

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



FILED

Application of San Diego Gas & Electric Company (U 902 M) for Approval of The SDG&E Solar Energy Project	Application 08-07-017 (Filed July 11, 2008)	04/08/24 10:53 AM A0807017
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**SAN DIEGO GAS & ELECTRIC COMPANY'S (U902M) ANNUAL
REPORT ON THE SOLAR ENERGY PROJECT**

PUBLIC VERSION

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April 8, 2024

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**SAN DIEGO GAS & ELECTRIC COMPANY’S (U902M) ANNUAL
COMPLIANCE REPORT ON THE SOLAR ENERGY PROJECT**

Pursuant to Decision (“D.”) 10-09-016, San Diego Gas and Electric Company (“SDG&E”) respectfully submits its Annual Compliance Report on the Solar Energy Project (“SEP”) program.

I. INTRODUCTION

The Solar Energy Project (“SEP”) is a five-year program¹ adopted by the California Public Utilities Commission (“CPUC”) in D.10-09-016 (“Decision”), issued on September 3, 2010, to spur the development of distributed solar photovoltaic (“PV”) projects in SDG&E’s service territory. As originally approved, the Decision allowed SDG&E to build and own up to 26 MWdc² PV, tied to SDG&E’s distribution system, with individual projects no greater in size than 5 MW.³ In the Decision, the CPUC instructed SDG&E to file an annual compliance report on the operating performance of the SEP projects.⁴

On December 10, 2010, SDG&E filed Advice Letter (“AL”) 2210-E requesting approval of SDG&E’s solicitation process where it sought PV projects to be developed and constructed by

¹ SDG&E received approval for a one-time six-month extension to the SEP program from the Executive Director of the Energy Division on November 20, 2015 which established the new SEP termination date of October 11, 2016.

² Capacity shall be listed as direct current (“dc”) unless otherwise noted.

³ Decision at 26.

⁴ See Ordering Paragraph (OP) 9 at 49-50.

third parties and owned by SDG&E as utility-owned generation (“UOG”). On April 11, 2011, Energy Division issued a disposition letter approving AL 2210-E and the implementation and administration of the SEP program.

SDG&E issued a competitive solicitation on September 6, 2011 for a third party Engineering, Procurement, and Construction (“EPC”) contractor and executed a turnkey agreement on June 20, 2012. On June 20, 2012, SDG&E also executed a 10-year O&M agreement with the Phase 1 approved EPC vendor at a cost less than the CPUC cap of \$25/kW-yr.⁵ This O&M agreement is integral with the warranties afforded under the EPC contract. Subsequent to the competitive solicitation for a third-party contractor, SDG&E filed AL 2374-E on June 20, 2012 and AL 2374-E-A on July 20, 2012 seeking CPUC approval of the executed contract and to procure up to 17 MW of UOG for the SEP program.⁶

The solicitation resulted in an award for eight sites located on SDG&E property with the potential to accommodate 17 MW of solar capacity. As of March 2013, four sites had been forecasted to be no longer under the \$3.50/W price cap,⁷ if constructed, due to adverse geotechnical and/or higher than expected interconnection costs. Development activities on these sites ceased.

Environmental permitting pre-application meetings were initiated in July 2013, and an additional site was dropped in October 2013, due to higher than expected permitting costs, which pushed forecasted construction costs beyond the \$3.50/W cap. Formal applications were submitted for the remaining sites Q1 2014 and Q2 2014. After extensive discussions and

⁵ Decision at 2 and Appendix A.

⁶ AL 2374-E was approved by the CPUC on August 23, 2012 with an effective date of July 20, 2012. AL 2374-E-A was approved by the CPUC on August 23, 2012 with an effective date of August 5, 2012.

⁷ *Id.*

application revisions another site was dropped in December 2014, due to a shrinking project footprint together with increasing permit and mitigation requirements, which pushed forecasted costs beyond the cap.

Two sites remained viable with the potential to accommodate 7.2 MW and continued through the development process. SDG&E received environmental permitting approval from San Diego County in October and December 2015 for the two sites. SDG&E and its EPC contractor entered into contract for construction of the two facilities March 1, 2016. Construction began on or about July 1, 2016 for both sites.

