

Application of SAN DIEGO GAS & ELECTRIC
COMPANY (U902-E) for Approval of SB 350
Transportation Electrification Proposals

Application No. _____
(Filed January 20, 2017)

PREPARED TESTIMONY OF
MICHAEL A. CALABRESE
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY
CHAPTER 6

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

January 20, 2017



TABLE OF CONTENTS

I.	PURPOSE AND SUMMARY	1
II.	REVENUE REQUIREMENT OVERVIEW	2
III.	COSTS OF SDG&E'S SB 350 TE PROPOSALS	3
	A. Capital Costs	3
	B. O&M Costs	4
	C. Total Costs Before Adjustments	6
	D. Adjustments to Capital and O&M Costs	7
	1. Overhead Loaders	7
	2. Escalation of Future Costs	8
	E. Total Costs After Adjustments.....	9
IV.	REVENUE REQUIREMENT	10
	A. Return of Capital.....	11
	B. O&M Costs	11
	C. Return.....	11
	D. Tax	12
	1. Property Tax.....	12
	2. Federal and State Income Tax.....	13
	E. Franchise Fees and Uncollectible	13
V.	CONCLUSION.....	14
VI.	STATEMENTS OF QUALIFICATIONS	15
	APPENDIX A	

1 **PREPARED TESTIMONY OF**

2 **MICHAEL A. CALABRESE**

3 **CHAPTER 6**

4 **I. PURPOSE AND SUMMARY**

5 The purpose of my testimony is to: (1) identify the costs associated with San Diego Gas
6 & Electric Company's ("SDG&E's") SB 350 transportation electrification ("TE") proposals
7 (comprised of six priority review projects and one standard review residential charging
8 program); (2) describe the methodology used by SDG&E in determining the revenue
9 requirements for the proposals; and (3) identify the resulting annual revenue requirements for
10 each of the six proposed priority review projects and the standard review residential charging
11 program. Since the SB 350 TE proposals include services and capital costs above and beyond
12 those authorized by the Commission in SDG&E's most recent general rate case ("GRC"), all
13 costs associated with the SB 350 TE proposals are incremental, and thus additive to any currently
14 authorized levels of revenue requirement.

15 Consistent with the "Assigned Commissioner's Ruling Regarding the Filing of the
16 Transportation Electrification Applications Pursuant to Senate Bill 350" ("ACR") (issued in
17 Rulemaking 13-11-007), each of the proposed priority review projects are equal to or below \$4
18 million in costs, while the total of all six projects combined are equal to or less than \$20 million.
19 SDG&E is requesting that the Commission approve, for years 2018 and 2019, capital costs,
20 operations and maintenance ("O&M") costs, and the associated revenue requirements for each of
21 the six priority review projects, as explained in more detail below in Section III and Appendix A
22 of this testimony. SDG&E is also seeking approval to roll forward for recovery in its post 2019

1 GRC any undepreciated book value of plant balances associated with these six priority review
2 projects.

3 In addition, SDG&E is requesting that the Commission approve, for the years 2019-2025,
4 the capital costs, O&M costs, and the associated revenue requirement for the standard review
5 residential charging program, as explained in more detail below in Section III and Appendix A of
6 this testimony. SDG&E is also seeking approval to roll forward for recovery in its post 2019
7 GRC any undepreciated book value of plant balances associated with the standard review
8 residential charging program.

9 Please refer to the direct testimony of SDG&E witness Norma Jasso in Chapter 7 (Cost
10 Recovery) for details regarding the balancing account requested for recovering the costs of the
11 six priority review projects and one standard review residential charging program.

12 Amounts reflected throughout the tables and appendix of this testimony may not add to
13 the exact sum totals shown due to rounding associated with supporting spreadsheets.

14 **II. REVENUE REQUIREMENT OVERVIEW**

15 The revenue requirements for each project shown in Appendix A of this testimony are
16 designed to capture all costs necessary to run the SB 350 TE proposals. These costs referred to
17 as capital costs, include asset or equipment costs such as chargers, transformers, and overhead
18 equipment, which provide benefits to its users over multiple years of the assets useful life. O&M
19 costs consumed within a one-year period that are incurred to maintain equipment, as well as
20 providing support to customer outreach and billing, are also part of the revenue requirement.

21 The capital costs require significant cash outflows, and are financed through
22 contributions from shareholders, as well as borrowed funds from lending institutions.
23 Shareholders and lenders are paid back for the principal portion of their contributions and loans

1 through the component of depreciation expense of the revenue requirement. Interest costs on the
2 portion of debt that is borrowed from lenders to finance a portion of the projects are also
3 collected as part of the revenue requirement. In addition, while being paid back for their
4 contribution, shareholders are allowed to earn an after tax return (approved by the Commission)
5 on their investment. Taxes on the return are collected as part of the revenue requirement so that
6 shareholders are made whole on an after tax basis. *See* Section IV.C for more detail.

7 In summary, the components of the revenue requirement include recovery of O&M costs
8 on a dollar for dollar basis, capital costs through depreciation, shareholder return, interest on debt
9 financing, and taxes (*see* Section IV and Appendix A).

