

CITY HALL LIFT STATION MICROGRID FINANCIAL RESULTS

FINANCIAL RESULTS

The detailed results of the Financial Modeling for City Hall Lift Station are included below for the 24-hour, 48-hour, and 72-hour resiliency scenarios with a 90% likelihood of ride-through.

TABLE 1: CURRENT ELECTRIC BILL STATEMENT

Time Period		Energy Use (kWh)				Max Demand (kW)		Charges (\$)			
Month	Season	On-Peak	Mid-Peak	Off-Peak	Super Off-Peak	On-Peak	Mid-Peak	Energy	Demand	Non-Bypassable	Total
January	Winter	0	2,563	3,547	4,297	0	43	1,272	1,531	302	3,105
February	Winter	0	2,347	4,124	3,712	0	43	1,242	1,531	300	3,074
March	Winter	0	2,707	4,482	4,834	0	38	1,451	1,494	311	3,256
April	Winter	0	2,356	4,218	4,659	0	38	1,351	1,255	307	2,912
May	Winter	0	2,375	3,415	4,314	0	34	1,211	1,217	300	2,728
June	Summer	1,602	698	6,094	0	34	34	1,138	2,056	289	3,483
July	Summer	1,549	913	5,564	0	29	34	1,097	1,882	287	3,266
August	Summer	2,009	816	5,278	0	38	38	1,124	2,350	287	3,761
September	Summer	1,243	646	5,378	0	29	34	980	1,882	282	3,144
October	Winter	0	1,663	1,609	3,470	0	29	788	1,061	279	2,128
November	Winter	0	1,976	3,028	3,696	0	38	1,043	1,374	291	2,709
December	Winter	0	2,371	3,607	4,309	0	43	1,236	1,650	301	3,187
Total		6,403	21,432	50,344	33,291	130	446	13,935	19,282	3,537	36,754

TABLE 2: NEW ELECTRIC BILL STATEMENT

Time Period		Energy Use (kWh)				Max Demand (kW)		Charges (\$)			
Month	Season	On-Peak	Mid-Peak	Off-Peak	Super Off-Peak	On-Peak	Mid-Peak	Energy	Demand	Non-Bypassable	Total
January	Winter	0	800	4,001	1,397	0	43	755	690	240	1,685
February	Winter	0	434	3,492	1,257	0	38	623	613	240	1,476
March	Winter	0	286	3,811	887	0	37	612	594	240	1,446
April	Winter	0	33	2,641	397	0	14	363	564	239	1,166
May	Winter	0	0	2,710	388	0	0	298	177	239	714
June	Summer	0	0	3,042	0	0	0	136	177	239	552
July	Summer	0	0	3,021	0	0	0	-182	177	239	234
August	Summer	0	0	3,381	0	0	0	-110	177	239	306
September	Summer	0	0	2,962	0	0	0	39	177	239	455
October	Winter	0	0	2,735	10	0	0	134	177	239	550
November	Winter	0	140	3,247	725	0	24	470	486	239	1,195
December	Winter	0	711	4,217	1,610	0	43	809	690	240	1,739
Total		0	2,405	39,259	6,670	0	200	3,946	4,700	2,873	11,518

TABLE 3: KEY FINANCIAL INPUTS & METRICS – PV + BESS DIRECT PURCHASE

Key Financial Outputs			
PV Cost	(\$271,920)	Total Energy Financial Benefit (Year 1)	\$24,572
BESS Cost	(\$1,053,328)	25-Year Total Energy Financial Benefit	\$1,028,472
Upfront Payment	(\$1,325,248)	25-Year NPV	(\$299,599)
Total O&M Cost	(\$400,397)	Payback Year	26+
Total Project Costs	(\$1,725,645)		
Total Incentives	\$397,574		
Net Payments	(\$1,328,071)		

TABLE 4: PV + BESS DIRECT PURCHASE PRO FORMA

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Cost (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	BESS O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
0	-	-	-	-	(271,920)	(1,053,328)	-	-	-	(1,325,248)	(1,325,248)	(1,325,248)	(1,325,248)
1	100,048	9,989	14,583	24,572	-	-	397,574	(1,188)	(10,534)	410,424	398,470	(914,824)	(926,778)
2	99,548	10,245	15,495	25,739	-	-	-	(1,218)	(10,797)	13,724	12,936	(901,100)	(913,842)
3	99,050	10,508	16,457	26,965	-	-	-	(1,248)	(11,067)	14,650	13,407	(886,450)	(900,435)
4	98,555	10,777	17,248	28,025	-	-	-	(1,279)	(11,344)	15,402	13,684	(871,048)	(886,750)
5	98,062	11,050	18,029	29,079	-	-	-	(1,311)	(11,628)	16,140	13,923	(854,907)	(872,828)
6	97,572	11,328	18,930	30,258	-	-	-	(1,344)	(11,918)	16,996	14,234	(837,911)	(858,594)
7	97,084	11,613	19,643	31,256	-	-	-	(1,378)	(12,216)	17,662	14,361	(820,250)	(844,233)
8	96,598	11,909	20,660	32,569	-	-	-	(1,412)	(12,522)	18,635	14,711	(801,615)	(829,522)
9	96,115	12,210	21,516	33,726	-	-	-	(1,447)	(12,835)	19,444	14,902	(782,171)	(814,621)
10	95,635	12,520	22,591	35,111	-	-	-	(1,484)	(13,156)	20,472	15,233	(761,699)	(799,388)
11	95,157	12,825	23,719	36,544	-	-	-	(1,521)	(13,484)	21,539	15,560	(740,160)	(783,827)

