG JV has received information from the EPC contractor claiming they are owed additional amounts beyond the contract value. The contractor has informed Cameron LNG JV that they will supplement this information at a future date. We have not yet been provided with sufficient details that would enable an evaluation of the validity or amount of such purported claims. For a discussion of the Cameron LNG JV and of these risks and other risks relating to the development of the Cameron LNG JV liquefaction project that could adversely affect our future performance, see "Management's Discussion and Analysis of Financial Condition and Results of Operations - Our Business - Sempra LNG & Midstream" and "Risk Factors" in the Annual Report.

Proposed Additional Cameron Liquefaction Expansion

Cameron LNG JV has received the major permits necessary to expand the current configuration of the Cameron LNG JV liquefaction project from the current three liquefaction trains under construction. The proposed expansion project includes up to two additional liquefaction trains, capable of increasing LNG production capacity by approximately 9 Mtpa to 10 Mtpa, and up to two additional full containment LNG storage tanks (one of which was permitted with the original three-train project). Advancement of the project includes

- DOE FTA approval received in July 2015
- Non-FTA approval received in July 2016
- FERC permit received in May 2016

Under the Cameron LNG JV financing agreements, expansion of the Cameron LNG JV facilities beyond the first three trains is subject to certain restrictions and conditions, including among others, timing restrictions on expansion of the project unless appropriate prior consent is obtained from lenders. Under the Cameron LNG JV equity agreements, the expansion of the project requires the unanimous consent of all the partners, including with respect to the equity

investment obligation of each partner. One of the partners indicated to Sempra Energy and the other partners that it does not intend to invest additional capital in Cameron LNG JV with respect to the expansion. As a result, discussions among the partners are taking place, and we are considering a variety of options to attempt to move this project forward. These activities have contributed to delays in developing firm pricing information and securing customer commitments, and there can be no assurance that these issues will be resolved in a timely manner, which could materially and adversely impact the near-term marketing of this project and ability to secure customer commitments. In light of these developments, we are unable to predict when we and/or Cameron LNG JV might be able to move forward on this project.

The expansion of the Cameron LNG JV facilities beyond the first three trains is subject to a number of risks and uncertainties, including amending the Cameron LNG JV agreement among the partners, obtaining customer commitments, completing the required commercial agreements, securing and maintaining all necessary permits, approvals and consents, obtaining financing, reaching a final investment decision among the Cameron LNG JV partners, and other factors associated with the potential investment. See “Risk Factors” in the Annual Report.

Other LNG Liquefaction Development

Design, regulatory and commercial activities are ongoing for potential LNG liquefaction developments at our Port Arthur, Texas site and at Sempra Mexico’s Energia Costa Azul facility. For these development projects, we have met with potential customers and determined there is an interest in long-term contracts for LNG supplies beginning in the 2022 to 2025 time frame.

Port Arthur

In November 2016, Sempra LNG & Midstream submitted a request to the FERC seeking authorization to site, construct and operate the proposed Port Arthur LNG natural gas liquefaction and export facility in Port Arthur, Texas.

- The proposed project is designed to include
 - two natural gas liquefaction trains with production capability of approximately 13.5 Mtpa, or 698 Bcf per year;
 - three LNG storage tanks;
 - natural gas liquids and refrigerant storage;
 - feed gas pre-treatment facilities; and
 - two berths and associated marine and loading facilities.
- In June 2015, Sempra LNG & Midstream filed permit applications with the DOE for authorization to export the LNG produced from the proposed project to all current and future non-FTA countries.
- In August 2015, Sempra LNG & Midstream received authorization from the DOE to export the LNG produced from the proposed project to all current and future FTA countries.
- In February 2016, Sempra LNG & Midstream and Woodside Petroleum Ltd. entered into a project development agreement for the joint development of the proposed Port Arthur LNG liquefaction project. The agreement specifies how the parties will share costs, and establishes a framework for the parties to work jointly on permitting, design, engineering, commercial and marketing activities associated with developing the Port Arthur LNG liquefaction project.
- In June 2017, Sempra LNG & Midstream, Woodside Petroleum Ltd. and Korea Gas Corporation signed a memorandum of understanding that provides a framework for cooperation and joint discussion by the parties regarding key aspects of the potential development of the Port Arthur LNG project, including engineering and construction work, O&M activities, feed gas sourcing, offtake of LNG and the potential for Korea Gas Corporation to purchase LNG from, and become an equity participant in, the Port

Arthur LNG project. The memorandum of understanding does not commit any party to buy or sell LNG or otherwise participate in the Port Arthur liquefaction LNG project.