At the first site, a 2.2 MW facility (“Pala Project”), a sub-contractor to the EPC contractor graded out of bounds impacting less than 1000 square feet of coastal sage scrub. The on-site biological monitor halted grading activity, and the excursion was promptly self-reported to the County. Work was halted for the better part of three months while a mitigation plan was agreed upon and enacted. By December, the EPC was in contractual default. In late April 2017, the contract for the Pala Project site was terminated. During late spring and summer of 2017, SDG&E proceeded to stabilize the site and the project was formally terminated.

The second remaining site, a 5 MW facility (“Creelman or Ramona Solar Project”) was largely constructed, but failed to make Substantial Completion by September 23, 2016. By December 2016, the EPC was in contractual default. In February 2017, work resumed by the lead subcontractor. On or about March 22, 2017, the site began delivering to the grid full output, but never achieved Substantial Completion under the contract. Remote monitoring was not effectuated until April 21, 2017. SDG&E deemed commercial operation effective April 1, 2017.

II. REPORTING ON THE UTILITY-OWNED GENERATION PORTION OF THE SOLAR ENERGY PROJECT

- a. A description of all UOG facilities for which work has been initiated or completed in the previous year, including: capital costs, and operations and maintenance expenses, generating capacity, type of technology, annual average expected generation, description of the site (existing SDG&E-owned land or newly acquired/leased, land/lease cost, proximity to substation), and progress toward completion.**

The Creelman Project (CAISO name: Ramona Solar Project) was developed and completed in 2017. No other projects were started or completed in 2023.

- b. A Calculation of the Levelized Cost of Energy (“LCOE”) for each UOG facility that is completed and interconnected to the grid. This calculation shall include workpapers showing actual amounts for all cost and electrical output entries used to calculate the LCOE.**

The LCOE for Ramona is \$0.77/kWh. Supporting workpapers are provided in Attachment A.

- c. Electrical output by month for the previous year for each UOG facility that is completed and interconnected to the grid.**

Creelman	Gross (MWH)	Net (MWH)
January 2023		
February 2023		
March 2023		
April 2023	66	64
May 2023	369	367
June 2023	393	390
July 2023	381	378
August 2023	402	399
September 2023	318	315
October 2023	358	355
November 2023	255	252
December 2023	193	189
Total 2023	2,735	2,709

- d. **A description of the project specific distribution and network upgrades needed to facilitate the PV PPA Program. The known or projected costs of those upgrades, associated with interconnecting each UOG facility, including all distribution and network upgrades, a listing of the UOG projects identified as triggering the need for network upgrades, and identification of the UOG projects implemented notwithstanding the need for network upgrades, and the cost of those network upgrades.**

No distribution upgrades have been needed.

Respectfully submitted,

By: /s/ Walter C. Waidelich

WALTER C. WAIDELICH

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Attachment A

2023 SEP LCOE

PUBLIC VERSION

	Total	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual Revenue Requirement	39,697,839	1,426,137	1,763,350	1,999,987	2,027,272	2,008,772	1,955,718	2,106,067	2,074,722	1,975,908	1,909,308	1,841,991	1,773,041	1,704,872
Annual Energy (kWhac)	174,011,139	6,590,000	7,774,000	6,783,000	7,224,617	2,110,236	29,931	2,735,000	8,157,877	8,117,088	8,076,502	8,036,120	7,995,939	7,955,959
Avg \$/(kWhac)	\$ 2.86	\$ 0.22	\$ 0.23	\$ 0.29	\$ 0.28	\$ 0.95	\$ 65.34	\$ 0.77	\$ 0.25	\$ 0.24	\$ 0.24	\$ 0.23	\$ 0.22	\$ 0.21