10 **III. COSTS OF SDG&E’S SB 350 TE PROPOSALS**

11 SDG&E’s SB 350 TE proposals include six priority review projects: (1) Airport Ground
12 Support Equipment, (2) Electrify Local Highways, (3) Medium Duty/Heavy Duty (“MD/HD”)
13 and Forklift Port Electrification, (4) Fleet Delivery Services, (5) Green Taxi/Shuttle/Rideshare,
14 and (6) Dealership Incentives. For more detail regarding the capital and O&M costs of these
15 programs, see the direct testimony of Randy Schimka in Chapter 3 (Priority Review Proposals
16 and Costs). In addition to the six projects identified above, SDG&E’s SB 350 TE proposals
17 include a standard review residential charging program. For more detail regarding the capital
18 and O&M costs of the residential charging program, see Randy Schimka’s Chapter 4 testimony
19 (Estimated Program Costs (Capital and O&M)).

20 **A. Capital Costs**

21 Table MAC-1 below identifies the capital costs for the six priority review projects for the
22 years 2018 and 2019, prior to adjustments for overheads and escalation factors.

Table MAC-1										
SB350 Programs - Priority Review Projects										
Capital Costs										
(Excludes escalation and loaders; Includes sales tax)										
(in \$000)										
Electrify Local Highways										
		Pilot Program		Out Years						Total
Capital Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	
Transformer & Install Cost	\$0	\$147	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$147
Electrical Service	\$0	\$559	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$559
EVSE Costs	\$0	\$1,758	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,758
Purchased & SD Software	\$634	\$211	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$845
Total Capital Costs	\$634	\$2,675	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,309
Dealership Incentives										
		Pilot Program		Out Years						Total
Capital Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	
Transformer & Install Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EVSE Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Purchased & SD Software	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Capital Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MD HD Port Electrification										
		Pilot Program		Out Years						Total
Capital Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	
Transformer & Install Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical Service	\$0	\$850	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$850
EVSE Costs	\$0	\$991	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$991
Purchased & SD Software	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Capital Costs	\$0	\$1,841	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,841
Fleet Delivery Services										
		Pilot Program		Out Years						Total
Capital Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	
Transformer & Install Cost	\$0	\$249	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$249
Electrical Service	\$0	\$829	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$829
EVSE Costs	\$0	\$1,531	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,531
Purchased & SD Software	\$467	\$156	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$623
Total Capital Costs	\$467	\$2,765	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,232
Taxi/Shuttle/Rideshare										
		Pilot Program		Out Years						Total
Capital Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	
Transformer & Install Cost	\$0	\$75	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75
Electrical Service	\$0	\$441	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$441
EVSE Costs	\$0	\$1,318	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,318
Purchased & SD Software	\$467	\$156	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$623
Total Capital Costs	\$467	\$1,989	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,456
Airport Ground Support Equipment										
		Pilot Program		Out Years						Total
Capital Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	
Transformer & Install Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical Service	\$0	\$912	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$912
EVSE Costs	\$0	\$1,493	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,493
Purchased & SD Software	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Capital Costs	\$0	\$2,406	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,406

1
2 Table MAC-2 below identifies the capital costs for the standard review residential
3 charging program for the years 2019 through 2025, prior to adjustments for overheads and
4 escalation factors.

Table MAC-2									
SB350 Programs - Residential Charging Program									
Capital Costs									
(Excludes escalation and loaders; Includes sales tax)									
(in \$000)									
Residential Home Charging									
		Program Period						Out-Years	
Capital Costs	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total
Transformer & Install Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EVSE Costs	\$0	\$32,229	\$32,229	\$32,229	\$32,229	\$32,229	\$32,229	\$0	\$193,375
Purchased & SD Software	\$7,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,600
Total Capital Costs	\$7,600	\$32,229	\$32,229	\$32,229	\$32,229	\$32,229	\$32,229	\$0	\$200,975

5
6 **B. O&M Costs**

7 Table MAC-3 below identifies the O&M costs for the six priority review projects, prior
8 to any applied loaders and escalators. O&M consists of ongoing service costs which will be

1 provided by either third party vendors (non-labor) or SDG&E internal labor for customer
 2 support, measurement evaluation, advertising, billing support, and equipment maintenance.
 3 O&M costs are also included in Table MAC-3 for years 2020 to 2050 as continued maintenance
 4 is provided for equipment and customer service calls.