Also, in November 2016, Sempra LNG & Midstream filed a permit application with the FERC for a pipeline project that will provide natural gas transportation service for the Port Arthur LNG liquefaction project. In February 2017, Sempra LNG & Midstream initiated the FERC pre-filing review process for a potential permit application for an additional pipeline project that would also provide natural gas transportation service for the Port Arthur LNG liquefaction project.

Development of the Port Arthur LNG liquefaction project is subject to a number of risks and uncertainties, including completing the required commercial agreements, such as joint venture agreements, LNG sales agreements and gas supply agreements; completing construction contracts; securing all necessary permits and approvals; obtaining financing and incentives; reaching a final investment decision; and other factors associated with the potential investment. See “Risk Factors” in the Annual Report.

Energía Costa Azul

We further discuss Sempra LNG & Midstream’s participation in potential LNG liquefaction development at Sempra Mexico’s Energía Costa Azul facility above in “Sempra Mexico – Energía Costa Azul LNG Terminal.”

Natural Gas Storage Assets

The future performance of our natural gas storage assets could be impacted by changes in the U.S. natural gas market, which could lead to sustained diminished natural gas storage values.

The recorded value of our long-lived natural gas storage assets at June 30, 2017 is \$1.5 billion. Historically, the value of natural gas storage services has positively correlated with the difference between the seasonal prices of natural gas, among other factors. In general, over the past several years, seasonal differences in natural gas prices have declined, which have contributed to lower prices for storage services. As our legacy (higher rate) sales contracts mature at our Bay Gas and Mississippi Hub facilities, replacement sales contract rates have been and could continue to be lower than has historically been the case. Lower sales revenues may not be offset by cost reductions, which could lead to further depressed asset values. Future investment in Bay Gas, Mississippi Hub and LA Storage will be dependent on market demand and estimates of long-term storage values. Our LA Storage development project construction permit expired in June 2017 and future development will require approval of a new construction permit by the FERC. The LA Storage project also includes an existing 23.3-mile pipeline header system, the LA Storage pipeline, that is not currently contracted.

We perform recovery testing of our recorded asset values when market conditions indicate that such values may not be recoverable. In the event such values are not recoverable, we would consider the fair value of these assets relative to their recorded value. To the extent the recorded (carrying) value is in excess of the fair value, we would record a noncash impairment charge. A significant impairment charge related to our natural gas storage assets would have a material adverse effect on our results of operations in the period in which it is recorded.

RBS SEMPRAS COMMODITIES

For a discussion about RBS Sempra Commodities, see “Factors Influencing Future Performance” in the Annual Report and Note 11 of the Notes to Condensed Consolidated Financial Statements herein.

OTHER SEMPRAS ENERGY MATTERS

For a discussion about Other Sempra Energy Matters, see “Factors Influencing Future Performance” in the Annual Report.

LITIGATION

We describe legal proceedings that could adversely affect our future performance in Note 11 of the Notes to Condensed Consolidated Financial Statements herein.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

We view certain accounting policies as critical because their application is the most relevant, judgmental, and/or material to our financial position and results of operations, and/or because they require the use of material judgments and estimates. We discuss these accounting policies in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Annual Report.

We describe our significant accounting policies in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report. We follow the same accounting policies for interim reporting purposes.

NEW ACCOUNTING STANDARDS

We discuss the relevant pronouncements that have recently been issued or become effective and have had or may have an impact on our financial statements and/or disclosures in Note 2 of the Notes to Condensed Consolidated Financial Statements herein.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We provide disclosure regarding derivative activity in Note 7 of the Notes to Condensed Consolidated Financial Statements herein. We discuss our market risk and risk policies in detail in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” herein and in the Annual Report.

