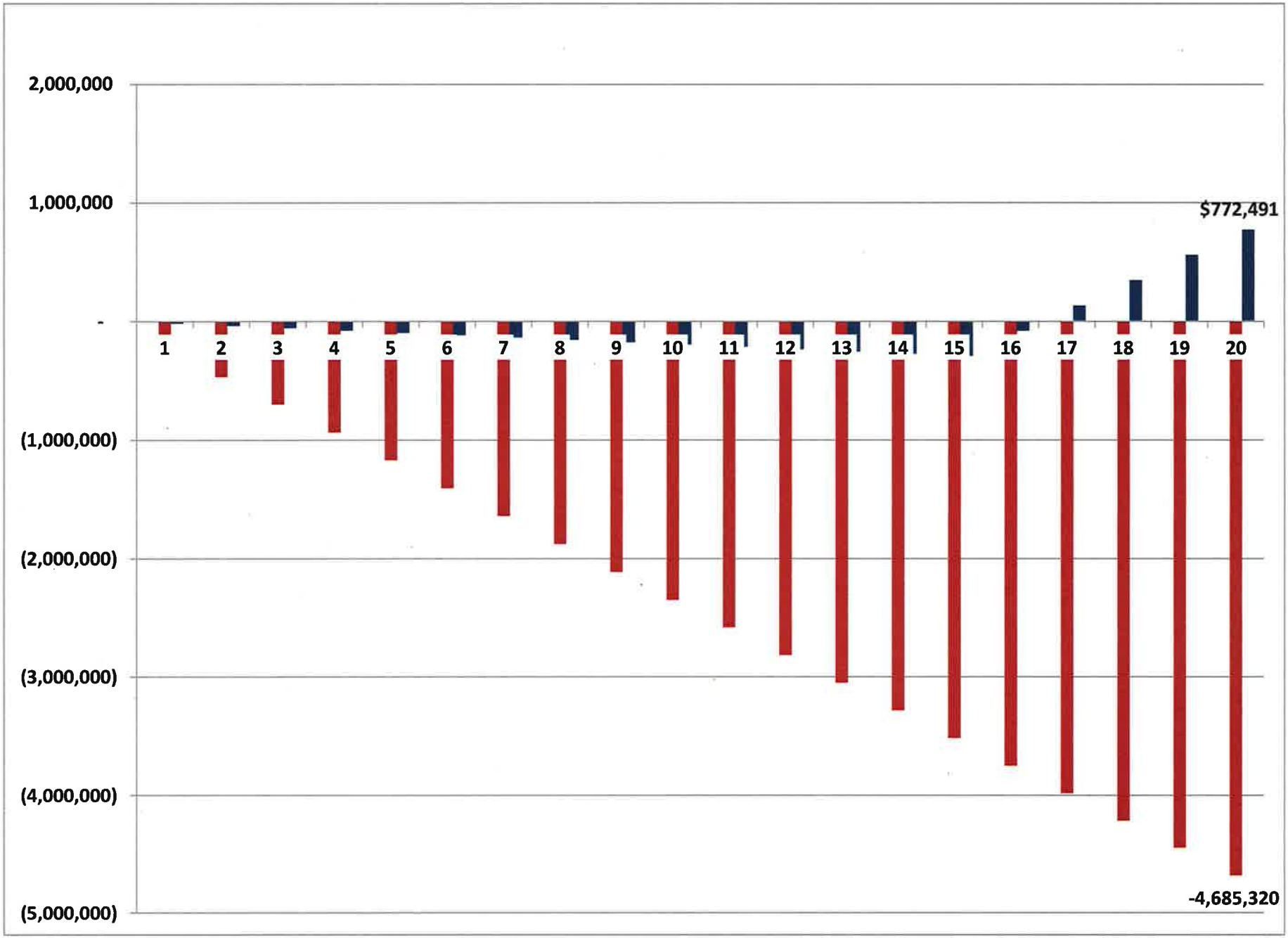
City of Calistoga

Photovoltaic System Cash Flow Analysis

Year		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
PV System Size (kW DC)	849		Interest Rate			3.00%																
Unit Cost per kW	$3,270		Term (years)			15																
Installed Cost	$2,776,230		PG&E electricity inflation rate			0.00%																
Annual Electricity Bill Savings	$234,266																					
Benefits / (Costs)																						
Loan payments		-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	-$232,555	$0	$0	$0	$0	$0	-$3,488,329
O&M / Inverter Reserve / Insurance	$25	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-21,225	-424,500
Avoided Electricity Costs		234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	234,266	4,685,320
Cumulative Electricity Costs		-234,266	-468,532	-702,798	-937,064	-1,171,330	-1,405,596	-1,639,862	-1,874,128	-2,108,394	-2,342,660	-2,576,926	-2,811,192	-3,045,458	-3,279,724	-3,513,990	-3,748,256	-3,982,522	-4,216,788	-4,451,054	-4,685,320	
Annual Benefits / (Costs)		-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	-19,514	213,041	213,041	213,041	213,041	213,041	772,491
Cumulative Benefits / (Costs)		-$19,514	-$39,029	-$58,543	-$78,057	-$97,571	-$117,086	-$136,600	-$156,114	-$175,629	-$195,143	-$214,657	-$234,172	-$253,686	-$273,200	-$292,714	-$79,673	$133,368	$346,409	$559,450	$772,491	
Net Present Value (loan)	$393,282																					
Internal Rate of Return (cash purchase)	12.51%																					
Cash Flows (cash purchase)	-$2,776,230	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$213,041	$1,484,590
		-$2,563,189	-$2,350,148	-$2,137,107	-$1,924,066	-$1,711,025	-$1,497,984	-$1,284,943	-$1,071,902	-$858,861	-$645,820	-$432,779	-$219,738	-$6,697	$206,344	$419,385	$632,426	$845,467	$1,058,508	$1,271,549	$1,484,590	
Net Present Value (cash purchase)	$381,827																					
Internal Rate of Return (cash purchase)	4.48%																					

ATTACHMENT 2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