



ENGIE Services U.S.

Energizing Mission Springs Water District

August 21, 2023



Project Goal

- **Reduce District Operating Cost**

District Electricity Expenditure

Site Name	Address	Annual Usage (kWh)	Annual Usage (\$)	\$/kWh	Solar PV
Horton WWTP	14601 Verbena Dr., Desert Hot Springs, CA 92240	1,786,022	\$370,974	\$0.2077	X
New Regional Plant	19011 Little Morongo Rd., Desert Hot Springs, CA 92240	1,786,022	\$370,974	\$0.2077	X
Well 24	Acoma Ave. & Little Morongo, Desert Hot Springs, CA 92240	815,900	\$229,601	\$0.2814	X
Well 27	64261 Dillon Rd., North Palm Springs, CA 92258	853,800	\$207,030	\$0.2425	X
Well 29	65700 Ironwood Dr., Desert Hot Springs, CA 92240	1,274,766	\$270,369	\$0.2121	X
Well 32 & Booster Station	16075 Little Morongo Rd., Desert Hot Springs, CA 92240	786,771	\$175,332	\$0.2229	X
Well 33 (RES-BCT Accounts)	19011 Little Morongo Rd., Desert Hot Springs, CA 92240	3,955,884	\$706,841	\$0.1787	X
Total		11,259,165	\$2,331,120	\$0.2070	7

Project Scope of Work

- Solar PV scope includes 4,167 kW across 7 sites
- Benefits include:
 - Hedges against rising energy costs
 - Reduces greenhouse gas emissions
 - Incentives through the Inflation Reduction Act (IRA)

Site Name	System Type	Solar Interconnection Type	Solar Size kW
Horton WWTP	Ground Mount	NEM	388.8
New Regional Plant	Ground Mount	NEM	388.8
Well 24	Ground Mount	NEM	175.0
Well 27	Ground Mount	NEM	349.9
Well 29	Ground Mount	NEM	204.1
Well 32 & Booster Station	Ground Mount	NEM	427.7
Well 33 (RES-BCT)	Ground Mount	RES-BCT	2,232.4
Total			4,166.7



What is NEM and RES-BCT (as per CPUC)

- **Net Energy Metering (NEM):** Under NEM tariffs, participating customers receive bill credits for excess generation that is exported to the electric grid during times when it is not serving onsite load. These bill credits are applied to customers' monthly bills at the retail rates (including generation, distribution, and transmission components) that the customers pay for energy consumption according to their otherwise applicable rate structures
- **Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT):** This tariff enables local governments to share generation credits from a system located on one government-owned property with billing accounts at other government-owned properties. The system size limit under RES-BCT is 5 MW, and bill credits are applied at the generation-only portion of a customer's retail rate