INTEREST RATE RISK

The table below shows the nominal amount of long-term debt at June 30, 2017 and December 31, 2016:

NOMINAL AMOUNT OF LONG-TERM DEBT(1)

(Dollars in millions)

	June 30, 2017			December 31, 2016		
	Sempra Energy Consolidated	SDG&E	SoCalGas	Sempra Energy Consolidated	SDG&E	SoCalGas
Utility fixed-rate	\$ 7,600	\$ 4,591	\$ 3,009	\$ 7,218	\$ 4,209	\$ 3,009
Utility variable-rate	300	300	—	445	445	—
Non-utility fixed-rate	6,906	—	—	6,703	—	—
Non-utility variable-rate	728	—	—	719	—	—

(1) Before the effects of acquisition-related fair value adjustments, interest rate swaps, reductions/increases for unamortized discount/premium and reduction for debt issuance costs, and excluding capital lease obligations and build-to-suit lease.

Interest rate risk sensitivity analysis measures interest rate risk by calculating the estimated changes in earnings that would result from a hypothetical change in market interest rates. If interest rates changed by ten percent on all of Sempra Energy’s effective variable-rate, long-term debt at June 30, 2017, the change in earnings over the next 12-month period ending June 30, 2018 would be \$4 million (after tax). These hypothetical changes in earnings are based on our long-term debt position after the effect of interest rate swaps.

FOREIGN CURRENCY AND INFLATION RATE RISK

We discuss our foreign currency and inflation exposure in “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Impact of Foreign Currency and Inflation Rates on Results of Operations” herein and in the Annual Report. At June 30, 2017, there were no significant changes to our exposure to foreign currency rate risk since December 31, 2016.

ITEM 4. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

Sempra Energy, SDG&E and SoCalGas have designed and maintain disclosure controls and procedures to ensure that information required to be disclosed in their respective reports is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC and is accumulated and communicated to the management of each company, including each respective principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure. In designing and evaluating these controls and procedures, the management of each company recognizes that any system of controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives; therefore, the management of each company applies judgment in evaluating the cost-benefit relationship of other possible controls and procedures.

Under the supervision and with the participation of management, including the principal executive officers and principal financial officers of Sempra Energy, SDG&E and SoCalGas, each company evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of June 30, 2017, the end of the period covered by this report. As discussed below, we excluded Ventika and IEnova Pipelines (formerly known as GdC) from our evaluation of changes in Sempra Energy's disclosure controls and procedures, to the extent subsumed by Ventika's and IEnova Pipelines' internal control over financial reporting. Based on these evaluations, the principal executive officers and principal financial officers of Sempra Energy, SDG&E and SoCalGas concluded that their respective company's disclosure controls and procedures were effective at the reasonable assurance level.

INTERNAL CONTROL OVER FINANCIAL REPORTING

Other than the changes which may be associated with the 2016 acquisitions described below (which did not impact SDG&E or SoCalGas), there have been no changes in the companies' internal control over financial reporting during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the companies' internal control over financial reporting.

As we discuss in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report, we acquired Ventika in December 2016 and the remaining 50-percent interest in IEnova Pipelines (formerly known as GdC) in September 2016. The carrying value of Ventika's net assets was \$278 million or 1.8 percent of Sempra Energy's net assets at June 30, 2017. Ventika's losses for the six months ended June 30, 2017 were \$23 million or 3.3 percent of total Sempra Energy earnings for the six months ended June 30, 2017. The carrying value of IEnova Pipelines' net assets was \$2.3 billion or 14.9 percent of Sempra Energy's net assets at June 30, 2017. IEnova Pipelines' earnings for the six months ended June 30, 2017 were \$20 million or 2.9 percent of total Sempra Energy earnings for the six months ended June 30, 2017. We are in the process of integrating Ventika and IEnova Pipelines. Our management is analyzing, evaluating and, where necessary, will implement changes in, Ventika's and IEnova Pipelines' controls and procedures. Due to the limited period of time since the acquisition dates, we have not had sufficient time to assess the internal controls of Ventika and IEnova Pipelines. Therefore, we excluded Ventika and IEnova Pipelines from our evaluation of disclosure controls and procedures above, to the extent subsumed by Ventika's and IEnova Pipelines' internal control over financial reporting. We intend to include Ventika and IEnova Pipelines in the overall assessment of, and report on, internal control over financial reporting as soon as practicable, but in no event later than one year from the respective acquisition dates.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are not party to, and our property is not the subject of, any material pending legal proceedings (other than ordinary routine litigation incidental to our businesses) except for the matters 1) described in Notes 9 and 11 of the Notes to Condensed Consolidated Financial Statements herein and in Notes 13 and 15 of the Notes to Consolidated Financial Statements in the Annual Report, or 2) referred to in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” herein and in the Annual Report.

