

RESOLUTION NO. 22-35

RESOLUTION OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT MAKING FINDINGS, AUTHORIZING THE GENERAL MANAGER TO EXECUTE POWER PURCHASE AGREEMENTS AND EASEMENT AGREEMENTS WITH EAST AVENUE Q SOLAR PROJECT 2022, LLC, AND EAST AVENUE SOUTH SOLAR PROJECT, LLC, TO BUILD, OWN AND OPERATE A SOLAR ARRAYS SYSTEM AT THE DISTRICT HEADQUARTERS AND 6MG RESERVOIR SITE

WHEREAS, it is the policy of the State of California and the intent of the State Legislature to promote all feasible means of energy conservation and all feasible uses of alternative energy supply sources; and

WHEREAS, Palmdale Water District (“District”) desires to reduce the steadily rising costs of meeting the energy needs at its facilities; and

WHEREAS, TerraVerde Energy, LLC (“TerraVerde”), has provided the District with analysis showing the benefits of implementing certain energy conservation measures through the installation of certain solar photovoltaic and battery energy storage facilities, and TerraVerde’s analysis (“Analysis”) is attached hereto as Exhibit A and made part hereof by this reference; and

WHEREAS, the District proposes to enter into a power purchase agreements and related contract documents (“Power Purchase Agreement”) with East Avenue Q Solar Project 2022, LLC, and East Avenue South Solar Project 2022, LLC, (“Providers”), pursuant to which Providers will design, construct, install, maintain, operate, and own on District property certain energy saving improvements consisting of solar photovoltaic facilities and battery storage systems and arrange with the local utility for interconnection of the facilities, which will generate energy for the sites on which such facilities are located; and

WHEREAS, Providers are wholly-owned subsidiaries of Distributed Solar Development, LLC (“DSD”); and

WHEREAS, the sites where such solar photovoltaic and battery energy storage facilities (“Project”) will be located are: Palmdale Water District Headquarters, and 6MG Tank; and

WHEREAS, the Analysis includes data showing that the anticipated cost to the District for the electrical energy provided by the Project will be less than the anticipated marginal cost to the District of electrical energy that would have been consumed by the District in the absence of those purchases; and

WHEREAS, the Board proposes to enter into Power Purchase Agreements and Easement Agreements substantially in the form presented at this meeting, subject to such changes, insertions or omissions as the General Manager or his designee reasonably deems necessary following the Board’s adoption of this Resolution; and

WHEREAS, pursuant to Government Code section 4217.12, the Board has held a public hearing, public notice of which was given at least two weeks in advance, to receive public comment.

NOW, THEREFORE, based upon the above-referenced recitals, the Board hereby finds, determines and orders as follows:

1. The Board finds that the terms of the Power Purchase Agreements and Easement Agreements are in the best interests of the District.

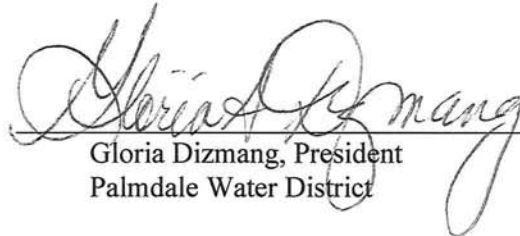
2. In accordance with Government Code section 4217.12, and based on data provided by the Analysis, the Board finds that the anticipated cost to the District for electrical energy provided by the Project under the Power Purchase Agreements and Easement Agreements will be less than the anticipated marginal cost to the District of electrical energy that would have been consumed by the District in the absence of those purchases.

3. The Board hereby approves the Power Purchase Agreements and Easement Agreements, both of which shall be subject to such changes, insertions or omissions as the District's General Manager or his designee reasonably deems necessary.

4. The District's General Manager or designee is hereby authorized and directed to negotiate any further changes, insertions and omissions to the Power Purchase Agreements and Easement Agreements as he reasonably deems necessary, and thereafter to execute and deliver the Power Purchase Agreements and Easement Agreements following the Board's adoption of this Resolution. The District's General Manager or designee is further authorized and directed to execute and deliver any and all papers, instruments, opinions, certificates, affidavits and other documents and to do or cause to be done any and all other acts and things necessary or proper for carrying out this resolution and said agreements.