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Annual Revenue Requirement	1,636,244	1,567,603	1,499,153	1,430,816	1,362,563	1,294,396	1,226,317	1,158,328	1,090,429	1,022,625	954,915	887,302
Annual Energy (kWhac)	7,916,180	7,876,599	7,837,216	7,798,030	7,759,040	7,720,244	7,681,643	7,643,235	7,605,019	7,566,994	7,529,159	7,491,513
Avg \$/(kWhac)	\$ 0.21	\$ 0.20	\$ 0.19	\$ 0.18	\$ 0.18	\$ 0.17	\$ 0.16	\$ 0.15	\$ 0.14	\$ 0.14	\$ 0.13	\$ 0.12

Solar Energy Project ~ Ramona Solar Energy (Creelman) LCOE Data
 Capital\$: \$16,777,556 2023
 Spare Parts (non-capital)\$: \$0 2023

Year	Creelman (kWdc)	Forecast Production (kWhac)	Expected Production (kWhac)	Actual Production (kWhac)	Performance %	LCOE Energy (kWhac)	CPUC O&M Cost Cap Forecast	Actual O&M	LCOE O&M	Notes
2017	4,953.9	8,449,200	7,359,938	6,590,000	90%	6,590,000	\$140,072	\$33,996	\$33,996	Facility delivery started 4-1-2017. Expected Production based on April thru December
2018	4,929.1	8,406,954	8,712,072	7,774,000	89%	7,774,000	\$142,874	\$66,647	\$66,647	
2019	4,904.5	8,364,919	9,444,318	6,783,000	72%	7,855,000	\$145,731	\$36,823	\$36,823	
2020	4,880.0	8,323,095	7,700,000	7,224,617	94%	8,323,095	\$148,646	\$58,009	\$58,009	
2021			5,372,618	2,110,236	39%					
2022			3,121,595	29,931	1%					
2023			1,625,056	2,735,000	168%					
2024			-	-						
2025			-	-						
2026			-	-						
2027			-	-						
2028			-	-						
2029			-	-						
2030			-	-						
2031			-	-						
2032			-	-						
2033			-	-						
2034			-	-						
2035			-	-						
2036			-	-						
2037			-	-						
2038			-	-						
2039			-	-						
2040			-	-						
2041			-	-						

Notes

Starting energy forecast numbers based on first year output PV Syst model provided by IES dated 12/16/2016

Annual Degradation: 0.5%

Energy numbers are in units of kWh AC input to the Grid

Expected Production is the hypothetical energy production for actual solar insolation and temperatures in the given year

Capacity numbers are in units of kW DC STC Nominal

**BEFORE THE PUBLIC UTILITIES
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**DECLARATION OF DANIEL BAERMAN
REGARDING CONFIDENTIALITY OF CERTAIN DATA**

I, Daniel Baerman, do declare as follows:

1. I am the Director of Electric Generation for San Diego Gas & Electric Company (“SDG&E”). I have reviewed the Attachment A to SDG&E’s Annual Compliance Report on the Solar Energy Project (“Report”). In addition, I am personally familiar with the facts and representations in this Declaration and, if called upon to testify, I could and would testify to the following based upon my personal knowledge and/or belief.

2. I hereby provide this Declaration in accordance with D.06-06-066, *et seq.* to demonstrate that the confidential information (“Protected Information”) provided in the Report falls within the scope of data protected as confidential pursuant to the confidentiality matrix attached to the Commission’s confidentiality decision, D.06-06-066, as amended, (the “IOU Matrix”) and under relevant statutory provisions.^{1/}

^{1/} The IOU Matrix is derived from the statutory protections extended to non-public market sensitive and trade secret information. (See D.06-06-066, *mimeo*, Ordering Paragraph 1). The Commission is obligated to act in a manner consistent with applicable law. The analysis of protection afforded under the Matrix must always produce a result that is consistent with the relevant underlying statutes; if information is eligible for statutory protection, it must be protected under the Matrix. (See *Southern California Edison Co. v. Public Utilities Comm.* 2000 Cal. App. LEXIS 995, *38-39) Thus, by claiming applicability of the Matrix, SDG&E relies upon and simultaneously claims the protection of applicable statutory provisions including, but not limited to, Public Utilities Code §§ 454.5(g) and 583, and Govt. Code § 6254(k).