ITEM 1A. RISK FACTORS

When evaluating our company and its subsidiaries, we urge you to carefully consider the risks and other information in this Quarterly Report on Form 10-Q, including the factors discussed in “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Factors Influencing Future Performance,” as well as the risk factors disclosed in Item 1A. to Part I of our Annual Report. There have been no material changes from the risk factors as previously disclosed in our Annual Report. Any of the risks and other information discussed in this Quarterly Report on Form 10-Q or any of the risks disclosed in Item 1A. to Part I of our Annual Report, as well as additional risks and uncertainties not currently known to us or that we currently deem immaterial, could materially and adversely affect our businesses, cash flows, results of operations, financial condition, prospects and/or the trading prices of our securities or those of our subsidiaries.

ITEM 6. EXHIBITS

The following exhibits relate to each registrant as indicated.

EXHIBIT 12 -- STATEMENTS RE: COMPUTATION OF RATIOS

Sempra Energy

[12.1 Sempra Energy Computation of Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends.](#)

San Diego Gas & Electric Company

[12.2 San Diego Gas & Electric Company Computation of Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends.](#)

Southern California Gas Company

[12.3 Southern California Gas Company Computation of Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends.](#)

EXHIBIT 31 -- SECTION 302 CERTIFICATIONS

Sempra Energy

[31.1 Certification of Sempra Energy’s Principal Executive Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.](#)

[31.2 Certification of Sempra Energy's Principal Financial Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.](#)

San Diego Gas & Electric Company

[31.3 Certification of San Diego Gas & Electric Company's Principal Executive Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.](#)

[31.4 Certification of San Diego Gas & Electric Company's Principal Financial Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.](#)

Southern California Gas Company

[31.5 Certification of Southern California Gas Company's Principal Executive Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.](#)

[31.6 Certification of Southern California Gas Company's Principal Financial Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.](#)

EXHIBIT 32 -- SECTION 906 CERTIFICATIONS

Sempra Energy

[32.1 Certification of Sempra Energy's Principal Executive Officer pursuant to 18 U.S.C. Sec. 1350.](#)

[32.2 Certification of Sempra Energy's Principal Financial Officer pursuant to 18 U.S.C. Sec. 1350.](#)

San Diego Gas & Electric Company

[32.3 Certification of San Diego Gas & Electric Company's Principal Executive Officer pursuant to 18 U.S.C. Sec. 1350.](#)

[32.4 Certification of San Diego Gas & Electric Company's Principal Financial Officer pursuant to 18 U.S.C. Sec. 1350.](#)

Southern California Gas Company

[32.5 Certification of Southern California Gas Company's Principal Executive Officer pursuant to 18 U.S.C. Sec. 1350.](#)

[32.6 Certification of Southern California Gas Company's Principal Financial Officer pursuant to 18 U.S.C. Sec. 1350.](#)

EXHIBIT 101 -- INTERACTIVE DATA FILE

Sempra Energy / San Diego Gas & Electric Company / Southern California Gas Company

101.INS XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.

101.SCH XBRL Taxonomy Extension Schema Document

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF XBRL Taxonomy Extension Definition Linkbase Document

101.LAB XBRL Taxonomy Extension Label Linkbase Document

SIGNATURES

Sempra Energy:

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: August 4, 2017

SEMPRA ENERGY,
(Registrant)

By: /s/ Trevor I. Mihalik

Trevor I. Mihalik
Senior Vice President, Controller and
Chief Accounting Officer

San Diego Gas & Electric Company:

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: August 4, 2017

SAN DIEGO GAS & ELECTRIC COMPANY,
(Registrant)

By: /s/ Bruce A. Folkmann

Bruce A. Folkmann
Vice President, Controller, Chief Financial Officer and Chief
Accounting Officer

Southern California Gas Company:

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: August 4, 2017

SOUTHERN CALIFORNIA GAS COMPANY,
(Registrant)

By: /s/ Bruce A. Folkmann

Bruce A. Folkmann
Vice President, Controller, Chief Financial Officer and Chief
Accounting Officer

