Lake County Libraries
PV+BESS Cost Benefit Modeling

Year	Solar Production (kWh)	Projected Value of Solar ($/kWh)	Projected Value of REC/LCFS credits ($/kWh)	Projected Value of BESS Discharge ($)	Total Energy Financial Benefit ($)	Project Cost ($)	Investment Tax Credit Elective Pay ($)	Avoided Downtime Cost ($)	O&M Costs ($)	Total Annual Projected Cash-flow ($)	Total NPV of Projected Cash-flow ($)	Cumulative Cash-flow (undiscounted) ($)	Cumulative Cash-flow (discounted) ($)
0	-	$ -	$ -	$ -	$ -	$ 1,281,092	$ -		$ -	$ (1,281,092)	$ (1,281,092)	$ (1,281,092)	$ (1,281,092)
1	177,495	$ 0.43422	$ -	$ 6,820	$ 83,893	$ -	$ 384,328	$ 51,667	$ 36,525	$ 483,362	$ 469,283	$ (797,730)	$ (811,809)
2	176,608	$ 0.44725	$ -	$ 7,025	$ 86,013	$ -	$ -	$ 53,217	$ 36,525	$ 102,704	$ 96,809	$ (695,026)	$ (715,000)
3	175,724	$ 0.46067	$ -	$ 7,236	$ 88,186	$ -	$ -	$ 54,813	$ 36,525	$ 106,474	$ 97,439	$ (588,551)	$ (617,561)
4	174,846	$ 0.47449	$ -	$ 7,453	$ 90,415	$ -	$ -	$ 56,457	$ 36,525	$ 110,347	$ 98,042	$ (478,204)	$ (519,519)
5	173,972	$ 0.48872	$ -	$ 7,676	$ 92,700	$ -	$ -	$ 58,151	$ 36,525	$ 114,326	$ 98,619	$ (363,878)	$ (420,900)
6	173,102	$ 0.50338	$ -	$ 7,907	$ 95,043	$ -	$ -	$ 59,896	$ 36,525	$ 118,414	$ 99,170	$ (245,464)	$ (321,730)
7	172,236	$ 0.51848	$ -	$ 8,144	$ 97,446	$ -	$ -	$ 61,693	$ 36,525	$ 122,613	$ 99,696	$ (122,850)	$ (222,034)
8	171,375	$ 0.53404	$ -	$ 8,388	$ 99,909	$ -	$ -	$ 63,543	$ 36,525	$ 126,928	$ 100,198	$ 4,077	$ (121,836)
9	170,518	$ 0.55006	$ -	$ 8,640	$ 102,435	$ -	$ -	$ 65,450	$ 36,525	$ 131,360	$ 100,676	$ 135,437	$ (21,159)
10	169,666	$ 0.56656	$ -	$ 8,899	$ 105,025	$ -	$ -	$ 67,413	$ 36,525	$ 135,913	$ 101,132	$ 271,351	$ 79,973
11	168,817	$ 0.58356	$ -	$ 9,166	$ 107,681	$ -	$ -	$ 69,435	$ 36,525	$ 140,592	$ 101,566	$ 411,942	$ 181,539
12	167,973	$ 0.60107	$ -	$ 9,441	$ 110,404	$ -	$ -	$ 71,519	$ 36,525	$ 145,398	$ 101,979	$ 557,340	$ 283,518
13	167,133	$ 0.61910	$ -	$ 9,724	$ 113,196	$ -	$ -	$ 73,664	$ 36,525	$ 150,335	$ 102,371	$ 707,675	$ 385,889
14	166,298	$ 0.63767	$ -	$ 10,016	$ 116,059	$ -	$ -	$ 75,874	$ 36,525	$ 155,408	$ 102,743	$ 863,084	$ 488,632
15	165,466	$ 0.65680	$ -	$ 10,317	$ 118,995	$ -	$ -	$ 78,150	$ 36,525	$ 160,620	$ 103,096	$ 1,023,704	$ 591,728
16	164,639	$ 0.67651	$ -	$ 10,626	$ 122,005	$ -	$ -	$ 80,495	$ 36,525	$ 165,975	$ 103,430	$ 1,189,679	$ 695,159
17	163,816	$ 0.69680	$ -	$ 10,945	$ 125,092	$ -	$ -	$ 82,910	$ 36,525	$ 171,476	$ 103,746	$ 1,361,155	$ 798,904
18	162,997	$ 0.71770	$ -	$ 11,273	$ 128,257	$ -	$ -	$ 85,397	$ 36,525	$ 177,128	$ 104,044	$ 1,538,284	$ 902,949
19	162,182	$ 0.73924	$ -	$ 11,611	$ 131,502	$ -	$ -	$ 87,959	$ 36,525	$ 182,936	$ 104,326	$ 1,721,219	$ 1,007,274
20	161,371	$ 0.76141	$ -	$ 11,960	$ 134,829	$ -	$ -	$ 90,598	$ 36,525	$ 188,902	$ 104,590	$ 1,910,121	$ 1,111,865
21	160,564	$ 0.78425	$ -	$ 12,319	$ 138,241	$ -	$ -	$ 93,316	$ 36,525	$ 195,032	$ 104,839	$ 2,105,153	$ 1,216,704
22	159,761	$ 0.80778	$ -	$ 12,688	$ 141,740	$ -	$ -	$ 96,115	$ 36,525	$ 201,330	$ 105,073	$ 2,306,483	$ 1,321,777
23	158,962	$ 0.83202	$ -	$ 13,069	$ 145,328	$ -	$ -	$ 98,998	$ 36,525	$ 207,801	$ 105,291	$ 2,514,285	$ 1,427,068
24	158,167	$ 0.85698	$ -	$ 13,461	$ 149,007	$ -	$ -	$ 101,968	$ 36,525	$ 214,450	$ 105,495	$ 2,728,734	$ 1,532,563
25	157,377	$ 0.88269	$ -	$ 13,865	$ 152,779	$ -	$ -	$ 105,027	$ 36,525	$ 221,281	$ 105,685	$ 2,950,015	$ 1,638,248
											Pay-back Period:	8	10
											NPV:	$ 1,638,248	
											IRR:	10.3%	