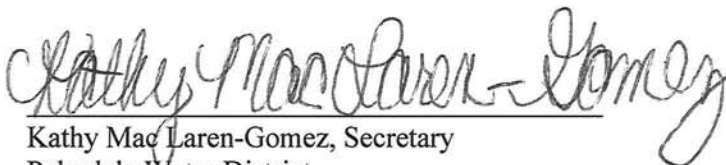
The foregoing Resolution was adopted at a meeting of the Board of Directors of the Palmdale Water District on December 12, 2022, by the following vote:

AYES: President Dizmang, Directors Dino, Wilson, Mac Laren-Gomez, Kellerman
NOES: None
ABSTAIN: None
ABSENT: None



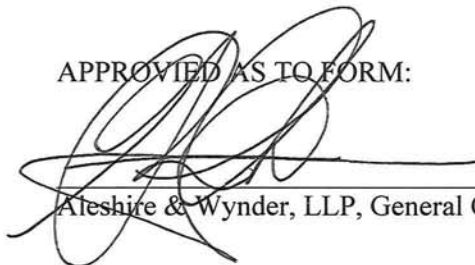
Gloria Dizmang, President
Palmdale Water District

CERTIFIED TO BE A TRUE
AND CORRECT COPY:



Kathy Mac Laren-Gomez, Secretary
Palmdale Water District

APPROVED AS TO FORM:



Aleshire & Wynder, LLP, General Counsel

EXHIBIT A
ANALYSIS OF BENEFITS

[Attached]

Palmdale Water District



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Pro Forma 4217 Exhibit A

Scenarios Included in this Pro Forma:

- #1 - : Solar Power Purchase Agreement and Battery Payments to Provider - 641 E Avenue - Tank 12MG, Waste Water Treatment Plant
- #2 - NEM-A 2.0: Solar Power Purchase Agreement - District Office 2029 E Ave, Station W3A, Station W2A, Station W8A, Well 14



Summary of Results

Financing Scenario	PPA Start Price	PPA Escalator	Net Benefit Year 1	Net Benefit Years 1-10	Net Benefit Years 1-25	Years to Payback
#1 - : Solar Power Purchase Agreement and Battery Payments to Provider - 641 E Avenue - Tank 12MG, Waste Water Treatment Plant	\$ 0.0626	0.00%	\$214,761	\$2,658,347	\$9,298,865	1
#2 - NEM-A 2.0: Solar Power Purchase Agreement - District Office 2029 E Ave, Station W3A, Station W2A, Station W8A, Well 14	\$ 0.0554	0.00%	\$149,498	\$1,978,716	\$7,314,807	1

Project Portfolio

Meter Name	Service Account ID	Meter Number	Connection Level	Rate (Current)	Rate (Optimal Before Project, New TOU)	Rate (Optimal After Project, New TOU)	Program	Meter Max Demand (kW)	Ex-Solar Customer Usage (kWh)
#1 - 641 E Avenue - Tank 12MG	8002835629	359150-007802	0-2kv	TOU-8 D	TOU-8 D	TOU-8 E	NEM-A + AES	601	1,482,252
#2 - Waste Water Treatment Plant (NEM-A with #1)	8003366592	V345N-001391	2kv-50kv	TOU-GS-3 D	TOU-GS-3 D	TOU-GS-3 E	NEM-A	496	1,946,020
#3 - District Office 2029 E Ave	8003094788	259000-053774	0-2kv	TOU-GS-2 D	TOU-GS-2 D	TOU-GS-2 E	NEM-A	85	264,205
#4 - Station W3A (NEM-A with #3)	8003502407	359150-006612	0-2kv	TOU-PA-3 A	TOU-PA-3 E	TOU-PA-3 E	NEM-A	264	1,167,643
#5 - Station W2A (NEM-A with #3)	8001204796	359150-009803	0-2kv	TOU-PA-3 A	TOU-PA-3 E	TOU-PA-3 E	NEM-A	306	1,263,954
#6 - Station W8A (NEM-A with #3)	8002629500	359150-009801	2kv-50kv	TOU-PA-3 A	TOU-PA-3 E	TOU-PA-3 E	NEM-A	386	1,631,180
#7 - Well 14 (NEM-A with #3)	8000465880	V345N-000672	0-2kv	TOU-PA-3 E	TOU-PA-3 E	TOU-PA-3 E	NEM-A	281	703,653
Portfolio Totals									8,458,908