EXHIBIT 12.1
SEMPRA ENERGY
COMPUTATION OF RATIO OF EARNINGS TO COMBINED FIXED CHARGES
AND PREFERRED STOCK DIVIDENDS
(Dollars in millions)

	2012	2013	2014	2015	2016	June 30, 2017
Fixed charges and preferred stock dividends:						
Interest	\$ 601	\$ 620	\$ 636	\$ 677	\$ 701	\$ 380
Interest portion of annual rentals	2	2	3	2	3	2
Preferred dividends of subsidiaries(1)	6	6	1	2	2	1
Total fixed charges	<u>609</u>	<u>628</u>	<u>640</u>	<u>681</u>	<u>706</u>	<u>383</u>
Preferred dividends for purpose of ratio	—	—	—	—	—	—
Combined fixed charges and preferred dividends for purpose of ratio	<u>\$ 609</u>	<u>\$ 628</u>	<u>\$ 640</u>	<u>\$ 681</u>	<u>\$ 706</u>	<u>\$ 383</u>
Earnings:						
Pretax income from continuing operations before adjustment for income or loss from equity investees	\$ 1,255	\$ 1,399	\$ 1,443	\$ 1,600	\$ 1,824	\$ 1,149
Add:						
Total fixed charges (from above)	609	628	640	681	706	383
Distributed income of equity investees	50	51	61	83	53	17
Less:						
Interest capitalized	53	23	40	69	90	31
Preferred dividends of subsidiaries(1)	6	6	1	2	2	1
Total earnings for purpose of ratio	<u>\$ 1,855</u>	<u>\$ 2,049</u>	<u>\$ 2,103</u>	<u>\$ 2,293</u>	<u>\$ 2,491</u>	<u>\$ 1,517</u>
Ratio of earnings to combined fixed charges and preferred stock dividends	<u>3.05</u>	<u>3.26</u>	<u>3.29</u>	<u>3.37</u>	<u>3.53</u>	<u>3.96</u>
Ratio of earnings to fixed charges	<u>3.05</u>	<u>3.26</u>	<u>3.29</u>	<u>3.37</u>	<u>3.53</u>	<u>3.96</u>

(1) In computing this ratio, "Preferred dividends of subsidiaries" represents the before-tax earnings necessary to pay such dividends, computed at the effective tax rates for the applicable periods.

EXHIBIT 12.2
SAN DIEGO GAS & ELECTRIC COMPANY
COMPUTATION OF RATIO OF EARNINGS TO COMBINED FIXED CHARGES
AND PREFERRED STOCK DIVIDENDS
(Dollars in millions)

	2012	2013	2014	2015	2016	June 30, 2017
Fixed charges and preferred stock dividends:						
Interest	\$ 220	\$ 231	\$ 238	\$ 241	\$ 239	\$ 126
Interest portion of annual rentals	1	1	1	1	1	1
Total fixed charges	<u>221</u>	<u>232</u>	<u>239</u>	<u>242</u>	<u>240</u>	<u>127</u>
Preferred stock dividends(1)	<u>7</u>	<u>5</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Combined fixed charges and preferred stock dividends for purpose of ratio	<u>\$ 228</u>	<u>\$ 237</u>	<u>\$ 239</u>	<u>\$ 242</u>	<u>\$ 240</u>	<u>\$ 127</u>
Earnings:						
Pretax income from continuing operations	\$ 705	\$ 626	\$ 797	\$ 890	\$ 845	\$ 454
Add: Total fixed charges (from above)	221	232	239	242	240	127
Less: Interest capitalized	<u>—</u>	<u>—</u>	<u>1</u>	<u>—</u>	<u>—</u>	<u>—</u>
Total earnings for purpose of ratio	<u>\$ 926</u>	<u>\$ 858</u>	<u>\$ 1,035</u>	<u>\$ 1,132</u>	<u>\$ 1,085</u>	<u>\$ 581</u>
Ratio of earnings to combined fixed charges and preferred stock dividends	<u>4.06</u>	<u>3.62</u>	<u>4.33</u>	<u>4.68</u>	<u>4.52</u>	<u>4.57</u>
Ratio of earnings to fixed charges	<u>4.19</u>	<u>3.70</u>	<u>4.33</u>	<u>4.68</u>	<u>4.52</u>	<u>4.57</u>

(1) In computing this ratio, "Preferred stock dividends" represents the before-tax earnings necessary to pay such dividends, computed at the effective tax rates for the applicable periods.