3. In D.06-06-066, *et seq.*, the Commission adopted rules governing confidentiality of certain categories of electric procurement data submitted to the Commission by investor owned utilities (“IOUs”) and energy service providers (“ESPs”). The Commission established two matrices – one applicable to IOUs, the other to ESPs – setting forth categories and sub-categories of data and providing a confidentiality designation for each.^{2/}

4. To the extent information matches an IOU Matrix category, it is entitled to the protection the IOU Matrix provides for that category of information. In addition, the Commission has made clear that information must be protected where “it matches a Matrix category exactly . . . or consists of information from which that information may be easily derived.”^{3/} In order to claim the protection afforded by the IOU Matrix, the party seeking confidential treatment must establish:

- 1) That the material it is submitting constitutes a particular type of data listed in the IOU Matrix,
- 2) Which category or categories in the IOU Matrix the data correspond to,
- 3) That it is complying with the limitations on confidentiality specified in the IOU Matrix for that type of data,
- 4) That the information is not already public, and
- 5) That the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.^{4/}

^{2/} D.06-06-066, as amended by D.07-05-032, *mimeo*, Appendices 1 and 2.

^{3/} *Administrative Law Judge’s Ruling on San Diego Gas & Electric Company’s April 3, 2007 Motion to File Data Under Seal*, issued May 4, 2007 in R.06-05-027, p. 2 (emphasis added).

^{4/} D.06-06-066, as amended by D.07-05-032, *mimeo*, p. 81, Ordering Paragraph 2.

5. In accordance with the Commission’s direction, SDG&E demonstrates in table form below that the instant confidentiality request satisfies the requirements of D.06-06-066. *et seq.*^{5/}

Data at issue	D.06-06-066 Matrix Requirements	How moving party meets requirements
Highlighted cells in “CPUC O&M Cost Cap Forecast”, “Actual O&M” and “LCOE O&M” columns of Attachment A to the Report.	Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix	Forecasted costs for the Ramona resource.
	Identify the IOU Matrix category or categories to which the data corresponds	This information is protected under IOU Matrix Category II.B.1.
	Affirm that the IOU is complying with the limitations on confidentiality specified in the IOU Matrix for that type of data	In accordance with the limitations on confidentiality set forth in the IOU Matrix, SDG&E requests that the information be kept confidential for a period of three years.
	Affirm that the information is not already public	SDG&E has not publicly disclosed this information and is not aware that it has been disclosed by any other party.
	Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.	The information was requested in granular, non-aggregated form. Thus, it would not be possible to provide a complete response if the data were to be aggregated, redacted, summarized or masked.

^{5/} See, *Administrative Law Judge’s Ruling on San Diego Gas & Electric Company’s Motions to File Data Under Seal*, issued April 30 in R.06-05-027, p. 7, Ordering Paragraph 3 (“In all future filings, SDG&E shall include with any request for confidentiality a table that lists the five D.06-06-066 Matrix requirements, and explains how each item of data meets the matrix.”)

Highlighted cells in “Creelman (kWdc),” “Forecast Production (kWhac)” and “LCOE Energy (kWhac)” columns of Attachment A to the Report.	Demonstrate that the material submitted constitutes a particular type of data listed in the IOU Matrix	Forecasted generation volumes for the Ramona resource.
	Identify the IOU Matrix category or categories to which the data corresponds	This information is protected under IOU Matrix Category IV.A.
	Affirm that the IOU is complying with the limitations on confidentiality specified in the IOU Matrix for that type of data	In accordance with the limitations on confidentiality set forth in the IOU Matrix, SDG&E requests that the information be kept confidential for a period of three years.
	Affirm that the information is not already public	SDG&E has not publicly disclosed this information and is not aware that it has been disclosed by any other party.
	Affirm that the data cannot be aggregated, redacted, summarized, masked or otherwise protected in a way that allows partial disclosure.	The information was requested in granular, non-aggregated form. Thus, it would not be possible to provide a complete response if the data were to be aggregated, redacted, summarized or masked.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Executed this on this 8th day of April, 2024, at San Diego, California.



Daniel Baerman
Director of Electric Generation