Project Details



Meter Name	Service Account ID	Customer Usage (kWh)	Solar Production (kWh)	Solar Sizing (%)	Solar Array Size (kW, DC)	Meter Max Demand (kW)	Battery Sizing (%)	Battery Size (kWh)	Battery Size (kW)
#1 - 641 E Avenue - Tank 12MG	8002835629	1,482,252	2,883,216	84%	1,225	601	42%	574	250
#2 - Waste Water Treatment Plant (NEM-A with #1)	8003366592	1,946,020	-	-	-	496	-	-	-
#3 - District Office 2029 E Ave	8003094788	264,205	4,554,247	91%	1,837	85	-	-	-
#4 - Station W3A (NEM-A with #3)	8003502407	1,167,643	-	-	-	264	-	-	-
#5 - Station W2A (NEM-A with #3)	8001204796	1,263,954	-	-	-	306	-	-	-
#6 - Station W8A (NEM-A with #3)	8002629500	1,631,180	-	-	-	386	-	-	-
#7 - Well 14 (NEM-A with #3)	8000465880	703,653	-	-	-	281	-	-	-
Totals		8,458,908	7,437,463	88%	3,062		10%	574	250

Savings



Meter Name	Service Account ID	Pre-Project Total Electricity Bill (year 1)	Post-Project Total Electricity Bill (year 1)	Total Savings (year 1)	Solar Savings (year 1)	Solar Savings (\$/kWh)	Battery Savings From Demand Reduction (year 1)	Battery Savings From Arbitrage (year 1)
#1 - 641 E Avenue - Tank 12MG	8002835629	\$358,405	\$102,002	\$256,404	\$213,850	\$0.1361	\$26,015	\$16,538
#2 - Waste Water Treatment Plant (NEM-A with #1)	8003366592	\$403,819	\$225,172	\$178,647	\$178,647	-	-	-
#3 - District Office 2029 E Ave	8003094788	\$61,945	\$22,247	\$39,698	\$39,698	\$0.0883	-	-
#4 - Station W3A (NEM-A with #3)	8003502407	\$184,836	\$97,316	\$87,520	\$87,520	-	-	-
#5 - Station W2A (NEM-A with #3)	8001204796	\$213,663	\$115,694	\$97,969	\$97,969	-	-	-
#6 - Station W8A (NEM-A with #3)	8002629500	\$270,019	\$145,839	\$124,180	\$124,180	-	-	-
#7 - Well 14 (NEM-A with #3)	8000465880	\$117,744	\$64,907	\$52,836	\$52,836	-	-	-
Totals		\$1,610,430	\$773,176	\$837,254	\$794,701	\$0.1069	\$26,015	\$16,538

Dashboard

Scenario: #1 - : Solar Power Purchase Agreement and Battery Payments to Provider - 641 E Avenue - Tank 12MG, Waste Water Treatment Plant

Technical Assumptions	
Total Solar Project Size	1.23 MW, DC
Annual Solar Yield	2,354 kWh/kW
Year-1 Solar Production	2,883,216 kWh
Annual Solar Degradation Factor	0.50%
Total Storage Project Size	574 kWh
Year-1 Demand Reduction	1,411 kW
Number of SCE Accounts	2

Avoided Cost & Revenue Sources	
Savings from Solar Production, yr-1	\$0.1361 /kWh
Estimated Utility Cost Escalator	3.00%
Average 25-year REC Price	\$0.0112 /kWh

Pricing	
PPA Rate	\$0.0626
PPA Annual Escalator	0.00%

Asset Management Services Assumptions	
Asset Management Services, Solar (PPA)	\$0.0100 /kWh
Asset Management Services, Storage	\$1,000 /battery
Asset Management Services Escalator	3.00%