O&M Expenses	Electrify Local Highways									Dealership Incentives												
	Pilot Program		Out Years							Total	Pilot Program		Out Years							Total		
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		2018	2019	2020	2021	2022	2023	2024	2025	2026-2050			
Non-Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$494	\$23	\$23	\$23	\$23	\$23	\$23	\$23	\$581	\$1,214	\$0	\$1,790	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,790	
Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$197	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$375	\$662	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total O&M Expenses	\$0	\$691	\$38	\$38	\$38	\$38	\$38	\$38	\$38	\$956	\$1,876	\$0	\$1,790	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,790	
O&M Expenses	MD HD Port Electrification									Fleet Delivery Services												
	Pilot Program		Out Years							Total	Pilot Program		Out Years							Total		
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		2018	2019	2020	2021	2022	2023	2024	2025	2026-2050			
Non-Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$270	\$24	\$24	\$24	\$24	\$24	\$24	\$24	\$587	\$998	\$0	\$262	\$23	\$23	\$23	\$23	\$23	\$23	\$23	\$568	\$965
Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$295	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$375	\$760	\$0	\$197	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$375	\$662
Total O&M Expenses	\$0	\$565	\$39	\$39	\$39	\$39	\$39	\$39	\$39	\$962	\$1,759	\$0	\$459	\$38	\$38	\$38	\$38	\$38	\$38	\$38	\$943	\$1,627
O&M Expenses	Taxi/Shuttle/Rideshare									Airport Ground Support Equipment												
	Pilot Program		Out Years							Total	Pilot Program		Out Years							Total		
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		2018	2019	2020	2021	2022	2023	2024	2025	2026-2050			
Non-Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$815	\$23	\$23	\$23	\$23	\$23	\$23	\$23	\$569	\$1,520	\$0	\$232	\$26	\$26	\$26	\$26	\$26	\$26	\$26	\$648	\$1,035
Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$196	\$15	\$15	\$15	\$15	\$15	\$15	\$15	\$375	\$661	\$0	\$202	\$22	\$22	\$22	\$22	\$22	\$22	\$22	\$550	\$884
Total O&M Expenses	\$0	\$1,011	\$38	\$38	\$38	\$38	\$38	\$38	\$38	\$944	\$2,181	\$0	\$434	\$48	\$48	\$48	\$48	\$48	\$48	\$48	\$1,198	\$1,919

5 Table MAC-4 below identifies the O&M costs for the residential charging program as part of the
 6 SB 350 TE proposals, prior to any adjustment factors. O&M consists of ongoing service costs
 7 which will be provided by either third party vendors (non-labor) or SDG&E internal labor for
 8 customer support, measurement evaluation, advertising, billing support, and equipment
 9 maintenance. O&M costs included in Table MAC-4 for years 2026 to 2041 are for continued
 10 maintenance of charger equipment and customer service calls.
 11

Table MAC-4									
SB350 Programs - Residential Charging Program									
O&M Costs									
(Excludes escalation and loaders; Includes sales tax)									
(in \$000)									
O&M Expenses	Residential Home Charging							Out-Years	
	Program Period								
	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total
Non-Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$175	\$175	\$175	\$175	\$175	\$175	\$36,000	\$37,050
Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$3,983	\$3,983	\$3,983	\$3,983	\$3,983	\$3,983	\$0	\$23,900
Total O&M Expenses	\$0	\$4,158	\$4,158	\$4,158	\$4,158	\$4,158	\$4,158	\$36,000	\$60,950

C. Total Costs Before Adjustments

Table MAC-5 below identifies the total capital and O&M costs for the six priority review projects before adjustments for loaders and escalation. As stated earlier in this testimony, all six priority review projects are each equal to or below \$4 million in costs for the years 2018 and 2019 (see amounts for items a-f), while the total of all six projects combined for the period 2018 and 2019 are equal to or less than \$20 million (see amount for item g).

Table MAC-5																					
SB350 Programs - Priority Review Projects																					
Summary of Total Costs																					
(Excludes escalation and loaders; Includes sales tax)																					
(in \$000)																					
Total Project Costs	Electrify Local Highways								Dealership Incentives												
	Pilot Program		Out Years						Total	Pilot Program		Out Years						Total			
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		
Capital Costs	\$634	\$2,675	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,309	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
O&M Costs	\$0	\$691	\$38	\$38	\$38	\$38	\$38	\$38	\$956	\$1,876	\$0	\$1,790	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,790
Total Project Costs	\$634	\$3,366	\$38	\$38	\$38	\$38	\$38	\$38	\$956	\$5,185	\$0	\$1,790	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,790
Pilot Program	\$4,000 a								\$1,790 b												
Total Project Costs	MD HD Port Electrification								Fleet Delivery Services												
	Pilot Program		Out Years						Total	Pilot Program		Out Years						Total			
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		
Capital Costs	\$0	\$1,841	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,841	\$467	\$2,765	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,232
O&M Costs	\$0	\$565	\$39	\$39	\$39	\$39	\$39	\$39	\$962	\$1,759	\$0	\$459	\$38	\$38	\$38	\$38	\$38	\$38	\$38	\$943	\$1,627
Total Project Costs	\$0	\$2,406	\$39	\$39	\$39	\$39	\$39	\$39	\$962	\$3,599	\$467	\$3,224	\$38	\$38	\$38	\$38	\$38	\$38	\$38	\$943	\$4,859
Pilot Program	\$2,406 c								\$3,691 d												
Total Project Costs	Taxi/Shuttle/Rideshare								Airport Ground Support Equipment												
	Pilot Program		Out Years						Total	Pilot Program		Out Years						Total			
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		
Capital Costs	\$467	\$1,989	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,456	\$0	\$2,406	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,406
O&M Costs	\$0	\$1,011	\$38	\$38	\$38	\$38	\$38	\$38	\$944	\$2,181	\$0	\$434	\$48	\$48	\$48	\$48	\$48	\$48	\$48	\$1,198	\$1,919
Total Project Costs	\$467	\$3,000	\$38	\$38	\$38	\$38	\$38	\$38	\$944	\$4,638	\$0	\$2,840	\$48	\$48	\$48	\$48	\$48	\$48	\$48	\$1,198	\$4,325
Pilot Program	\$3,467 e								\$2,840 f												
Total All Pilot Programs (a-f)	\$18,193 g																				

1 Table MAC-6 below identifies the total capital and O&M costs for the residential
 2 charging program as part of the SB 350 TE proposals before adjustments for loaders and
 3 escalation.