EXHIBIT 12.3
SOUTHERN CALIFORNIA GAS COMPANY
COMPUTATION OF RATIO OF EARNINGS TO COMBINED FIXED CHARGES
AND PREFERRED STOCK DIVIDENDS
(Dollars in millions)

	2012	2013	2014	2015	2016	June 30, 2017
Fixed charges and preferred stock dividends:						
Interest	\$ 77	\$ 76	\$ 77	\$ 96	\$ 111	\$ 59
Interest portion of annual rentals	1	1	2	1	2	1
Total fixed charges	<u>78</u>	<u>77</u>	<u>79</u>	<u>97</u>	<u>113</u>	<u>60</u>
Preferred stock dividends(1)	2	2	2	2	2	1
Combined fixed charges and preferred stock dividends for purpose of ratio	<u>\$ 80</u>	<u>\$ 79</u>	<u>\$ 81</u>	<u>\$ 99</u>	<u>\$ 115</u>	<u>\$ 61</u>
Earnings:						
Pretax income from continuing operations	\$ 369	\$ 481	\$ 472	\$ 558	\$ 493	\$ 379
Add: Total fixed charges (from above)	78	77	79	97	113	60
Less: Interest capitalized	1	1	1	1	1	1
Total earnings for purpose of ratio	<u>\$ 446</u>	<u>\$ 557</u>	<u>\$ 550</u>	<u>\$ 654</u>	<u>\$ 605</u>	<u>\$ 438</u>
Ratio of earnings to combined fixed charges and preferred stock dividends	<u>5.58</u>	<u>7.05</u>	<u>6.79</u>	<u>6.61</u>	<u>5.26</u>	<u>7.18</u>
Ratio of earnings to fixed charges	<u>5.72</u>	<u>7.23</u>	<u>6.96</u>	<u>6.74</u>	<u>5.35</u>	<u>7.30</u>

(1) In computing this ratio, "Preferred stock dividends" represents the before-tax earnings necessary to pay such dividends, computed at the effective tax rates for the applicable periods.

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, Debra L. Reed, certify that:

1. I have reviewed this report on Form 10-Q of Sempra Energy;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

August 4, 2017

/s/ Debra L. Reed

Debra L. Reed
Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, J. Walker Martin, certify that:

1. I have reviewed this report on Form 10-Q of Sempra Energy;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

August 4, 2017

/s/ J. Walker Martin

J. Walker Martin
Chief Financial Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, Scott D. Drury, certify that:

1. I have reviewed this report on Form 10-Q of San Diego Gas & Electric Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

August 4, 2017

/s/ Scott D. Drury

Scott D. Drury

President

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, Patricia K. Wagner, certify that:

1. I have reviewed this report on Form 10-Q of Southern California Gas Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

August 4, 2017

/s/ Patricia K. Wagner

Patricia K. Wagner
Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, Bruce A. Folkmann, certify that:

1. I have reviewed this report on Form 10-Q of Southern California Gas Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

August 4, 2017

/s/ Bruce A. Folkmann

Bruce A. Folkmann
Chief Financial Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal executive officer of Sempra Energy (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended June 30, 2017 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 4, 2017

/s/ Debra L. Reed

Debra L. Reed
Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal financial officer of Sempra Energy (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended June 30, 2017 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 4, 2017

/s/ J. Walker Martin

J. Walker Martin
Chief Financial Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal executive officer of San Diego Gas & Electric Company (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended June 30, 2017 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 4, 2017

/s/ Scott D. Drury

Scott D. Drury
President

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal financial officer of San Diego Gas & Electric Company (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended June 30, 2017 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 4, 2017

/s/ Bruce A. Folkmann

Bruce A. Folkmann
Chief Financial Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal executive officer of Southern California Gas Company (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended June 30, 2017 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 4, 2017

/s/ Patricia K. Wagner

Patricia K. Wagner
Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal financial officer of Southern California Gas Company (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended June 30, 2017 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 4, 2017

/s/ Bruce A. Folkmann

Bruce A. Folkmann
Chief Financial Officer