Total Net Benefit (25 years)	
Utility Bill Savings	\$14,834,831
Power Purchase Agreement (PPA) Payments	(\$4,251,597)
Payments to 3rd Party Provider	(\$960,000)
Asset Management Services	(\$1,087,659)
Renewable Energy Certificates (RECs)	\$763,290
Total Net Benefit	\$9,298,865

Cash Flow

Year	ELECTRICITY		UTILITY SAVINGS				EXPENSES				CASH POSITION							
	Annual Solar Production (kWh)	Solar Savings per kWh Produced	Savings from Solar	Savings from Storage due to Drawn Reduction	Savings from Storage due to Arbitrage	Storage Savings (Total)	Subtotal: Bill Savings	PPA Payments	Battery Payments to Provider	Management Service (Solar & Storage)	Subtotal: Annual Operating Expenses	Net Benefits (Solar)	Net Benefits (Storage)	Net Benefits (Total)	Renewable Energy Certificates (RECs)	Cumulative Cash Position	Conservative Cumulative Cash Position	Term
2023	2,883,216	\$ 0.1361	\$ 392,497	\$ 26,015	\$ 16,538	\$ 42,553	\$ 435,050	\$ (180,489)	\$ (38,400)	\$ (29,832)	\$ (248,721)	\$ 183,176	\$ 3,153	\$ 186,329	\$ 28,432	\$ 214,761	\$ 171,256	1
2024	2,868,800	\$ 0.1402	\$ 402,251	\$ 26,796	\$ 16,012	\$ 42,808	\$ 445,058	\$ (179,587)	\$ (38,400)	\$ (30,727)	\$ (248,714)	\$ 192,967	\$ 3,378	\$ 196,344	\$ 28,975	\$ 440,080	\$ 352,069	2
2025	2,854,456	\$ 0.1444	\$ 412,247	\$ 27,599	\$ 15,791	\$ 43,390	\$ 455,637	\$ (177,689)	\$ (38,400)	\$ (31,649)	\$ (248,738)	\$ 202,970	\$ 3,929	\$ 206,899	\$ 29,118	\$ 676,098	\$ 542,523	3
2026	2,840,183	\$ 0.1488	\$ 422,491	\$ 28,437	\$ 15,722	\$ 44,150	\$ 466,641	\$ (177,795)	\$ (38,400)	\$ (32,598)	\$ (248,794)	\$ 213,190	\$ 4,657	\$ 217,847	\$ 29,262	\$ 923,207	\$ 742,968	4
2027	2,825,983	\$ 0.1532	\$ 432,990	\$ 29,280	\$ 15,636	\$ 44,916	\$ 477,906	\$ (176,907)	\$ (38,400)	\$ (33,576)	\$ (248,883)	\$ 223,632	\$ 5,390	\$ 229,023	\$ 29,407	\$ 1,181,637	\$ 953,608	5
2028	2,811,853	\$ 0.1578	\$ 443,750	\$ 30,159	\$ 15,817	\$ 45,976	\$ 489,725	\$ (176,022)	\$ (38,400)	\$ (34,584)	\$ (249,006)	\$ 234,303	\$ 6,416	\$ 240,720	\$ 29,153	\$ 1,451,509	\$ 1,174,508	6
2029	2,797,793	\$ 0.1625	\$ 454,777	\$ 31,063	\$ 16,193	\$ 47,256	\$ 502,033	\$ (175,142)	\$ (38,400)	\$ (35,621)	\$ (249,163)	\$ 245,208	\$ 7,662	\$ 252,870	\$ 29,699	\$ 1,734,078	\$ 1,405,873	7
2030	2,783,804	\$ 0.1674	\$ 466,078	\$ 31,995	\$ 16,577	\$ 48,572	\$ 514,650	\$ (174,266)	\$ (38,400)	\$ (36,690)	\$ (249,356)	\$ 256,352	\$ 8,942	\$ 265,294	\$ 29,846	\$ 2,009,219	\$ 1,650,549	8
2031	2,769,885	\$ 0.1724	\$ 477,660	\$ 32,955	\$ 16,969	\$ 49,925	\$ 527,585	\$ (173,395)	\$ (38,400)	\$ (37,790)	\$ (249,585)	\$ 270,383	\$ 10,258	\$ 277,999	\$ 29,994	\$ 2,337,212	\$ 1,905,784	9
2032	2,756,036	\$ 0.1776	\$ 489,530	\$ 33,944	\$ 17,371	\$ 51,314	\$ 540,844	\$ (172,528)	\$ (38,400)	\$ (38,934)	\$ (249,853)	\$ 291,282	\$ 11,610	\$ 290,992	\$ 30,142	\$ 2,658,347	\$ 2,172,834	10
2033	2,742,256	\$ 0.1829	\$ 501,695	\$ 34,962	\$ 17,781	\$ 52,743	\$ 554,437	\$ (171,665)	\$ (38,400)	\$ (40,092)	\$ (250,157)	\$ 303,445	\$ 12,999	\$ 304,280	\$ 30,442	\$ 2,992,519	\$ 2,451,562	11