Table MAC-6									
SB350 Programs - Residential Charging Program									
Summary of Total Costs									
(Excludes escalation and loaders; Includes sales tax)									
(in \$000)									
Residential Home Charging									
Total Program Costs	Program Period							Out-Years	
	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total
Capital Costs	\$7,600	\$32,229	\$32,229	\$32,229	\$32,229	\$32,229	\$32,229	\$0	\$200,975
O&M Costs	\$0	\$4,158	\$4,158	\$4,158	\$4,158	\$4,158	\$4,158	\$36,000	\$60,950
Total Program Costs	\$7,600	\$36,387	\$36,387	\$36,387	\$36,387	\$36,387	\$36,387	\$36,000	\$261,925
Total Program Costs Years 2019-2025							<u>\$225,925</u>		

4

5 **D. Adjustments to Capital and O&M Costs**

6 **1. Overhead Loaders**

7 Overhead loaders are used to allocate undistributed company overhead costs across
 8 capital projects and O&M. Overhead costs are those activities and services that are associated
 9 with direct costs, such as payroll taxes and pension and benefits, or are costs that cannot be
 10 economically direct-charged, such as administrative and general overheads. Overhead loaders
 11 used to develop the revenue requirement for both the six priority review projects and the
 12 residential charging program are for illustrative purposes only and are subject to change. The
 13 overhead loader values adhere to the methodology proposed by the Federal Energy Regulatory
 14 Commission (“FERC”)¹ and were derived using the same methodology used in SDG&E’s most
 15 recent GRC filing. If the SB 350 TE proposals are approved, then the Commission-approved
 16 overhead loaders in effect at the time of approval will be used.

¹ FERC guidelines reference the Statement of Federal Financial Accounting Standards 4: Managerial Cost Accounting Standards and Concepts.

2. Escalation of Future Costs

Cost escalation factors are used to reflect the effect of inflation on SDG&E’s costs.

SDG&E’s escalation costs were derived using IHS/Market Global Insight’s 3rd Quarter 2016 utility cost forecast, which was published in late October 2016.

Tables MAC-7 and MAC- 8 show the capital costs for the six priority review projects and the residential charging program adjusted for SDG&E overhead loaders and cost escalation.

Table MAC-7
SB350 Programs - Priority Review Projects
Capital Costs
(Includes escalation, loaders, and sales tax)

(in \$000)

Capital Costs	Electrify Local Highways										Dealership Incentives											
	Pilot Program		Out Years								Total	Pilot Program		Out Years								Total
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	2018		2019	2020	2021	2022	2023	2024	2025	2026-2050			
Transformer & Install Cost	\$0	\$231	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$231	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical Service	\$0	\$864	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$864	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EVSE Costs	\$0	\$2,336	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,336	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Purchased & SD Software	\$1,197	\$402	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,599	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Capital Costs	\$1,197	\$3,833	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,029	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Capital Costs	MD HD Port Electrification										Fleet Delivery Services												
	Pilot Program		Out Years								Total	Pilot Program		Out Years								Total	
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	2018		2019	2020	2021	2022	2023	2024	2025	2026-2050				
Transformer & Install Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$388	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$388
Electrical Service	\$0	\$1,312	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,312	\$0	\$1,280	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,280
EVSE Costs	\$0	\$1,477	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,477	\$0	\$2,112	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,112
Purchased & SD Software	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$882	\$296	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,178
Total Capital Costs	\$0	\$2,789	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,789	\$882	\$4,077	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,958

Capital Costs	Taxi/Shuttle/Rideshare										Airport Ground Support Equipment												
	Pilot Program		Out Years								Total	Pilot Program		Out Years								Total	
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	2018		2019	2020	2021	2022	2023	2024	2025	2026-2050				
Transformer & Install Cost	\$0	\$120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Electrical Service	\$0	\$681	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$681	\$0	\$1,409	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,409
EVSE Costs	\$0	\$1,809	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,809	\$0	\$2,095	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,095
Purchased & SD Software	\$882	\$296	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,178	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Capital Costs	\$882	\$2,906	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,788	\$0	\$3,504	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,504

Table MAC-8
SB350 Programs - Residential Charging Program
Capital Costs
(Includes escalation, loaders, and sales tax)

(in \$000)

Capital Costs	Residential Home Charging								Out-Years 2026-2050	Total
	Program Period									
	2019	2020	2021	2022	2023	2024	2025			
Transformer & Install Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EVSE Costs	\$0	\$40,671	\$41,881	\$43,141	\$44,441	\$45,768	\$47,133	\$0	\$263,034	
Purchased & SD Software	\$14,709	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,709	
Total Capital Costs	\$14,709	\$40,671	\$41,881	\$43,141	\$44,441	\$45,768	\$47,133	\$0	\$277,744	

Tables MAC-9 and MAC-10 show the O&M costs for the six priority review projects and the residential charging program adjusted for SDG&E overhead loaders and cost escalation.