Project Cost

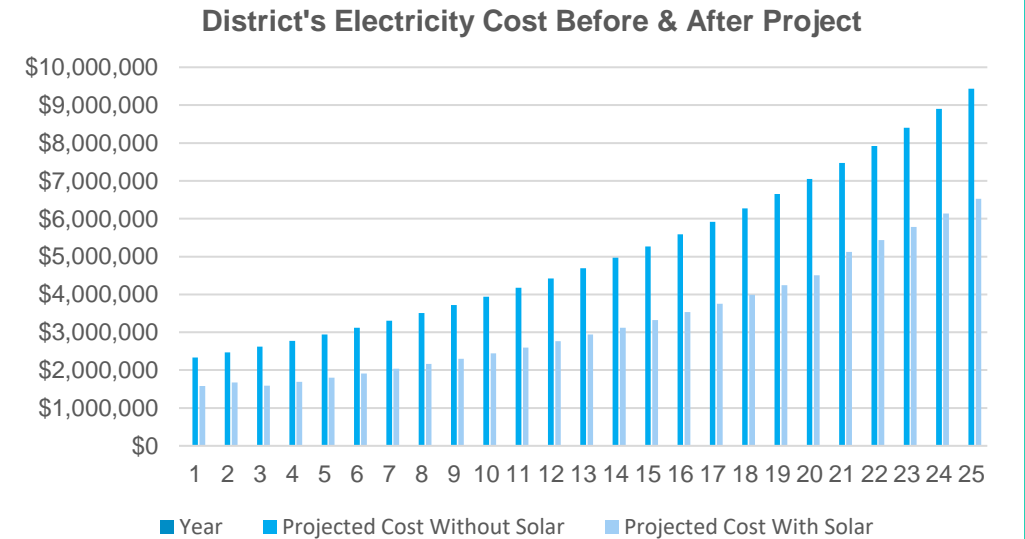
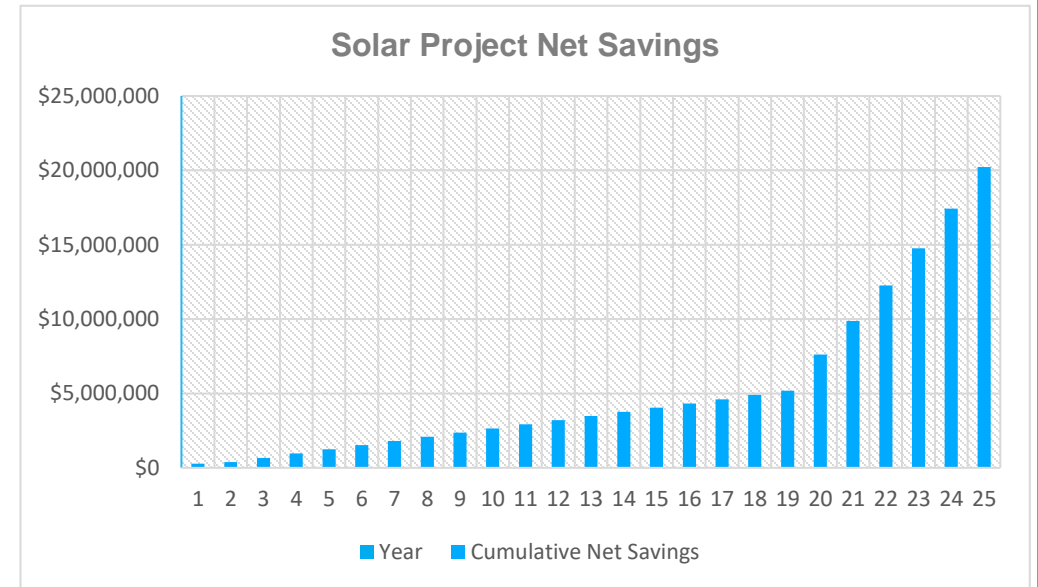
Description	Amount	% of Price
Division 0 - Development & Contracting	\$396,562	
Division 1 - General Requirements	\$1,438,576	
Division 2 - Sitework	\$855,038	
Division 5 - Metals	\$1,789,157	
Division 11 - Equipment	\$2,310,090	
Division 16 - Electrical	\$6,383,153	
Division 17 - Instrumentation	\$162,005	
Division 33 - Utilities	\$247,500	
Subtotal	\$13,582,081	70.3%
Contingency	\$983,505	5.1%
20-year Guaranteed Performance	\$494,357	2.6%
Design and Construction Engineering	\$973,214	5.0%
Subtotal	\$16,033,157	83.0%
Overhead and Profit	\$3,283,900	17.0%
Price	\$19,317,057	100.0%