2034	2,728,544	\$ 0.1884	\$ 514,162	\$ 36,011	\$ 17,856	\$ 53,867	\$ 568,029	\$ (170,807)	\$ (38,400)	\$ (41,295)	\$ (250,366)	\$ 315,878	\$ 14,083	\$ 317,527	\$ 30,592	\$ 3,340,468	\$ 2,742,728	12
2035	2,714,902	\$ 0.1941	\$ 526,939	\$ 37,091	\$ 17,920	\$ 55,012	\$ 581,950	\$ (169,953)	\$ (38,400)	\$ (42,534)	\$ (250,596)	\$ 328,589	\$ 15,186	\$ 324,445	\$ 30,744	\$ 3,702,144	\$ 3,046,189	13
2036	2,701,327	\$ 0.1999	\$ 540,033	\$ 38,204	\$ 17,972	\$ 56,176	\$ 596,209	\$ (169,103)	\$ (38,400)	\$ (43,810)	\$ (251,313)	\$ 341,584	\$ 16,308	\$ 344,897	\$ 30,896	\$ 4,077,784	\$ 3,382,209	14
2037	2,687,821	\$ 0.2059	\$ 553,453	\$ 39,350	\$ 18,011	\$ 57,361	\$ 610,814	\$ (168,258)	\$ (38,400)	\$ (45,124)	\$ (252,181)	\$ 354,870	\$ 17,449	\$ 359,033	\$ 31,049	\$ 4,467,713	\$ 3,691,056	15
2038	2,674,382	\$ 0.2121	\$ 567,206	\$ 40,531	\$ 18,011	\$ 57,361	\$ 633,503	\$ (167,416)	\$ (38,400)	\$ (46,478)	\$ (252,994)	\$ 368,455	\$ 18,589	\$ 381,209	\$ 31,202	\$ 4,879,571	\$ 4,099,563	16
2039	2,661,010	\$ 0.2185	\$ 581,301	\$ 41,747	\$ 24,947	\$ 66,693	\$ 647,994	\$ (166,579)	\$ (38,400)	\$ (47,872)	\$ (253,851)	\$ 378,345	\$ 20,688	\$ 395,143	\$ 31,357	\$ 5,305,916	\$ 4,401,110	17
2040	2,647,705	\$ 0.2250	\$ 595,747	\$ 42,999	\$ 24,601	\$ 67,600	\$ 663,347	\$ (165,746)	\$ (38,400)	\$ (49,308)	\$ (254,754)	\$ 396,549	\$ 22,548	\$ 409,893	\$ 31,512	\$ 5,747,166	\$ 4,776,025	18
2041	2,634,466	\$ 0.2318	\$ 610,551	\$ 44,289	\$ 24,495	\$ 68,784	\$ 679,335	\$ (164,918)	\$ (38,400)	\$ (50,787)	\$ (255,404)	\$ 411,073	\$ 24,681	\$ 425,230	\$ 31,668	\$ 6,203,908	\$ 5,164,833	19
2042	2,621,294	\$ 0.2387	\$ 625,723	\$ 45,618	\$ 24,360	\$ 69,977	\$ 695,701	\$ (164,093)	\$ (38,400)	\$ (52,311)	\$ (256,104)	\$ 425,926	\$ 26,824	\$ 440,897	\$ 31,825	\$ 6,676,473	\$ 5,567,828	20
2043	2,608,187	\$ 0.2459	\$ 641,272	\$ 46,986	\$ 24,642	\$ 71,629	\$ 712,901	\$ (163,273)	\$ (38,400)	\$ (53,880)	\$ (256,553)	\$ 441,116	\$ 29,026	\$ 470,479	\$ 31,992	\$ 7,165,246	\$ 5,985,311	21
2044	2,595,146	\$ 0.2532	\$ 657,208	\$ 48,396	\$ 25,228	\$ 73,624	\$ 749,832	\$ (162,455)	\$ (38,400)	\$ (55,497)	\$ (257,053)	\$ 456,560	\$ 31,363	\$ 492,008	\$ 32,141	\$ 7,671,708	\$ 6,418,689	22
2045	2,582,171	\$ 0.2608	\$ 673,540	\$ 49,848	\$ 25,836	\$ 75,674	\$ 789,214	\$ (161,644)	\$ (38,400)	\$ (57,161)	\$ (257,955)	\$ 473,539	\$ 32,707	\$ 509,946	\$ 32,300	\$ 8,195,856	\$ 6,867,917	23
2046	2,569,260	\$ 0.2687	\$ 690,277	\$ 51,343	\$ 26,438	\$ 77,781	\$ 788,058	\$ (160,838)	\$ (38,400)	\$ (58,876)	\$ (258,112)	\$ 488,789	\$ 33,407	\$ 509,946	\$ 32,460	\$ 8,738,102	\$ 7,383,357	24
2047	2,556,413	\$ 0.2767	\$ 707,451	\$ 52,883	\$ 27,063	\$ 79,946	\$ 787,377	\$ (160,031)	\$ (38,400)	\$ (60,643)	\$ (258,074)	\$ 497,513	\$ 34,160	\$ 509,946	\$ 32,619	\$ 9,298,665	\$ 7,815,382	25
2048	679,166,892	\$ 0.1970	\$ 13,380,808	\$ 946,490	\$ 505,533	\$ 1,454,023	\$ 14,854,831	\$ (4,251,597)	\$ (960,000)	\$ (1,087,659)	\$ (6,299,256)	\$ 8,078,011	\$ 457,564	\$ 8,535,575	\$ 763,290	\$ 9,298,665	\$ 7,815,382	