Table MAC-9																				
SB350 Programs - Priority Review Projects																				
O&M Costs																				
(Includes escalation, loaders, and sales tax)																				
(in \$000)																				
O&M Expenses	Electrify Local Highways										Dealership Incentives									
	Pilot Program		Out Years								Pilot Program		Out Years							Total
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		
Non-Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$587	\$28	\$29	\$29	\$30	\$30	\$31	\$966	\$1,731	\$0	\$2,128	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,128
Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$320	\$25	\$26	\$27	\$27	\$28	\$29	\$1,058	\$1,540	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total O&M Expenses	\$0	\$907	\$53	\$55	\$56	\$57	\$59	\$60	\$2,024	\$3,271	\$0	\$2,128	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,128
O&M Expenses	MD HD Port Electrification										Fleet Delivery Services									
	Pilot Program		Out Years								Pilot Program		Out Years							Total
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		
Non-Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$321	\$28	\$29	\$30	\$30	\$31	\$31	\$976	\$1,477	\$0	\$311	\$28	\$28	\$29	\$29	\$30	\$30	\$943	\$1,428
Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$480	\$25	\$26	\$27	\$27	\$28	\$29	\$1,058	\$1,700	\$0	\$320	\$25	\$26	\$27	\$27	\$28	\$29	\$1,058	\$1,541
Total O&M Expenses	\$0	\$801	\$54	\$55	\$56	\$58	\$59	\$60	\$2,035	\$3,177	\$0	\$632	\$53	\$54	\$55	\$57	\$58	\$59	\$2,002	\$2,969
O&M Expenses	Taxi/Shuttle/Rideshare										Airport Ground Support Equipment									
	Pilot Program		Out Years								Pilot Program		Out Years							Total
	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050		
Non-Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$969	\$28	\$28	\$29	\$29	\$30	\$30	\$946	\$2,088	\$0	\$276	\$31	\$32	\$33	\$33	\$34	\$35	\$1,076	\$1,550
Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$319	\$25	\$26	\$27	\$27	\$28	\$29	\$1,058	\$1,539	\$0	\$328	\$37	\$38	\$39	\$40	\$41	\$42	\$1,552	\$2,118
Total O&M Expenses	\$0	\$1,288	\$53	\$54	\$55	\$57	\$58	\$59	\$2,004	\$3,628	\$0	\$604	\$68	\$70	\$72	\$73	\$75	\$77	\$2,628	\$3,669

1

Table MAC-10										
SB350 Programs - Residential Charging Program										
O&M Costs										
(Includes escalation, loaders, and sales tax)										
(in \$000)										
O&M Expenses	Residential Home Charging								2026-2050	Total
	Program Period									
	2019	2020	2021	2022	2023	2024	2025			
Non-Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$212	\$217	\$221	\$225	\$229	\$233	\$55,362	\$56,699	
Labor: Customer Support, Meas. & Eval., Billing, and Maintenance	\$0	\$6,677	\$6,878	\$7,074	\$7,272	\$7,475	\$7,684	\$0	\$43,060	
Total O&M Expenses	\$0	\$6,889	\$7,094	\$7,295	\$7,497	\$7,705	\$7,918	\$55,362	\$99,759	

2

3

E. Total Costs After Adjustments

4

After updating the capital and O&M costs with the appropriate adjustment factors noted

5

above, the six priority review projects and the residential charging program for purposes of

6

calculating the revenue requirement are shown in Table MAC-11 and MAC-12 below.

Table MAC-11													
SB350 Programs - Priority Review Projects													
Summary of Total Costs													
(Includes escalation, loaders, and sales tax)													
(in \$000)													
Electrify Local Highways													
		Pilot Program		Out Years									
Total Project Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total			
Capital Costs	\$1,197	\$3,833	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,029			
O&M Costs	\$0	\$907	\$53	\$55	\$56	\$57	\$59	\$60	\$2,024	\$3,271			
Total Project Costs	\$1,197	\$4,740	\$53	\$55	\$56	\$57	\$59	\$60	\$2,024	\$8,300			
Pilot Program	\$5,937 a												
Dealership Incentives													
		Pilot Program		Out Years									
Total Project Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total			
Capital Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
O&M Costs	\$0	\$2,128	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Total Project Costs	\$0	\$2,128	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Pilot Program	\$2,128 b												
MD HD Port Electrification													
		Pilot Program		Out Years									
Total Project Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total			
Capital Costs	\$0	\$2,789	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,789			
O&M Costs	\$0	\$801	\$54	\$55	\$56	\$58	\$59	\$60	\$2,035	\$3,177			
Total Project Costs	\$0	\$3,589	\$54	\$55	\$56	\$58	\$59	\$60	\$2,035	\$5,966			
Pilot Program	\$3,589 c												
Fleet Delivery Services													
		Pilot Program		Out Years									
Total Project Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total			
Capital Costs	\$882	\$4,077	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,958			
O&M Costs	\$0	\$632	\$53	\$54	\$55	\$57	\$58	\$59	\$2,002	\$2,969			
Total Project Costs	\$882	\$4,708	\$53	\$54	\$55	\$57	\$58	\$59	\$2,002	\$7,927			
Pilot Program	\$5,590 d												
Taxi/Shuttle/Rideshare													
		Pilot Program		Out Years									
Total Project Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total			
Capital Costs	\$882	\$2,906	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,788			
O&M Costs	\$0	\$1,288	\$53	\$54	\$55	\$57	\$58	\$59	\$2,004	\$3,628			
Total Project Costs	\$882	\$4,193	\$53	\$54	\$55	\$57	\$58	\$59	\$2,004	\$7,416			
Pilot Program	\$5,075 e												
Airport Ground Support Equipment													
		Pilot Program		Out Years									
Total Project Costs	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total			
Capital Costs	\$0	\$3,504	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,504			
O&M Costs	\$0	\$604	\$68	\$70	\$72	\$73	\$75	\$77	\$2,628	\$3,669			
Total Project Costs	\$0	\$4,108	\$68	\$70	\$72	\$73	\$75	\$77	\$2,628	\$7,172			
Pilot Program	\$4,108 f												
Total All Pilot Programs (a-f)	\$26,428 g												