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Cost (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	BESS O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
12	94,681	13,143	24,299	37,442	-	-	-	(1,559)	(13,822)	22,062	15,474	(718,098)	(768,354)
13	94,207	13,475	25,811	39,287	-	-	-	(1,598)	(14,167)	23,522	16,017	(694,577)	(752,337)
14	93,736	13,819	27,190	41,009	-	-	-	(1,638)	(14,521)	24,851	16,429	(669,726)	(735,907)
15	93,268	14,168	28,549	42,717	-	-	-	(1,679)	(14,884)	26,154	16,787	(643,572)	(719,120)
16	92,801	14,520	29,815	44,335	-	-	-	(1,721)	(15,256)	27,358	17,048	(616,215)	(702,072)
17	92,337	14,877	31,248	46,125	-	-	-	(1,764)	(15,638)	28,724	17,379	(587,491)	(684,693)
18	91,876	15,246	32,010	47,256	-	-	-	(1,808)	(16,029)	29,419	17,281	(558,071)	(667,412)
19	91,416	15,631	34,695	50,327	-	-	-	(1,853)	(16,429)	32,044	18,274	(526,027)	(649,138)
20	90,959	16,026	36,169	52,195	-	-	-	(1,899)	(16,840)	33,456	18,524	(492,571)	(630,614)
21	90,504	16,431	37,976	54,408	-	-	-	(1,947)	(17,261)	35,200	18,922	(457,371)	(611,693)
22	90,052	16,844	39,664	56,508	-	-	-	(1,995)	(17,693)	36,820	19,216	(420,551)	(592,477)
23	89,602	17,253	40,593	57,846	-	-	-	(2,045)	(18,135)	37,666	19,085	(382,885)	(573,391)
24	89,154	17,688	43,326	61,014	-	-	-	(2,096)	(18,588)	40,329	19,839	(342,556)	(553,552)
25	88,708	18,131	46,028	64,158	-	-	-	(2,149)	(19,053)	42,957	20,516	(299,599)	(533,036)
Total	2,356,726	342,226	686,246	1,028,472	(271,920)	(1,053,328)	397,574	(40,579)	(359,818)	-	-	-	-

TABLE 5: KEY FINANCIAL INPUTS & METRICS – PV PPA + BESS LEASE

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.239	Total Energy Financial Benefit (Year 1)	\$24,572
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$1,028,472
PPA Payment (Year 1)	(\$24,270)	25-Year NPV	(\$757,686)
PPA Payments Term (20-Year)	(\$534,014)	Payback Year	26+
PPA Termination Value	(\$40,805)		
BESS Lease Payment (Year 1)	(\$52,666)		
BESS Lease Payment Term (20-Year)	(\$1,053,328)		
Lease Escalation Rate	0%		
Lease Termination Value	(\$158,011)		

TABLE 6: PV PPA + BESS LEASE PRO FORMA

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV PPA Cost (\$)	PPA Termination Value (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
0	-	-	-	-	-	-	-	-	-	-	-	-
1	100,048	9,989	14,583	24,572	(\$24,270)	-	(\$52,666)	-	(\$52,365)	(\$50,840)	(\$52,365)	(\$50,840)
2	99,548	10,245	15,495	25,739	(\$24,511)	-	(\$52,666)	-	(\$51,438)	(\$48,485)	(\$103,803)	(\$99,325)
3	99,050	10,508	16,457	26,965	(\$24,754)	-	(\$52,666)	-	(\$50,455)	(\$46,174)	(\$154,258)	(\$145,499)
4	98,555	10,777	17,248	28,025	(\$25,000)	-	(\$52,666)	-	(\$49,641)	(\$44,105)	(\$203,899)	(\$189,604)
5	98,062	11,050	18,029	29,079	(\$25,248)	-	(\$52,666)	-	(\$48,835)	(\$42,126)	(\$252,735)	(\$231,730)
6	97,572	11,328	18,930	30,258	(\$25,499)	-	(\$52,666)	-	(\$47,907)	(\$40,121)	(\$300,641)	(\$271,851)
7	97,084	11,613	19,643	31,256	(\$25,752)	-	(\$52,666)	-	(\$47,162)	(\$38,347)	(\$347,804)	(\$310,199)
8	96,598	11,909	20,660	32,569	(\$26,007)	-	(\$52,666)	-	(\$46,105)	(\$36,396)	(\$393,909)	(\$346,594)
9	96,115	12,210	21,516	33,726	(\$26,265)	-	(\$52,666)	-	(\$45,206)	(\$34,647)	(\$439,115)	(\$381,241)
10	95,635	12,520	22,591	35,111	(\$26,526)	-	(\$52,666)	-	(\$44,081)	(\$32,801)	(\$483,197)	(\$414,042)

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV PPA Cost (\$)	PPA Termination Value (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
11	95,157	12,825	23,719	36,544	(26,789)	-	(52,666)	-	(42,912)	(31,000)	(526,108)	(445,042)
12	94,681	13,143	24,299	37,442	(27,055)	-	(52,666)	-	(42,280)	(29,654)	(568,388)	(474,696)
13	94,207	13,475	25,811	39,287	(27,324)	-	(52,666)	-	(40,704)	(27,717)	(609,092)	(502,414)
14	93,736	13,819	27,190	41,009	(27,595)	-	(52,666)	-	(39,252)	(25,950)	(648,344)	(528,364)
15	93,268	14,168	28,549	42,717	(27,869)	-	(52,666)	-	(37,819)	(24,274)	(686,162)	(552,638)
16	92,801	14,520	29,815	44,335	(28,146)	-	(52,666)	-	(36,477)	(22,731)	(722,640)	(575,369)
17	92,337	14,877	31,248	46,125	(28,425)	-	(52,666)	-	(34,966)	(21,155)	(757,605)	(596,524)
18	91,876	15,246	32,010	47,256	(28,707)	-	(52,666)	-	(34,117)	(20,040)	(791,723)	(616,565)
19	91,416	15,631	34,695	50,327	(28,992)	-	(52,666)	-	(31,332)	(17,868)	(823,055)	(634,433)
20	90,959	16,026	36,169	52,195	(29,280)	(40,805)	(52,666)	(158,011)	(228,566)	(126,552)	(1,051,621)	(760,984)
21	90,504	16,431	37,976	54,408	-	-	-	-	54,408	29,247	(997,213)	(731,738)
22	90,052	16,844	39,664	56,508	-	-	-	-	56,508	29,491	(940,705)	(702,246)
23	89,602	17,253	40,593	57,846	-	-	-	-	57,846	29,310	(882,859)	(672,936)
24	89,154	17,688	43,326	61,014	-	-	-	-	61,014	30,015	(821,845)	(642,921)
25	88,708	18,131	46,028	64,158	-	-	-	-	64,158	30,642	(757,686)	(612,279)
Total	2,356,726	342,226	686,246	1,028,472	(534,014)	(40,805)	(1,053,328)	(158,011)	-	-	-	-

TABLE 7: KEY FINANCIAL INPUTS & METRICS – PV DIRECT PURCHASE + BESS LEASE

Key Financial Outputs			
PV Cost	(\$271,920)	Total Energy Financial Benefit (Year 1)	\$24,572
Total PV O&M Cost	(\$40,579)	25-Year Total Energy Financial Benefit	\$1,028,472
BESS Lease Payment (Year 1)	(\$52,666)	25-Year NPV	(\$413,790)
BESS Lease Payment Term (20-Year)	(\$1,053,328)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$158,011)		
Total Incentives	\$81,576		