Dashboard

Scenario: #2 - NEM-A 2.0: Solar Power Purchase Agreement - District Office 2029 E Ave, Station W3A, Station W2A, Station W8A, Well 14

Technical Assumptions	
Total Solar Project Size	1.84 MW, DC
Annual Solar Yield	2,479 kWh/kW
Year-1 Solar Production	4,554,247 kWh
Annual Solar Degradation Factor	0.50%
Number of SCE Accounts	5
Avoided Cost & Revenue Sources	
Savings from Solar Production, yr-1	\$0.0883 /kWh
Estimated Utility Cost Escalator	3.00%
Average 25-year REC Price	\$0.0112 /kWh
Pricing	
PPA Rate	\$0.0554
PPA Annual Escalator	0.00%
Asset Management Services Assumptions	
Asset Management Services, Solar (PPA)	\$0.0100 /kWh
Asset Management Services Escalator	3.00%

Total Net Benefit (25 years)	
Utility Bill Savings	\$13,711,712
Power Purchase Agreement (PPA) Payments	(\$5,943,291)
Asset Management Services	(\$1,660,445)
Renewable Energy Certificates (RECs)	\$1,206,830
Total Net Benefit	\$7,314,807

Cash Flow

Year	Electricity		Utility Savings		Expenses		Cash Position		Term	
	Annual Solar Production (kWh)	Solar Savings per kWh Produced	Savings from Solar	Subtotal: Annual Utility Bill Savings	PPA Payments (Solar)	Asset Management Service (Solar)	Subtotal: Annual Operating Expenses	Net Benefits (Solar)		Renewable Energy Certificates (RECs)
2023	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2024	4,554,247	\$ 0.0883	\$ 402,203	\$ 402,203	\$ (252,305)	\$ (45,542)	\$ (297,848)	\$ 104,356	\$ 45,142	\$ 149,498
2025	4,531,476	\$ 0.0910	\$ 412,198	\$ 412,198	\$ (251,044)	\$ (46,909)	\$ (297,952)	\$ 114,246	\$ 45,768	\$ 309,512
2026	4,508,818	\$ 0.0937	\$ 422,441	\$ 422,441	\$ (249,789)	\$ (48,316)	\$ (298,105)	\$ 124,337	\$ 45,994	\$ 479,843
2027	4,486,274	\$ 0.0965	\$ 432,939	\$ 432,939	\$ (248,540)	\$ (49,765)	\$ (298,305)	\$ 134,634	\$ 46,222	\$ 660,699
2028	4,463,843	\$ 0.0994	\$ 443,698	\$ 443,698	\$ (247,297)	\$ (51,258)	\$ (298,555)	\$ 145,142	\$ 46,451	\$ 852,292
2029	4,441,523	\$ 0.1024	\$ 454,723	\$ 454,723	\$ (246,060)	\$ (52,796)	\$ (298,857)	\$ 155,867	\$ 46,281	\$ 1,054,440
2030	4,419,316	\$ 0.1055	\$ 466,023	\$ 466,023	\$ (244,830)	\$ (54,380)	\$ (299,210)	\$ 166,813	\$ 46,912	\$ 1,268,165
2031	4,397,219	\$ 0.1086	\$ 477,604	\$ 477,604	\$ (243,606)	\$ (56,011)	\$ (299,617)	\$ 177,987	\$ 47,144	\$ 1,493,296