Table MAC-12										
SB350 Programs - Residential Charging Program										
Summary of Total Costs										
(Includes escalation, loaders, and sales tax)										
(in \$000)										
Residential Home Charging										
		Program Period							Out-Years	
Total Program Costs	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total	
Capital Costs	\$14,709	\$40,671	\$41,881	\$43,141	\$44,441	\$45,768	\$47,133	\$0	\$277,744	
O&M Costs	\$0	\$6,889	\$7,094	\$7,295	\$7,497	\$7,705	\$7,918	\$55,362	\$99,759	
Total Program Costs	\$14,709	\$47,561	\$48,975	\$50,435	\$51,938	\$53,473	\$55,051	\$55,362	\$377,503	
Total Program Period Costs Years 2019-2025	\$322,141									

IV. REVENUE REQUIREMENT

The revenue requirement represents the total dollars that need to be collected each year in order to cover the costs and the returns associated with the six priority review projects and the residential charging program. Specifically, the components that make up the revenue requirement are: return of capital (via depreciation), O&M costs, debt and equity returns, federal and state taxes, franchise fees, and uncollectible revenue. The project by project revenue requirements are broken out by component and presented in Appendix A. A more detailed description of the components of the revenue requirement is presented in the sections that follow.

1 **A. Return of Capital**

2 The return of capital is equal to annual book depreciation which uses the straight-line
3 remaining life method.² Consistent with the FERC Code of Federal Regulations, SDG&E
4 assumes the following useful lives for each asset category as presented in Table MAC-13.

Asset Category	FERC Useful Life Years
Chargers	16
New Electric Service	55
Transformers & Installation	34
Billing System Integration	5
Severs & Hardware	5

5
6 **B. O&M Costs**

7 O&M costs represent the total costs required to ensure the ongoing successful operation
8 of the six priority review projects and the residential charging program. O&M costs are included
9 in the revenue requirement and treated as a pass-through item on a dollar for dollar basis.

10 **C. Return**

11 The current authorized annual return components of the revenue requirement for the six
12 priority review projects and the residential charging program consist of return on debt (5.00
13 percent), return on preferred stock (6.22 percent), and return on equity (10.30 percent).³ These
14 values are then weighted by their authorized capital allocation percentages and multiplied by the

² This method is consistent with Standard Practice U-4, Determination of Straight-Line Remaining Life Depreciation Accruals. The CPUC issued this standard practice in 1961 as a guide for determining proper depreciation accruals.

³ Adopted in D.12-12-034.

1 average rate base⁴ to determine the revenue requirement for each return component. The
2 authorized weighted returns are listed in Table MAC-14 below.

Table-MAC-14			
SDG&E Rate of Return (ROR) Calculation			
	Capital		Authorized
	Ratio %	Cost	Weighted Cost
Long-Term Debt	45.25%	5.00%	2.26%
Preferred Equity	2.75%	6.22%	0.17%
Common Equity	52.00%	10.30%	5.36%
	100.00%		7.79%

3

4

D. Tax

5

1. Property Tax

6

7

8

The annual property tax expense for the six priority review projects and the residential charging program is calculated by multiplying the period ending rate base by SDG&E’s effective property tax rate of 1.466 percent.⁵

⁴ D.16-06-054 at 216 (“SDG&E defines rate base as, ‘the net investment of property, plant, equipment and other assets that SDG&E has acquired or constructed to provide utility services to its customers’”).
⁵ Consistent with previous filings, SDG&E’s effective property tax rate is calculated by dividing the total property taxes due by county (per SDG&E property tax bills) by the total assessed value by county.

1 **2. Federal and State Income Tax**

2 **a. Federal Income Tax**

3 Federal income tax expense is calculated by multiplying federal Earnings before Income
4 Tax (“EBIT”)⁶ by the current corporate federal income tax rate of 35 percent. In accordance
5 with established Commission policy, federal income taxes are computed on a normalized basis
6 for utility ratemaking purposes.⁷ An annual breakout of the federal tax component of the
7 revenue requirement is provided in Appendix A.