TABLE 8: PV DIRECT PURCHASE + BESS LEASE PRO FORMA

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
0	-	-	-	-	(271,920)	-	-	-	-	(271,920)	(271,920)	(271,920)	(271,920)
1	100,048	9,989	14,583	24,572	-	(52,666)	-	81,576	(1,188)	52,293	50,770	(219,627)	(221,150)
2	99,548	10,245	15,495	25,739	-	(52,666)	-	-	(1,218)	(28,145)	(26,529)	(247,772)	(247,679)
3	99,050	10,508	16,457	26,965	-	(52,666)	-	-	(1,248)	(26,949)	(24,662)	(274,721)	(272,341)
4	98,555	10,777	17,248	28,025	-	(52,666)	-	-	(1,279)	(25,920)	(23,030)	(300,641)	(295,371)
5	98,062	11,050	18,029	29,079	-	(52,666)	-	-	(1,311)	(24,899)	(21,478)	(325,540)	(316,849)
6	97,572	11,328	18,930	30,258	-	(52,666)	-	-	(1,344)	(23,752)	(19,892)	(349,292)	(336,741)
7	97,084	11,613	19,643	31,256	-	(52,666)	-	-	(1,378)	(22,788)	(18,529)	(372,080)	(355,270)
8	96,598	11,909	20,660	32,569	-	(52,666)	-	-	(1,412)	(21,510)	(16,980)	(393,590)	(372,250)
9	96,115	12,210	21,516	33,726	-	(52,666)	-	-	(1,447)	(20,388)	(15,626)	(413,978)	(387,876)
10	95,635	12,520	22,591	35,111	-	(52,666)	-	-	(1,484)	(19,039)	(14,167)	(433,017)	(402,043)
11	95,157	12,825	23,719	36,544	-	(52,666)	-	-	(1,521)	(17,643)	(12,746)	(450,660)	(414,788)

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
12	94,681	13,143	24,299	37,442	-	(52,666)	-	-	(1,559)	(16,783)	(11,771)	(467,443)	(426,560)
13	94,207	13,475	25,811	39,287	-	(52,666)	-	-	(1,598)	(14,978)	(10,199)	(482,421)	(436,759)
14	93,736	13,819	27,190	41,009	-	(52,666)	-	-	(1,638)	(13,295)	(8,789)	(495,716)	(445,548)
15	93,268	14,168	28,549	42,717	-	(52,666)	-	-	(1,679)	(11,628)	(7,464)	(507,344)	(453,012)
16	92,801	14,520	29,815	44,335	-	(52,666)	-	-	(1,721)	(10,052)	(6,264)	(517,396)	(459,276)
17	92,337	14,877	31,248	46,125	-	(52,666)	-	-	(1,764)	(8,305)	(5,024)	(525,701)	(464,301)
18	91,876	15,246	32,010	47,256	-	(52,666)	-	-	(1,808)	(7,218)	(4,240)	(532,919)	(468,540)
19	91,416	15,631	34,695	50,327	-	(52,666)	-	-	(1,853)	(4,193)	(2,391)	(537,112)	(470,931)
20	90,959	16,026	36,169	52,195	-	(52,666)	(158,011)	-	(1,899)	(160,381)	(88,799)	(697,493)	(559,731)
21	90,504	16,431	37,976	54,408	-	-	-	-	(1,947)	52,461	28,200	(645,032)	(531,530)
22	90,052	16,844	39,664	56,508	-	-	-	-	(1,995)	54,513	28,450	(590,519)	(503,080)
23	89,602	17,253	40,593	57,846	-	-	-	-	(2,045)	55,801	28,274	(534,718)	(474,806)
24	89,154	17,688	43,326	61,014	-	-	-	-	(2,096)	58,918	28,984	(475,800)	(445,823)
25	88,708	18,131	46,028	64,158	-	-	-	-	(2,149)	62,010	29,616	(413,790)	(416,207)
Total	2,356,726	342,226	686,246	1,028,472	(271,920)	(1,053,328)	(158,011)	81,576	(40,579)	-	-	-	-

TABLE 9: CURRENT ELECTRIC BILL STATEMENT

Time Period		Energy Use (kWh)				Max Demand (kW)		Charges (\$)			
Month	Season	On-Peak	Mid-Peak	Off-Peak	Super Off-Peak	On-Peak	Mid-Peak	Energy	Demand	Non-Bypassable	Total
January	Winter	0	2,563	3,547	4,297	0	43	1,272	1,531	302	3,105
February	Winter	0	2,347	4,124	3,712	0	43	1,242	1,531	300	3,074
March	Winter	0	2,707	4,482	4,834	0	38	1,451	1,494	311	3,256
April	Winter	0	2,356	4,218	4,659	0	38	1,351	1,255	307	2,912
May	Winter	0	2,375	3,415	4,314	0	34	1,211	1,217	300	2,728
June	Summer	1,602	698	6,094	0	34	34	1,138	2,056	289	3,483
July	Summer	1,549	913	5,564	0	29	34	1,097	1,882	287	3,266
August	Summer	2,009	816	5,278	0	38	38	1,124	2,350	287	3,761
September	Summer	1,243	646	5,378	0	29	34	980	1,882	282	3,144
October	Winter	0	1,663	1,609	3,470	0	29	788	1,061	279	2,128
November	Winter	0	1,976	3,028	3,696	0	38	1,043	1,374	291	2,709
December	Winter	0	2,371	3,607	4,309	0	43	1,236	1,650	301	3,187
Total		6,403	21,432	50,344	33,291	130	446	13,935	19,282	3,537	36,754