2032	4,375,233	\$ 0.1119	\$ 489,472	\$ 489,472	\$ (242,388)	\$ (57,692)	\$ (300,080)	\$ 189,393	\$ 47,378	\$ 1,730,066
2033	4,353,357	\$ 0.1152	\$ 501,636	\$ 501,636	\$ (241,176)	\$ (59,423)	\$ (300,599)	\$ 201,037	\$ 47,612	\$ 1,978,716
2034	4,331,590	\$ 0.1187	\$ 514,102	\$ 514,102	\$ (239,970)	\$ (61,205)	\$ (301,175)	\$ 212,926	\$ 47,448	\$ 2,239,089
2035	4,309,932	\$ 0.1222	\$ 526,877	\$ 526,877	\$ (238,770)	\$ (63,041)	\$ (301,812)	\$ 225,065	\$ 48,085	\$ 2,512,239
2036	4,288,383	\$ 0.1259	\$ 539,970	\$ 539,970	\$ (237,576)	\$ (64,933)	\$ (302,509)	\$ 237,461	\$ 48,323	\$ 2,798,023
2037	4,266,941	\$ 0.1297	\$ 553,388	\$ 553,388	\$ (236,389)	\$ (66,881)	\$ (303,269)	\$ 250,119	\$ 48,562	\$ 3,096,703
2038	4,245,606	\$ 0.1336	\$ 567,140	\$ 567,140	\$ (235,207)	\$ (68,887)	\$ (304,094)	\$ 263,046	\$ 48,802	\$ 3,408,552
2039	4,224,378	\$ 0.1376	\$ 581,233	\$ 581,233	\$ (234,031)	\$ (70,954)	\$ (304,984)	\$ 276,249	\$ 48,644	\$ 3,733,444
2040	4,203,256	\$ 0.1417	\$ 595,677	\$ 595,677	\$ (232,860)	\$ (73,082)	\$ (305,943)	\$ 289,734	\$ 49,286	\$ 4,072,465
2041	4,182,240	\$ 0.1460	\$ 610,479	\$ 610,479	\$ (231,696)	\$ (75,275)	\$ (306,971)	\$ 303,509	\$ 49,530	\$ 4,425,504
2042	4,161,329	\$ 0.1503	\$ 625,650	\$ 625,650	\$ (230,538)	\$ (77,533)	\$ (308,071)	\$ 317,579	\$ 49,776	\$ 4,792,859
2043	4,140,522	\$ 0.1549	\$ 641,197	\$ 641,197	\$ (229,385)	\$ (79,859)	\$ (309,244)	\$ 331,953	\$ 50,022	\$ 5,174,834
2044	4,119,819	\$ 0.1595	\$ 657,131	\$ 657,131	\$ (228,238)	\$ (82,255)	\$ (310,493)	\$ 346,638	\$ 49,870	\$ 5,571,342
2045	4,099,220	\$ 0.1643	\$ 673,461	\$ 673,461	\$ (227,097)	\$ (84,722)	\$ (311,819)	\$ 361,641	\$ 50,518	\$ 5,983,502
2046	4,078,724	\$ 0.1692	\$ 690,196	\$ 690,196	\$ (225,961)	\$ (87,264)	\$ (313,225)	\$ 376,971	\$ 50,769	\$ 6,411,241
2047	4,058,331	\$ 0.1743	\$ 707,348	\$ 707,348	\$ (224,832)	\$ (89,882)	\$ (314,714)	\$ 392,634	\$ 51,020	\$ 6,854,895
2048	4,038,039	\$ 0.1795	\$ 724,925	\$ 724,925	\$ (223,707)	\$ (92,578)	\$ (316,286)	\$ 408,639	\$ 51,272	\$ 7,314,807
	107,279,615	\$ 0.1278	\$ 13,711,712	\$ 13,711,712	\$ (5,943,291)	\$ (1,660,445)	\$ (7,603,736)	\$ 6,107,977	\$ 1,206,830	\$ 7,314,807
										\$ 5,943,636