8 **b. State Income Tax**

9 State income tax expense is calculated by multiplying state EBIT⁸ by the current
10 California Corporation Franchise Tax rate of 8.84 percent. State income taxes are not
11 normalized, but instead are calculated on a flow-through basis.⁹

12 **E. Franchise Fees and Uncollectible**

13 Franchise Fees and Uncollectible (“FF&U”) are the final calculated components of the
14 revenue requirement. Franchise fees cover the payments made to counties and incorporated
15 cities pursuant to local ordinances granting a franchise to the company to place utility property in
16 the public right of way. Uncollectibles represent the estimated uncollectible expenses incurred

⁶ For ratemaking purposes, federal EBIT is calculated as the sum of Common and Preferred Stock Returns minus prior year state taxes, multiplied by a tax gross-up factor. The tax gross-up factor is mathematically required to compute a pre-tax earnings number that, once taxes are applied, results in SDG&E’s achievement of its authorized rate of return.

⁷ Normalization requires that any tax adjustments for deferred taxes (due to accelerated federal tax depreciation methods) are not included when calculating the annual required taxes due from ratepayers through the revenue requirement.

⁸ For ratemaking purposes, state EBIT is calculated as the sum of Common and Preferred Stock Returns minus any deferred state income tax, multiplied by a tax gross-up factor. The tax gross-up factor is mathematically required to compute a pre-tax earnings number that, once taxes are applied, results in SDG&E’s achievement of its authorized rate of return.

⁹ Consistent with Commission policy, flow-through accounting treats temporary differences between recognition of expenses for book purposes and their tax return treatment as current adjustments to the revenue requirement.

1 by SDG&E. FF&U is calculated by multiplying the sum of all other revenue requirement
2 components by the authorized multipliers¹⁰ for franchise fees and uncollectibles.

3 **V. CONCLUSION**

4 The final revenue requirements for the six priority review projects and the residential
5 charging program broken out by component, are summarized in Appendix A. This concludes my
6 direct testimony.

¹⁰ FF&U multipliers used for these revenue requirements are consistent with those supported in D.16-06-054.

1 **VI. STATEMENTS OF QUALIFICATIONS**

2 My name is Michael A. Calabrese. My business address is 8330 Century Park Court, San
3 Diego, California 92123. I am employed by SDG&E as the Business Planning Manager for
4 Clean Transportation. In my current role, I am responsible for managing, directing and
5 coordinating financial analysis and revenue requirements for Electric Transportation projects.

6 I received a Bachelor of Science degree in Accounting and Management (double major)
7 from California State University, Northridge, in 1981. I am a Certified Public Accountant and a
8 member of the American Institute of Certified Public Accountants and the California Society of
9 Certified Public Accountants. I continue to maintain my license with practice rights by adhering
10 to continuing professional education requirements. I began my employment in June 1981 in the
11 Internal Audit Department of Pacific Lighting Corporation, the then parent company of the
12 Southern California Gas Company. In 1982, I joined Pacific Interstate Company, a regulated
13 subsidiary of Pacific Lighting Corporation, and held various levels of increasing responsibility,
14 including Supervisor of Fixed Assets, Budgeting and Payroll. In February 1994, I joined
15 Southern California Gas Company as a Senior Depreciation Analyst in support of the company's
16 GRC. Since that time I have held various areas of increasing responsibility and most recently
17 Director of Accounting Operations before transferring to SDG&E.

APPENDIX A

San Diego Gas & Electric Electrify Local Highways Annual Revenue Requirement

(000's)

	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total
									(1)	
FF&U:	(31)	57	47	44	43	40	21	19	268	508
O&M:	-	907	53	55	56	57	59	60	2,024	3,271
Working Capital:	-	-	-	-	-	-	-	-	-	-
Depreciation:	-	338	500	500	500	500	226	171	2,284	5,019
Return on Common:	-	132	226	197	170	144	124	116	1,170	2,280
Return on Preferred:	-	4	7	6	5	5	4	4	37	73
Return On Debt:	-	56	95	83	72	61	52	49	494	963
Federal Taxes:	(737)	111	342	280	270	255	46	66	640	1,271
State Taxes:	(186)	10	85	74	72	70	18	19	181	342
Property Taxes:	-	-	27	55	54	47	39	34	351	607
Total	(955)	1,614	1,383	1,295	1,242	1,179	588	537	7,450	14,334

(1) The amounts in this column extend beyond 2050 due to the impact of assets book and tax lives on rate base.

San Diego Gas & Electric Dealership Incentives Annual Revenue Requirement

(000's)

	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total
FF&U:	-	79	-	-	-	-	-	-	-	79
O&M:	-	2,128	-	-	-	-	-	-	-	2,128
Working Capital:	-	-	-	-	-	-	-	-	-	-
Depreciation:	-	-	-	-	-	-	-	-	-	-
Return on Common:	-	-	-	-	-	-	-	-	-	-
Return on Preferred:	-	-	-	-	-	-	-	-	-	-
Return On Debt:	-	-	-	-	-	-	-	-	-	-
Federal Taxes:	-	-	-	-	-	-	-	-	-	-
State Taxes:	-	-	-	-	-	-	-	-	-	-
Property Taxes:	-	-	-	-	-	-	-	-	-	-
Total	-	2,208	-	-	-	-	-	-	-	2,208

APPENDIX A

San Diego Gas & Electric MD HD Port Electrification Annual Revenue Requirement

(000's)

	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total
									(1)	
FF&U:	-	36	18	17	17	17	16	16	266	402
O&M:	-	801	54	55	56	58	59	60	2,035	3,177
Working Capital:	-	-	-	-	-	-	-	-	-	-
Depreciation:	-	44	118	118	118	118	118	118	1,917	2,667
Return on Common:	-	53	132	123	117	110	104	98	1,290	2,028
Return on Preferred:	-	2	4	4	4	4	3	3	41	65
Return On Debt:	-	22	56	52	49	47	44	42	545	857
Federal Taxes:	-	33	80	67	66	62	59	55	713	1,134
State Taxes:	-	6	17	14	14	14	14	14	206	299
Property Taxes:	-	-	13	31	34	32	30	29	378	547
Total	-	995	491	481	474	461	447	434	7,390	11,175

(1) The amounts in this column extend beyond 2050 due to the impact of assets book and tax lives on rate base.