Project Financing

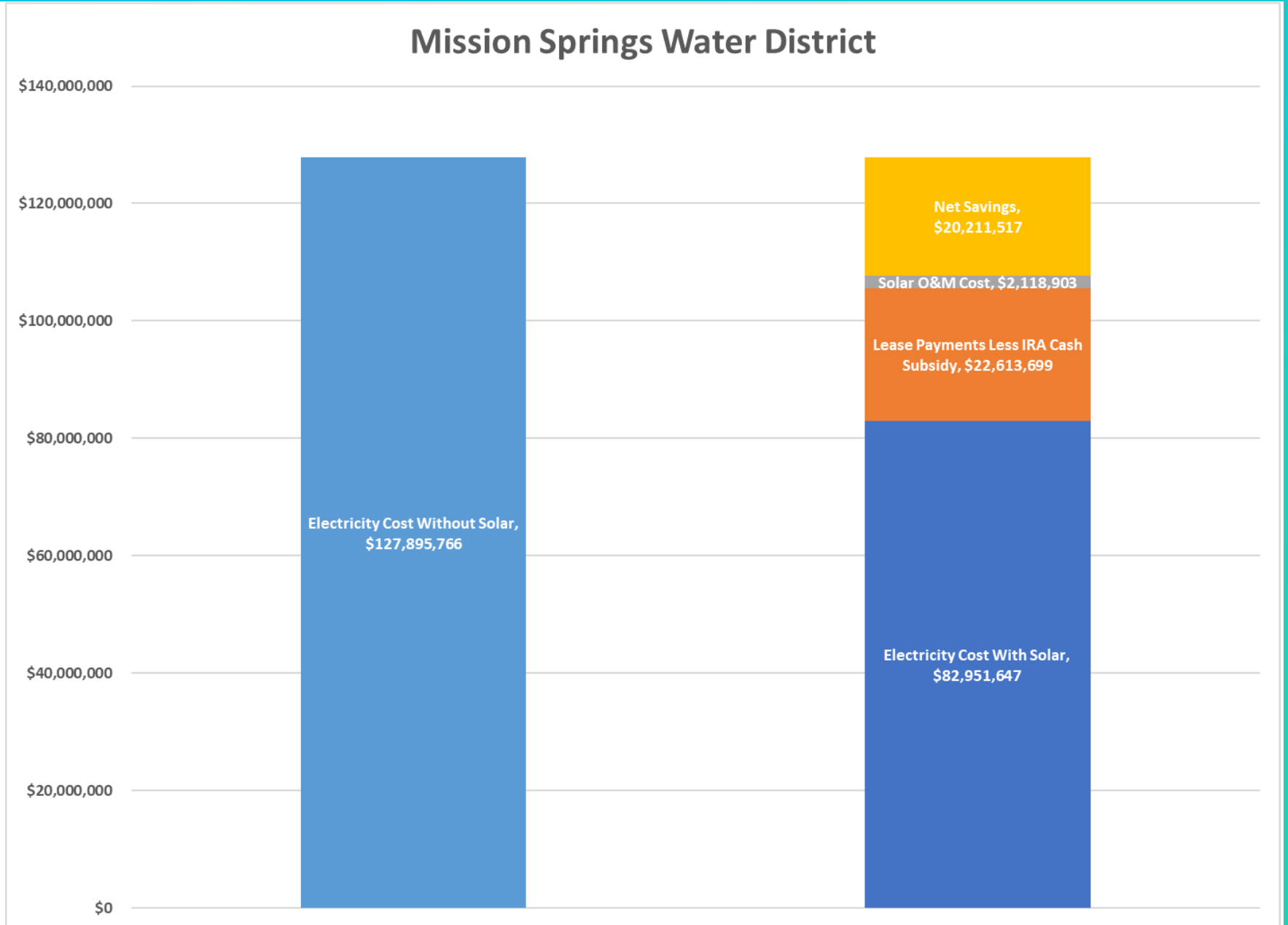
- **Project cost: \$19,317,057**
- **ENGIE Finance Department issued an RFP to thirteen financing companies**
- **The District received three proposals for 20-year finance terms:**
 - **Huntington National Bank: Interest Rate – 4.77%**
 - **Webster Bank: Interest Rate – 4.74%**
 - **Bank of America – 4.25%**
- **The District selected Bank of America**
- **The lease payments vary as per the project savings. See Appendix for cash flow**