TABLE 10: NEW ELECTRIC BILL STATEMENT

Time Period		Energy Use (kWh)				Max Demand (kW)		Charges (\$)			
Month	Season	On-Peak	Mid-Peak	Off-Peak	Super Off-Peak	On-Peak	Mid-Peak	Energy	Demand	Non-Bypassable	Total
January	Winter	0	660	3,762	1,520	0	43	743	690	240	1,673
February	Winter	0	434	3,360	1,165	0	38	596	613	240	1,449
March	Winter	0	286	3,639	914	0	37	597	594	240	1,431
April	Winter	0	25	2,632	403	0	14	369	564	239	1,172
May	Winter	0	0	2,710	388	0	0	298	177	239	714
June	Summer	0	0	3,042	0	0	0	136	177	239	552
July	Summer	0	0	3,021	0	0	0	-182	177	239	234
August	Summer	0	0	3,381	0	0	0	-110	177	239	306
September	Summer	0	0	2,962	0	0	0	39	177	239	455
October	Winter	0	0	2,735	10	0	0	134	177	239	550
November	Winter	0	28	2,990	816	0	19	436	476	239	1,152
December	Winter	0	668	4,144	1,576	0	43	804	690	240	1,734
Total		0	2,100	38,378	6,791	0	196	3,860	4,690	2,872	11,422

TABLE 11: KEY FINANCIAL INPUTS & METRICS – PV + BESS DIRECT PURCHASE

Key Financial Outputs			
PV Cost	(\$271,920)	Total Energy Financial Benefit (Year 1)	\$24,667
BESS Cost	(\$1,409,325)	25-Year Total Energy Financial Benefit	\$1,041,287
Upfront Payment	(\$1,681,245)	25-Year NPV	(\$585,340)
Total O&M Cost	(\$449,755)	Payback Year	26+
Total Project Costs	(\$2,131,000)		
Total Incentives	\$504,374		
Net Payments	(\$1,626,627)		

TABLE 12: PV + BESS DIRECT PURCHASE PRO FORMA

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Cost (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	BESS O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
0	-	-	-	-	(271,920)	(1,409,325)	-	-	-	(1,681,245)	(1,681,245)	(1,681,245)	(1,681,245)
1	100,048	10,075	14,592	24,667	-	-	504,374	(1,188)	(11,979)	515,874	500,848	(1,165,371)	(1,180,397)
2	99,548	10,330	15,505	25,835	-	-	-	(1,218)	(12,278)	12,339	11,630	(1,153,033)	(1,168,766)
3	99,050	10,591	16,468	27,060	-	-	-	(1,248)	(12,585)	13,226	12,104	(1,139,807)	(1,156,663)
4	98,555	10,858	17,286	28,144	-	-	-	(1,279)	(12,900)	13,965	12,408	(1,125,842)	(1,144,255)
5	98,062	11,126	18,150	29,277	-	-	-	(1,311)	(13,223)	14,743	12,717	(1,111,099)	(1,131,538)
6	97,572	11,401	19,045	30,445	-	-	-	(1,344)	(13,553)	15,548	13,021	(1,095,551)	(1,118,516)
7	97,084	11,681	19,763	31,445	-	-	-	(1,378)	(13,892)	16,175	13,152	(1,079,376)	(1,105,365)
8	96,598	11,976	20,996	32,973	-	-	-	(1,412)	(14,239)	17,321	13,674	(1,062,055)	(1,091,691)
9	96,115	12,280	22,046	34,325	-	-	-	(1,447)	(14,595)	18,283	14,012	(1,043,772)	(1,077,679)
10	95,635	12,591	23,148	35,739	-	-	-	(1,484)	(14,960)	19,295	14,357	(1,024,477)	(1,063,322)
11	95,157	12,898	24,305	37,203	-	-	-	(1,521)	(15,334)	20,348	14,700	(1,004,129)	(1,048,622)
12	94,681	13,218	24,919	38,137	-	-	-	(1,559)	(15,717)	20,860	14,631	(983,269)	(1,033,991)
13	94,207	13,552	26,359	39,911	-	-	-	(1,598)	(16,110)	22,203	15,119	(961,066)	(1,018,872)
14	93,736	13,899	27,833	41,731	-	-	-	(1,638)	(16,513)	23,581	15,590	(937,486)	(1,003,283)
15	93,268	14,251	29,046	43,298	-	-	-	(1,679)	(16,926)	24,693	15,849	(912,793)	(987,433)

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Cost (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	BESS O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
16	92,801	14,608	30,498	45,106	-	-	-	(1,721)	(17,349)	26,036	16,225	(886,757)	(971,208)
17	92,337	14,972	32,023	46,995	-	-	-	(1,764)	(17,783)	27,449	16,607	(859,308)	(954,601)
18	91,876	15,348	32,618	47,967	-	-	-	(1,808)	(18,227)	27,932	16,407	(831,376)	(938,195)
19	91,416	15,739	35,017	50,756	-	-	-	(1,853)	(18,683)	30,220	17,234	(801,156)	(920,961)
20	90,959	16,139	36,754	52,893	-	-	-	(1,899)	(19,150)	31,843	17,631	(769,313)	(903,330)
21	90,504	16,549	38,401	54,950	-	-	-	(1,947)	(19,629)	33,374	17,940	(735,939)	(885,389)
22	90,052	16,967	40,308	57,274	-	-	-	(1,995)	(20,120)	35,159	18,349	(700,780)	(867,040)
23	89,602	17,382	41,227	58,609	-	-	-	(2,045)	(20,623)	35,941	18,211	(664,838)	(848,829)
24	89,154	17,823	43,973	61,795	-	-	-	(2,096)	(21,138)	38,561	18,969	(626,278)	(829,860)
25	88,708	18,274	46,479	64,753	-	-	-	(2,149)	(21,667)	40,938	19,552	(585,340)	(810,308)
Total	2,356,726	344,528	696,758	1,041,287	(271,920)	(1,409,325)	504,374	(40,579)	(409,176)	-	-	-	-

TABLE 13: KEY FINANCIAL INPUTS & METRICS – PV PPA + BESS LEASE

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.239	Total Energy Financial Benefit (Year 1)	\$24,667
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$1,041,287
PPA Payment (Year 1)	(\$24,270)	25-Year NPV	(\$1,154,252)
PPA Payments Term (20-Year)	(\$534,014)	Payback Year	26+
PPA Termination Value	(\$40,805)		
BESS Lease Payment (Year 1)	(\$70,466)		
BESS Lease Payment Term (20-Year)	(\$1,409,325)		
Lease Escalation Rate	0%		
Lease Termination Value	(\$211,394)		