San Diego Gas & Electric Fleet Delivery Services Annual Revenue Requirement

(000's)

	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total
									(1)	
FF&U:	(23)	43	42	40	38	36	22	21	313	532
O&M:	-	632	53	54	55	57	58	59	2,002	2,969
Working Capital:	-	-	-	-	-	-	-	-	-	-
Depreciation:	-	265	412	412	412	412	209	169	2,600	4,889
Return on Common:	-	121	226	201	179	157	140	131	1,542	2,697
Return on Preferred:	-	4	7	6	6	5	4	4	49	86
Return On Debt:	-	51	96	85	76	66	59	55	651	1,139
Federal Taxes:	(543)	96	288	237	229	216	61	74	848	1,506
State Taxes:	(137)	9	69	60	59	57	19	20	247	402
Property Taxes:	-	-	26	55	55	49	43	39	456	722
Total	(704)	1,221	1,218	1,149	1,108	1,055	615	572	8,708	14,943

(1) The amounts in this column extend beyond 2050 due to the impact of assets book and tax lives on rate base.

APPENDIX A

San Diego Gas & Electric Taxi/Shuttle/Rideshare Annual Revenue Requirement

(000's)

	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total
									(1)	
FF&U:	(23)	65	36	34	32	31	17	15	221	427
O&M:	-	1,288	53	54	55	57	58	59	2,004	3,628
Working Capital:	-	-	-	-	-	-	-	-	-	-
Depreciation:	-	251	373	373	373	373	171	131	1,730	3,776
Return on Common:	-	99	170	149	129	109	94	88	889	1,727
Return on Preferred:	-	3	5	5	4	3	3	3	28	55
Return On Debt:	-	42	72	63	54	46	40	37	376	730
Federal Taxes:	(543)	83	255	208	201	189	35	50	486	963
State Taxes:	(137)	7	63	55	54	52	13	14	137	259
Property Taxes:	-	-	20	42	41	35	30	26	267	460
Total	(704)	1,837	1,047	982	944	896	461	423	6,137	12,025

(1) The amounts in this column extend beyond 2050 due to the impact of assets book and tax lives on rate base.

San Diego Gas & Electric Airport Ground Support Equipment Annual Revenue Requirement

(000's)

	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050	Total
									(1)	
FF&U:	-	30	23	22	22	21	21	20	321	479
O&M:	-	604	68	70	72	73	75	77	2,628	3,669
Working Capital:	-	-	-	-	-	-	-	-	-	-
Depreciation:	-	59	159	159	159	159	159	159	2,369	3,381
Return on Common:	-	66	165	154	146	137	129	121	1,466	2,385
Return on Preferred:	-	2	5	5	5	4	4	4	47	76
Return On Debt:	-	28	70	65	62	58	55	51	619	1,008
Federal Taxes:	-	41	100	84	82	77	73	68	808	1,333
State Taxes:	-	8	22	18	18	18	18	18	231	353
Property Taxes:	-	-	17	39	42	40	38	35	433	643
Total	-	839	630	616	607	589	571	554	8,921	13,326

(1) The amounts in this column extend beyond 2050 due to the impact of assets book and tax lives on rate base.

APPENDIX A

San Diego Gas & Electric Residential Charging Program Annual Revenue Requirement

(000's)	2018	2019	2020	2021	2022	2023	2024	2025	2026-2050 (1)	Total
FF&U:	-	(384)	646	863	1,147	1,424	1,687	1,796	18,139	25,318
O&M:	-	-	6,889	7,094	7,295	7,497	7,705	7,918	55,362	99,759
Working Capital:	-	-	-	-	-	-	-	-	-	-
Depreciation:	-	-	3,986	6,593	9,279	12,047	14,897	14,804	220,475	282,082
Return on Common:	-	-	1,536	3,482	5,353	7,144	8,859	10,576	85,925	122,875
Return on Preferred:	-	-	49	111	171	228	283	338	2,744	3,924
Return On Debt:	-	-	649	1,471	2,261	3,018	3,742	4,468	36,297	51,905
Federal Taxes:	-	(9,063)	4,155	3,655	4,780	5,789	6,489	5,904	46,568	68,276
State Taxes:	-	(2,289)	842	1,011	1,315	1,620	1,860	1,779	12,778	18,917
Property Taxes:	-	-	-	307	874	1,383	1,871	2,337	26,241	33,012
Total	-	(11,736)	18,752	24,587	32,475	40,151	47,392	49,920	504,528	706,070

(1) The amounts in this column extend beyond 2050 due to the impact of assets book and tax lives on rate base.