Financial Analysis

- **Project cost: \$19,317,057**
- **Financing assumptions:**
 - Project to be financed over 20 years
 - Annual interest rate: 4.25%
 - Annual electricity escalation: 6% (actual annual escalation: 15% over last 4 years)
 - Annual energy savings guaranteed for 20 years
 - All O&M by ENGIE
 - Inflation Reduction Act cash subsidy: \$6.6 million
- **Net annual savings during financing term: Approx. \$281,000**
- **Net savings over project life: \$20 million**



No District Out-of- Pocket Costs



Financial Analysis of Each Site

Site	Interconnection Type	Solar Size kW	Electricity Consumption Offset	Project Cost	Net Project Savings	Net Present Value*	Internal Rate of Return	Simple Payback Period
Horton WWTP	NEM	388.8	42.2%	\$1,786,684	\$1,062,656	\$580,559	7.3%	12.7
New Regional Plant	NEM	388.8	42.2%	\$1,889,495	\$942,299	\$495,333	6.9%	13.2
Well 24	NEM	175.0	40.8%	\$950,580	\$1,690,133	\$1,045,014	12.5%	8.5
Well 27	NEM	349.9	79.3%	\$1,754,117	\$3,020,165	\$1,863,666	12.3%	8.7
Well 29	NEM	204.1	30.0%	\$1,003,366	\$754,142	\$429,086	8.1%	11.9
Well 32 & Booster Station	NEM	427.7	100.0%	\$1,708,235	\$2,104,055	\$1,266,678	10.3%	10.1
Well 33	RES-BCT	2,232.4	100.0%	\$10,224,580	\$10,638,067	\$5,912,291	8.7%	11.8
Total		4,166.7	68.6%	\$19,317,057	\$20,211,517	\$11,592,626	9.1%	11.2

Note: NPV is calculated at a 3% discount rate

Why Do The Project Now?

- **California PUC passed a law (NEM 3.0) in December 2022 drastically reducing the savings from solar projects**
- **ENGIE filed solar interconnection applications in March 2023 on behalf of the District to grandfather the District for the higher NEM 2.0 savings for 20 years**
- **To retain the grandfathering, the projects must be completed by March 2026. With many supply chain issues, there is not too much of a cushion to complete the project by then**
- **The District is eligible to receive a substantial cash subsidy from the Federal Government as per the Inflation Reduction Act. Even though there is substantial funding available in the program, each year of delay in starting the project can potentially reduce the subsidy**
- **SCE has a cap of 124.6 MW in the RES-BCT program. Currently 71.8 MW has already been used up, so a project delay can put an end to this project**

Energy Program Benefits

- **Create \$20 million in net savings after paying for all costs over the life of the program**
- **Reduce the District's overall electricity spend by nearly 40%**
- **Provide a hedge against rising electricity costs, which are expected to increase substantially in the future**
- **Grandfather the District into 20-year savings with the current NEM 2.0 and install solar before it becomes unviable in the near future**
- **Receive \$6.6 million in Inflation Reduction Act cash subsidy**
- **ENGIE guarantees 95% of the energy savings**
- **Stimulate local economy and provide local jobs**
- **Carbon emissions reduction equivalent of removing 1,218 cars off the road annually**

Energy Program Roadmap

- **Board Selected ENGIE through RFQ Process**
December 15, 2023
- **Interconnection Applications Submitted**
March 31, 2023
- **Energy Proposal Presentation to Staff**
July 6, 2023
- **Energy Proposal Presentation to Board**
July 13, 2023
- **Energy Proposal Board Study Session**
August 21, 2023
- **Posting of Public Hearing Notice**
September 4, 2023
- **Board Approval of the Project**
September 18, 2023
- **Implementation**
September 2023 – September 2025
- **Celebratory Ribbon Cutting**
October 2025