TABLE 14: PV PPA + BESS LEASE PRO FORMA

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV PPA Cost (\$)	PPA Termination Value (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
0	-	-	-	-	-	-	-	-	-	-	-	-
1	100,048	10,075	14,592	24,667	(24,270)	-	(70,466)	-	(70,069)	(68,028)	(70,069)	(68,028)
2	99,548	10,330	15,505	25,835	(24,511)	-	(70,466)	-	(69,143)	(65,173)	(139,212)	(133,202)
3	99,050	10,591	16,468	27,060	(24,754)	-	(70,466)	-	(68,161)	(62,377)	(207,373)	(195,579)
4	98,555	10,858	17,286	28,144	(25,000)	-	(70,466)	-	(67,322)	(59,815)	(274,695)	(255,393)
5	98,062	11,126	18,150	29,277	(25,248)	-	(70,466)	-	(66,437)	(57,310)	(341,132)	(312,703)
6	97,572	11,401	19,045	30,445	(25,499)	-	(70,466)	-	(65,520)	(54,872)	(406,652)	(367,575)
7	97,084	11,681	19,763	31,445	(25,752)	-	(70,466)	-	(64,773)	(52,667)	(471,425)	(420,241)
8	96,598	11,976	20,996	32,973	(26,007)	-	(70,466)	-	(63,501)	(50,128)	(534,926)	(470,369)
9	96,115	12,280	22,046	34,325	(26,265)	-	(70,466)	-	(62,406)	(47,829)	(597,332)	(518,199)
10	95,635	12,591	23,148	35,739	(26,526)	-	(70,466)	-	(61,254)	(45,579)	(658,586)	(563,777)
11	95,157	12,898	24,305	37,203	(26,789)	-	(70,466)	-	(60,053)	(43,384)	(718,639)	(607,161)
12	94,681	13,218	24,919	38,137	(27,055)	-	(70,466)	-	(59,385)	(41,651)	(778,024)	(648,812)
13	94,207	13,552	26,359	39,911	(27,324)	-	(70,466)	-	(57,879)	(39,413)	(835,903)	(688,225)
14	93,736	13,899	27,833	41,731	(27,595)	-	(70,466)	-	(56,330)	(37,241)	(892,233)	(725,466)

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV PPA Cost (\$)	PPA Termination Value (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
15	93,268	14,251	29,046	43,298	(27,869)	-	(70,466)	-	(55,038)	(35,327)	(947,271)	(760,793)
16	92,801	14,608	30,498	45,106	(28,146)	-	(70,466)	-	(53,506)	(33,343)	(1,000,777)	(794,136)
17	92,337	14,972	32,023	46,995	(28,425)	-	(70,466)	-	(51,896)	(31,398)	(1,052,673)	(825,533)
18	91,876	15,348	32,618	47,967	(28,707)	-	(70,466)	-	(51,207)	(30,078)	(1,103,879)	(855,612)
19	91,416	15,739	35,017	50,756	(28,992)	-	(70,466)	-	(48,702)	(27,774)	(1,152,581)	(883,386)
20	90,959	16,139	36,754	52,893	(29,280)	(40,805)	(70,466)	(211,394)	(299,052)	(165,578)	(1,451,633)	(1,048,964)
21	90,504	16,549	38,401	54,950	-	-	-	-	54,950	29,538	(1,396,684)	(1,019,426)
22	90,052	16,967	40,308	57,274	-	-	-	-	57,274	29,891	(1,339,410)	(989,535)
23	89,602	17,382	41,227	58,609	-	-	-	-	58,609	29,697	(1,280,800)	(959,838)
24	89,154	17,823	43,973	61,795	-	-	-	-	61,795	30,399	(1,219,005)	(929,439)
25	88,708	18,274	46,479	64,753	-	-	-	-	64,753	30,926	(1,154,252)	(898,512)
Total	2,356,726	344,528	696,758	1,041,287	(534,014)	(40,805)	(1,409,325)	(211,394)	-	-	-	-

TABLE 15: KEY FINANCIAL INPUTS & METRICS – PV DIRECT PURCHASE + BESS LEASE

Key Financial Outputs			
PV Cost	(\$271,920)	Total Energy Financial Benefit (Year 1)	\$24,667
Total PV O&M Cost	(\$40,579)	25-Year Total Energy Financial Benefit	\$1,041,287
BESS Lease Payment (Year 1)	(\$70,466)	25-Year NPV	(\$810,356)
BESS Lease Payment Term (20-Year)	(\$1,409,325)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$211,394)		
Total Incentives	\$81,576		

TABLE 16: PV DIRECT PURCHASE + BESS LEASE PRO FORMA

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
0	-	-	-	-	(271,920)	-	-	-	-	(271,920)	(271,920)	(271,920)	(271,920)
1	100,048	10,075	14,592	24,667	-	(70,466)	-	81,576	(1,188)	34,589	33,582	(237,331)	(238,338)
2	99,548	10,330	15,505	25,835	-	(70,466)	-	-	(1,218)	(45,849)	(43,217)	(283,180)	(281,556)
3	99,050	10,591	16,468	27,060	-	(70,466)	-	-	(1,248)	(44,655)	(40,866)	(327,835)	(322,421)
4	98,555	10,858	17,286	28,144	-	(70,466)	-	-	(1,279)	(43,601)	(38,739)	(371,436)	(361,160)
5	98,062	11,126	18,150	29,277	-	(70,466)	-	-	(1,311)	(42,501)	(36,661)	(413,937)	(397,822)
6	97,572	11,401	19,045	30,445	-	(70,466)	-	-	(1,344)	(41,365)	(34,642)	(455,302)	(432,464)
7	97,084	11,681	19,763	31,445	-	(70,466)	-	-	(1,378)	(40,399)	(32,848)	(495,701)	(465,313)
8	96,598	11,976	20,996	32,973	-	(70,466)	-	-	(1,412)	(38,906)	(30,712)	(534,607)	(496,025)
9	96,115	12,280	22,046	34,325	-	(70,466)	-	-	(1,447)	(37,588)	(28,808)	(572,196)	(524,834)
10	95,635	12,591	23,148	35,739	-	(70,466)	-	-	(1,484)	(36,211)	(26,945)	(608,407)	(551,778)
11	95,157	12,898	24,305	37,203	-	(70,466)	-	-	(1,521)	(34,784)	(25,129)	(643,191)	(576,907)
12	94,681	13,218	24,919	38,137	-	(70,466)	-	-	(1,559)	(33,888)	(23,769)	(677,079)	(600,676)
13	94,207	13,552	26,359	39,911	-	(70,466)	-	-	(1,598)	(32,153)	(21,895)	(709,233)	(622,571)
14	93,736	13,899	27,833	41,731	-	(70,466)	-	-	(1,638)	(30,373)	(20,080)	(739,605)	(642,650)
15	93,268	14,251	29,046	43,298	-	(70,466)	-	-	(1,679)	(28,847)	(18,516)	(768,452)	(661,166)
16	92,801	14,608	30,498	45,106	-	(70,466)	-	-	(1,721)	(27,081)	(16,876)	(795,533)	(678,042)
17	92,337	14,972	32,023	46,995	-	(70,466)	-	-	(1,764)	(25,235)	(15,267)	(820,768)	(693,310)