Disclaimers and Assumptions

- 1) Projections of future savings are calculated based on patterns of previous electricity usage, and assume that historical usage patterns hold at the same level over the life of the project. Billing and usage data for 641 E Avenue - Tank 12MG, Waste Water Treatment Plant, and District Office 2029 E Ave are from April 2021 through April 2022. Billing and usage data for the remaining sites are as follows: Well 14 data is from February 2020 through January 2021, Station W8A data is from April 2020 through March 2021, Station W3A data is from November 2020 through October 2021, and Station W2A data is from January 2020 through January 2021.
- 2) Projections of future savings are subject to rate tariff eligibility over the life of the installation. This analysis uses SCE rate tariffs published October 2022.
- 3) This analysis assumes the electrical service will not require significant upgrades.
- 4) Projections of future savings are based on interconnection of all sites under NEM 2.0 tariff. Remaining capacity under the NEM 2.0 tariff is subject to availability.
- 5) The PPA rates include a \$250,000 distribution utility upgrade cost assumption per site; PPA rates may change if actual cost is higher or lower than anticipated.
- 6) NEM-A analysis assumes the client solely owns contiguous parcels where the aggregated meters exist.
- 7) This analysis has been performed assuming SCE New TOU rate tariffs. A few sites have legacy PA treatment, which should be preserved until expired for optimal financial benefit.
- 8) Applicable NEM 2.0 tariff eligibility is assumed to be available for 20 years from Permission to Operate. Projections of savings shown beyond year 20 are subject to change based on any future NEM, or similar, tariffs in effect at that time.
- 9) This analysis assumes an Investment Tax Credit of 30% per site based on achieving Permission to Operate between 2023 and 2032. This does not constitute tax advice and Palmdale Water District should seek professional tax advice from their tax advisors to confirm all potential tax savings and the assumptions made in this analysis.
- 10) Due to the total system size of the project being over 1MW, this analysis assumes that all prevailing wage and apprenticeship requirements of the 30% Investment Tax Credit level will be met. If these requirements are not met, the Investment Tax Credit will be 6%.
- 11) Asset Management Services include system performance monitoring and detailed energy & financial reporting.
- 12) Renewable Energy Credits (RECs) have been included in this analysis as potential revenue, however, by selling the RECs they cannot be claimed for clean energy use.
- 13) No part of TerraVerde Energy's deliverables, messaging, presentation or anything else shared with its clients should be construed by the client or any other entity as advice on scope for future contracts, work orders or other engagements.