Financial Analysis

Project Cost								\$19,317,057
District Contribution								\$0
Amount to be Financed								\$19,317,057
Finance Term, including Construction Period								19
Estimated Annual Interest Rate								4.25%
Annual Escalation of Electricity Cost								6.00%
Low Income Bonus Credit								Yes
Annual Degradation of Solar Panels								0.50%
Annual Escalation of O&M Cost								3.00%
Year	Electricity Savings - NEM	Electricity Savings - RES-BCT	IRA Direct Payment	Total Program Savings	Lease Payment	Solar O&M Cost	Total Program Costs	Net Savings
1	\$452,114	\$300,783	\$6,567,799	\$7,320,697	\$6,981,484	\$58,117	\$7,039,601	\$281,096
2	\$476,845	\$317,236	\$0	\$794,081	\$610,273	\$59,861	\$670,134	\$123,947
3	\$502,929	\$526,217	\$0	\$1,029,145	\$686,393	\$61,656	\$748,049	\$281,096
4	\$530,439	\$555,001	\$0	\$1,085,439	\$740,838	\$63,506	\$804,344	\$281,096
5	\$559,454	\$585,359	\$0	\$1,144,813	\$798,306	\$65,411	\$863,717	\$281,096
6	\$590,056	\$617,378	\$0	\$1,207,434	\$858,965	\$67,374	\$926,338	\$281,096
7	\$622,332	\$651,149	\$0	\$1,273,481	\$922,990	\$69,395	\$992,385	\$281,096
8	\$656,373	\$686,767	\$0	\$1,343,140	\$990,568	\$71,477	\$1,062,044	\$281,096
9	\$692,277	\$724,333	\$0	\$1,416,610	\$1,061,893	\$73,621	\$1,135,514	\$281,096
10	\$730,145	\$763,954	\$0	\$1,494,098	\$1,137,173	\$75,830	\$1,213,003	\$281,096
11	\$770,084	\$805,742	\$0	\$1,575,826	\$1,216,626	\$78,104	\$1,294,730	\$281,096
12	\$812,207	\$849,816	\$0	\$1,662,023	\$1,300,480	\$80,448	\$1,380,928	\$281,096
13	\$856,635	\$896,301	\$0	\$1,752,936	\$1,388,979	\$82,861	\$1,471,840	\$281,096
14	\$903,493	\$945,329	\$0	\$1,848,822	\$1,482,379	\$85,347	\$1,567,726	\$281,096
15	\$952,914	\$997,038	\$0	\$1,949,952	\$1,580,949	\$87,907	\$1,668,856	\$281,096
16	\$1,005,038	\$1,051,576	\$0	\$2,056,615	\$1,684,974	\$90,544	\$1,775,519	\$281,096
17	\$1,060,014	\$1,109,097	\$0	\$2,169,111	\$1,794,755	\$93,261	\$1,888,016	\$281,096
18	\$1,117,997	\$1,169,765	\$0	\$2,287,762	\$1,910,607	\$96,059	\$2,006,666	\$281,096
19	\$1,179,151	\$1,233,751	\$0	\$2,412,902	\$2,032,866	\$98,940	\$2,131,806	\$281,096
20	\$1,243,651	\$1,301,237	\$0	\$2,544,888	\$0	\$101,909	\$101,909	\$2,442,980
21	\$983,759	\$1,372,415	\$0	\$2,356,174	\$0	\$104,966	\$104,966	\$2,251,208
22	\$1,037,570	\$1,447,486	\$0	\$2,485,057	\$0	\$108,115	\$108,115	\$2,376,942
23	\$1,094,325	\$1,526,664	\$0	\$2,620,989	\$0	\$111,358	\$111,358	\$2,509,631
24	\$1,154,185	\$1,610,172	\$0	\$2,764,357	\$0	\$114,699	\$114,699	\$2,649,658
25	\$1,217,319	\$1,698,249	\$0	\$2,915,568	\$0	\$118,140	\$118,140	\$2,797,428
Totals	\$21,201,304	\$23,742,815	\$6,567,799	\$51,511,919	\$29,181,499	\$2,118,903	\$31,300,402	\$20,211,517