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
18	91,876	15,348	32,618	47,967	-	(70,466)	-	-	(1,808)	(24,307)	(14,278)	(845,075)	(707,588)
19	91,416	15,739	35,017	50,756	-	(70,466)	-	-	(1,853)	(21,563)	(12,297)	(866,638)	(719,885)
20	90,959	16,139	36,754	52,893	-	(70,466)	(211,394)	-	(1,899)	(230,867)	(127,825)	(1,097,505)	(847,710)
21	90,504	16,549	38,401	54,950	-	-	-	-	(1,947)	53,003	28,492	(1,044,502)	(819,218)
22	90,052	16,967	40,308	57,274	-	-	-	-	(1,995)	55,279	28,850	(989,224)	(790,369)
23	89,602	17,382	41,227	58,609	-	-	-	-	(2,045)	56,564	28,661	(932,659)	(761,708)
24	89,154	17,823	43,973	61,795	-	-	-	-	(2,096)	59,699	29,368	(872,961)	(732,340)
25	88,708	18,274	46,479	64,753	-	-	-	-	(2,149)	62,604	29,900	(810,356)	(702,440)
Total	2,356,726	344,528	696,758	1,041,287	(271,920)	(1,409,325)	(211,394)	81,576	(40,579)	-	-	-	-

TABLE 17: CURRENT ELECTRIC BILL STATEMENT

Time Period		Energy Use (kWh)				Max Demand (kW)		Charges (\$)			
Month	Season	On-Peak	Mid-Peak	Off-Peak	Super Off-Peak	On-Peak	Mid-Peak	Energy	Demand	Non-Bypassable	Total
January	Winter	0	2,563	3,547	4,297	0	43	1,272	1,531	302	3,105
February	Winter	0	2,347	4,124	3,712	0	43	1,242	1,531	300	3,074
March	Winter	0	2,707	4,482	4,834	0	38	1,451	1,494	311	3,256
April	Winter	0	2,356	4,218	4,659	0	38	1,351	1,255	307	2,912
May	Winter	0	2,375	3,415	4,314	0	34	1,211	1,217	300	2,728
June	Summer	1,602	698	6,094	0	34	34	1,138	2,056	289	3,483
July	Summer	1,549	913	5,564	0	29	34	1,097	1,882	287	3,266
August	Summer	2,009	816	5,278	0	38	38	1,124	2,350	287	3,761
September	Summer	1,243	646	5,378	0	29	34	980	1,882	282	3,144
October	Winter	0	1,663	1,609	3,470	0	29	788	1,061	279	2,128
November	Winter	0	1,976	3,028	3,696	0	38	1,043	1,374	291	2,709
December	Winter	0	2,371	3,607	4,309	0	43	1,236	1,650	301	3,187
Total		6,403	21,432	50,344	33,291	130	446	13,935	19,282	3,537	36,754

TABLE 18: NEW ELECTRIC BILL STATEMENT

Time Period		Energy Use (kWh)				Max Demand (kW)		Charges (\$)			
Month	Season	On-Peak	Mid-Peak	Off-Peak	Super Off-Peak	On-Peak	Mid-Peak	Energy	Demand	Non-Bypassable	Total
January	Winter	0	410	3,780	1,471	0	34	723	652	240	1,616
February	Winter	0	337	3,146	1,186	0	38	561	613	240	1,414
March	Winter	0	286	3,689	1,011	0	37	622	594	240	1,456
April	Winter	0	25	2,323	428	0	14	340	363	239	942
May	Winter	0	0	2,710	388	0	0	298	177	239	714
June	Summer	0	0	3,042	0	0	0	136	177	239	552
July	Summer	0	0	3,021	0	0	0	-182	177	239	234
August	Summer	0	0	3,381	0	0	0	-110	177	239	306
September	Summer	0	0	2,962	0	0	0	39	177	239	455
October	Winter	0	0	2,735	10	0	0	134	177	239	550
November	Winter	0	0	2,705	771	0	0	390	400	239	1,029
December	Winter	0	668	4,145	1,576	0	43	804	690	240	1,735
Total		0	1,727	37,639	6,840	0	167	3,753	4,376	2,872	11,001

TABLE 19: KEY FINANCIAL INPUTS & METRICS – PV + BESS DIRECT PURCHASE

Key Financial Outputs			
PV Cost	(\$271,920)	Total Energy Financial Benefit (Year 1)	\$25,087
BESS Cost	(\$1,671,068)	25-Year Total Energy Financial Benefit	\$1,052,256
Upfront Payment	(\$1,942,988)	25-Year NPV	(\$785,019)
Total O&M Cost	(\$477,184)	Payback Year	26+
Total Project Costs	(\$2,420,172)		
Total Incentives	\$582,896		
Net Payments	(\$1,837,276)		

TABLE 20: PV + BESS DIRECT PURCHASE PRO FORMA

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Cost (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	BESS O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
0	-	-	-	-	(271,920)	(1,671,068)	-	-	-	(1,942,988)	(1,942,988)	(1,942,988)	(1,942,988)
1	100,048	10,181	14,906	25,087	-	-	582,896	(1,188)	(12,782)	594,014	576,712	(1,348,974)	(1,366,276)
2	99,548	10,434	15,796	26,230	-	-	-	(1,218)	(13,102)	11,911	11,227	(1,337,064)	(1,355,049)
3	99,050	10,693	16,762	27,455	-	-	-	(1,248)	(13,429)	12,778	11,694	(1,324,286)	(1,343,355)
4	98,555	10,959	17,564	28,523	-	-	-	(1,279)	(13,765)	13,479	11,976	(1,310,807)	(1,331,379)
5	98,062	11,230	18,199	29,428	-	-	-	(1,311)	(14,109)	14,008	12,083	(1,296,799)	(1,319,296)
6	97,572	11,509	19,108	30,618	-	-	-	(1,344)	(14,462)	14,812	12,405	(1,281,987)	(1,306,891)
7	97,084	11,794	19,830	31,623	-	-	-	(1,378)	(14,823)	15,422	12,540	(1,266,564)	(1,294,351)
8	96,598	12,089	21,066	33,155	-	-	-	(1,412)	(15,194)	16,549	13,064	(1,250,015)	(1,281,287)
9	96,115	12,393	22,119	34,512	-	-	-	(1,447)	(15,574)	17,491	13,405	(1,232,524)	(1,267,882)
10	95,635	12,705	23,163	35,868	-	-	-	(1,484)	(15,963)	18,422	13,707	(1,214,103)	(1,254,174)
11	95,157	13,016	24,321	37,337	-	-	-	(1,521)	(16,362)	19,454	14,054	(1,194,649)	(1,240,121)
12	94,681	13,342	24,936	38,278	-	-	-	(1,559)	(16,771)	19,948	13,991	(1,174,701)	(1,226,130)
13	94,207	13,681	26,364	40,046	-	-	-	(1,598)	(17,190)	21,258	14,475	(1,153,443)	(1,211,654)
14	93,736	14,029	27,833	41,862	-	-	-	(1,638)	(17,620)	22,604	14,944	(1,130,840)	(1,196,710)
15	93,268	14,381	29,224	43,605	-	-	-	(1,679)	(18,061)	23,866	15,318	(1,106,974)	(1,181,392)
16	92,801	14,737	30,685	45,422	-	-	-	(1,721)	(18,512)	25,189	15,697	(1,081,785)	(1,165,695)
17	92,337	15,099	32,219	47,318	-	-	-	(1,764)	(18,975)	26,579	16,081	(1,055,206)	(1,149,614)

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Cost (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	BESS O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
18	91,876	15,472	33,030	48,502	-	-	-	(1,808)	(19,449)	27,245	16,003	(1,027,961)	(1,133,611)
19	91,416	15,863	35,520	51,383	-	-	-	(1,853)	(19,936)	29,595	16,877	(998,367)	(1,116,733)
20	90,959	16,266	37,296	53,562	-	-	-	(1,899)	(20,434)	31,229	17,291	(967,138)	(1,099,443)
21	90,504	16,677	39,160	55,838	-	-	-	(1,947)	(20,945)	32,946	17,710	(934,191)	(1,081,732)
22	90,052	17,093	41,118	58,211	-	-	-	(1,995)	(21,468)	34,747	18,134	(899,444)	(1,063,598)
23	89,602	17,507	42,153	59,660	-	-	-	(2,045)	(22,005)	35,610	18,043	(863,834)	(1,045,555)
24	89,154	17,946	44,796	62,742	-	-	-	(2,096)	(22,555)	38,091	18,738	(825,744)	(1,026,817)
25	88,708	18,399	47,593	65,992	-	-	-	(2,149)	(23,119)	40,724	19,450	(785,019)	(1,007,367)
Total	2,356,726	347,495	704,762	1,052,256	(271,920)	(1,671,068)	582,896	(40,579)	(436,605)	-	-	-	-

TABLE 21: KEY FINANCIAL INPUTS & METRICS – PV PPA + BESS LEASE

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.239	Total Energy Financial Benefit (Year 1)	\$25,087
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$1,052,256
PPA Payment (Year 1)	(\$24,270)	25-Year NPV	(\$1,444,266)
PPA Payments Term (20-Year)	(\$534,014)	Payback Year	26+
PPA Termination Value	(\$40,805)		
BESS Lease Payment (Year 1)	(\$83,553)		
BESS Lease Payment Term (20-Year)	(\$1,671,068)		
Lease Escalation Rate	0%		
Lease Termination Value	(\$250,635)		

TABLE 22: PV PPA + BESS LEASE PRO FORMA

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV PPA Cost (\$)	PPA Termination Value (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
0	-	-	-	-	-	-	-	-	-	-	-	-
1	100,048	10,181	14,906	25,087	(24,270)	-	(83,553)	-	(82,736)	(80,326)	(82,736)	(80,326)
2	99,548	10,434	15,796	26,230	(24,511)	-	(83,553)	-	(81,834)	(77,137)	(164,571)	(157,463)
3	99,050	10,693	16,762	27,455	(24,754)	-	(83,553)	-	(80,853)	(73,991)	(245,423)	(231,455)
4	98,555	10,959	17,564	28,523	(25,000)	-	(83,553)	-	(80,030)	(71,106)	(325,454)	(302,561)
5	98,062	11,230	18,199	29,428	(25,248)	-	(83,553)	-	(79,373)	(68,468)	(404,827)	(371,029)
6	97,572	11,509	19,108	30,618	(25,499)	-	(83,553)	-	(78,434)	(65,687)	(483,261)	(436,716)
7	97,084	11,794	19,830	31,623	(25,752)	-	(83,553)	-	(77,682)	(63,162)	(560,943)	(499,879)
8	96,598	12,089	21,066	33,155	(26,007)	-	(83,553)	-	(76,406)	(60,315)	(637,349)	(560,194)
9	96,115	12,393	22,119	34,512	(26,265)	-	(83,553)	-	(75,307)	(57,716)	(712,656)	(617,911)
10	95,635	12,705	23,163	35,868	(26,526)	-	(83,553)	-	(74,211)	(55,220)	(786,867)	(673,131)
11	95,157	13,016	24,321	37,337	(26,789)	-	(83,553)	-	(73,006)	(52,741)	(859,873)	(725,872)
12	94,681	13,342	24,936	38,278	(27,055)	-	(83,553)	-	(72,331)	(50,732)	(932,204)	(776,604)
13	94,207	13,681	26,364	40,046	(27,324)	-	(83,553)	-	(70,831)	(48,233)	(1,003,036)	(824,836)
14	93,736	14,029	27,833	41,862	(27,595)	-	(83,553)	-	(69,287)	(45,807)	(1,072,323)	(870,643)
15	93,268	14,381	29,224	43,605	(27,869)	-	(83,553)	-	(67,817)	(43,529)	(1,140,140)	(914,173)

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV PPA Cost (\$)	PPA Termination Value (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	Total Annual Projected Cash Flow (\$)	Total NPV Of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
16	92,801	14,737	30,685	45,422	(28,146)	-	(83,553)	-	(66,277)	(41,302)	(1,206,417)	(955,474)
17	92,337	15,099	32,219	47,318	(28,425)	-	(83,553)	-	(64,661)	(39,121)	(1,271,078)	(994,595)
18	91,876	15,472	33,030	48,502	(28,707)	-	(83,553)	-	(63,759)	(37,452)	(1,334,837)	(1,032,047)
19	91,416	15,863	35,520	51,383	(28,992)	-	(83,553)	-	(61,162)	(34,880)	(1,395,999)	(1,066,926)
20	90,959	16,266	37,296	53,562	(29,280)	(40,805)	(83,553)	(250,635)	(350,711)	(194,180)	(1,746,710)	(1,261,107)
21	90,504	16,677	39,160	55,838	-	-	-	-	55,838	30,016	(1,690,872)	(1,231,091)
22	90,052	17,093	41,118	58,211	-	-	-	-	58,211	30,380	(1,632,661)	(1,200,711)
23	89,602	17,507	42,153	59,660	-	-	-	-	59,660	30,229	(1,573,001)	(1,170,482)
24	89,154	17,946	44,796	62,742	-	-	-	-	62,742	30,865	(1,510,258)	(1,139,617)
25	88,708	18,399	47,593	65,992	-	-	-	-	65,992	31,518	(1,444,266)	(1,108,099)
Total	2,356,726	347,495	704,762	1,052,256	(534,014)	(40,805)	(1,671,068)	(250,635)	-	-	-	-

TABLE 23: KEY FINANCIAL INPUTS & METRICS – PV DIRECT PURCHASE + BESS LEASE

Key Financial Outputs			
PV Cost	(\$271,920)	Total Energy Financial Benefit (Year 1)	\$25,087
Total PV O&M Cost	(\$40,579)	25-Year Total Energy Financial Benefit	\$1,052,256
BESS Lease Payment (Year 1)	(\$83,553)	25-Year NPV	(\$1,100,370)
BESS Lease Payment Term (20-Year)	(\$1,671,068)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$250,635)		
Total Incentives	\$81,576		

TABLE 24: PV DIRECT PURCHASE + BESS LEASE PRO FORMA

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
0	-	-	-	-	(271,920)	-	-	-	-	(271,920)	(271,920)	(271,920)	(271,920)
1	100,048	10,181	14,906	25,087	-	(83,553)	-	81,576	(1,188)	21,922	21,283	(249,998)	(250,637)
2	99,548	10,434	15,796	26,230	-	(83,553)	-	-	(1,218)	(58,541)	(55,181)	(308,539)	(305,817)
3	99,050	10,693	16,762	27,455	-	(83,553)	-	-	(1,248)	(57,346)	(52,480)	(365,886)	(358,297)
4	98,555	10,959	17,564	28,523	-	(83,553)	-	-	(1,279)	(56,310)	(50,031)	(422,195)	(408,328)
5	98,062	11,230	18,199	29,428	-	(83,553)	-	-	(1,311)	(55,436)	(47,820)	(477,632)	(456,148)
6	97,572	11,509	19,108	30,618	-	(83,553)	-	-	(1,344)	(54,280)	(45,458)	(531,912)	(501,606)
7	97,084	11,794	19,830	31,623	-	(83,553)	-	-	(1,378)	(53,308)	(43,344)	(585,219)	(544,950)
8	96,598	12,089	21,066	33,155	-	(83,553)	-	-	(1,412)	(51,810)	(40,900)	(637,030)	(585,850)
9	96,115	12,393	22,119	34,512	-	(83,553)	-	-	(1,447)	(50,489)	(38,696)	(687,519)	(624,545)
10	95,635	12,705	23,163	35,868	-	(83,553)	-	-	(1,484)	(49,169)	(36,586)	(736,687)	(661,132)
11	95,157	13,016	24,321	37,337	-	(83,553)	-	-	(1,521)	(47,738)	(34,487)	(784,425)	(695,618)
12	94,681	13,342	24,936	38,278	-	(83,553)	-	-	(1,559)	(46,835)	(32,849)	(831,260)	(728,467)
13	94,207	13,681	26,364	40,046	-	(83,553)	-	-	(1,598)	(45,105)	(30,715)	(876,365)	(759,182)
14	93,736	14,029	27,833	41,862	-	(83,553)	-	-	(1,638)	(43,329)	(28,646)	(919,694)	(787,827)
15	93,268	14,381	29,224	43,605	-	(83,553)	-	-	(1,679)	(41,627)	(26,719)	(961,321)	(814,546)

Year	Solar Production (kWh)	Projected Energy Savings (\$)	Projected Demand Savings (\$)	Total Energy Financial Benefit (\$)	PV Cost (\$)	BESS Lease Cost (\$)	Lease Termination Value (\$)	ITC Elective Pay (\$)	PV O&M Costs (\$)	Total Annual Projected Cash Flow (\$)	Total NPV of Projected Cash Flow (\$)	Undiscounted Cumulative Cash Flow (\$)	Discounted Cumulative Cash Flow (\$)
16	92,801	14,737	30,685	45,422	-	(83,553)	-	-	(1,721)	(39,852)	(24,835)	(1,001,174)	(839,381)
17	92,337	15,099	32,219	47,318	-	(83,553)	-	-	(1,764)	(37,999)	(22,990)	(1,039,173)	(862,371)
18	91,876	15,472	33,030	48,502	-	(83,553)	-	-	(1,808)	(36,859)	(21,651)	(1,076,033)	(884,022)
19	91,416	15,863	35,520	51,383	-	(83,553)	-	-	(1,853)	(34,023)	(19,403)	(1,110,056)	(903,425)
20	90,959	16,266	37,296	53,562	-	(83,553)	(250,635)	-	(1,899)	(282,526)	(156,428)	(1,392,581)	(1,059,853)
21	90,504	16,677	39,160	55,838	-	-	-	-	(1,947)	53,891	28,969	(1,338,690)	(1,030,884)
22	90,052	17,093	41,118	58,211	-	-	-	-	(1,995)	56,215	29,338	(1,282,475)	(1,001,545)
23	89,602	17,507	42,153	59,660	-	-	-	-	(2,045)	57,615	29,193	(1,224,860)	(972,352)
24	89,154	17,946	44,796	62,742	-	-	-	-	(2,096)	60,646	29,834	(1,164,214)	(942,518)
25	88,708	18,399	47,593	65,992	-	-	-	-	(2,149)	63,844	30,492	(1,100,370)	(912,026)
Total	2,356,726	347,495	704,762	1,052,256	(271,920)	(1,671,068)	(250,635)	81,576	(40,579)	-	-	-	-