

# SUSI Q CENTER

# MICROGRID FINANCIAL RESULTS

## FINANCIAL RESULTS

The detailed results of the Financial Modeling for Susi Q Center 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	4,255	5,644	7,758	0	56	2,163	1,830	349	4,342
February	Winter	0	3,867	5,283	7,020	0	50	1,934	1,661	337	3,932
March	Winter	0	4,302	6,096	8,079	0	48	2,208	1,768	351	4,327
April	Winter	0	4,193	5,746	7,866	0	48	2,125	1,728	347	4,200
May	Winter	0	4,679	6,432	8,854	0	51	2,382	1,793	360	4,534
June	Summer	3,778	1,142	14,942	0	56	50	2,675	3,466	359	6,501
July	Summer	5,350	2,146	20,820	0	66	61	3,829	4,213	411	8,454
August	Summer	5,944	1,727	23,165	0	69	61	4,155	4,369	427	8,950
September	Summer	5,657	2,108	24,912	0	77	75	4,383	5,097	438	9,918
October	Winter	0	6,028	8,463	11,503	0	61	3,102	2,146	397	5,645
November	Winter	0	4,421	6,550	8,226	0	62	2,300	2,039	355	4,694
December	Winter	0	4,110	6,246	7,268	0	43	2,121	1,491	346	3,958
<b>Total</b>		<b>20,729</b>	<b>42,977</b>	<b>134,298</b>	<b>66,574</b>	<b>267</b>	<b>666</b>	<b>33,378</b>	<b>31,601</b>	<b>4,476</b>	<b>69,455</b>

**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	2,571	9,627	1,763	0	47	1,868	751	243	2,863
February	Winter	0	2,524	8,802	1,361	0	46	1,653	761	243	2,657
March	Winter	0	2,424	9,523	1,153	0	41	1,720	661	243	2,623
April	Winter	0	1,878	8,895	917	0	44	1,532	704	242	2,478
May	Winter	0	2,756	8,944	1,716	0	47	1,741	751	243	2,736
June	Summer	2,986	0	11,010	0	49	0	1,867	951	243	3,062
July	Summer	4,734	1,297	15,679	0	64	61	2,953	1,230	246	4,429
August	Summer	5,400	1,385	17,546	0	64	60	3,311	1,240	247	4,798
September	Summer	5,320	1,956	19,632	0	73	64	3,647	1,411	248	5,306
October	Winter	0	5,186	9,904	5,905	0	59	2,622	945	246	3,813
November	Winter	0	2,896	9,504	3,199	0	59	1,987	944	244	3,175
December	Winter	0	1,974	9,915	2,700	0	40	1,866	639	243	2,748
<b>Total</b>		<b>18,440</b>	<b>26,846</b>	<b>138,983</b>	<b>18,712</b>	<b>251</b>	<b>569</b>	<b>26,768</b>	<b>10,988</b>	<b>2,932</b>	<b>40,688</b>

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

Key Financial Outputs			
PV Cost	(\$155,513)	Total Energy Financial Benefit (Year 1)	\$27,222
BESS Cost	(\$1,409,325)	25-Year Total Energy Financial Benefit	\$1,202,058
Upfront Payment	(\$1,564,838)	25-Year NPV	(\$404,133)
Total O&M Cost	(\$510,805)	Payback Year	26+
Total Project Costs	(\$2,075,643)		
Total Incentives	\$469,451		
Net Payments	(\$1,606,192)		

**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	-	-	-	-	(155,513)	(1,409,325)	-	-	-	(1,564,838)	(1,564,838)	(1,564,838)	(1,564,838)
1	72,142	6,610	20,613	27,222	-	-	469,451	(861)	(14,093)	481,719	467,688	(1,083,118)	(1,097,149)
2	71,781	6,776	21,602	28,378	-	-	-	(883)	(14,445)	13,050	12,301	(1,070,069)	(1,084,848)
3	71,422	6,943	22,642	29,586	-	-	-	(905)	(14,806)	13,874	12,697	(1,056,194)	(1,072,152)
4	71,065	7,108	23,583	30,691	-	-	-	(928)	(15,177)	14,587	12,960	(1,041,608)	(1,059,191)
5	70,710	7,275	24,799	32,074	-	-	-	(951)	(15,556)	15,567	13,428	(1,026,041)	(1,045,763)
6	70,356	7,442	26,011	33,452	-	-	-	(974)	(15,945)	16,533	13,846	(1,009,508)	(1,031,917)
7	70,005	7,616	27,594	35,210	-	-	-	(999)	(16,344)	17,867	14,528	(991,640)	(1,017,389)
8	69,655	7,808	28,997	36,805	-	-	-	(1,024)	(16,752)	19,029	15,022	(972,611)	(1,002,367)
9	69,306	7,997	30,310	38,307	-	-	-	(1,049)	(17,171)	20,087	15,395	(952,524)	(986,972)
10	68,960	8,194	31,815	40,008	-	-	-	(1,076)	(17,600)	21,332	15,873	(931,192)	(971,099)
11	68,615	8,379	33,240	41,618	-	-	-	(1,103)	(18,040)	22,476	16,237	(908,716)	(954,862)

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	68,272	8,575	35,197	43,772	-	-	-	(1,130)	(18,491)	24,150	16,939	(884,566)	(937,924)
13	67,931	8,796	36,953	45,749	-	-	-	(1,158)	(18,954)	25,637	17,458	(858,928)	(920,466)
14	67,591	9,028	38,763	47,791	-	-	-	(1,187)	(19,427)	27,176	17,967	(831,752)	(902,499)
15	67,253	9,250	40,265	49,515	-	-	-	(1,217)	(19,913)	28,385	18,219	(803,367)	(884,280)
16	66,917	9,479	42,340	51,819	-	-	-	(1,247)	(20,411)	30,161	18,795	(773,206)	(865,484)
17	66,582	9,707	44,520	54,227	-	-	-	(1,279)	(20,921)	32,027	19,377	(741,179)	(846,107)
18	66,249	9,947	47,025	56,972	-	-	-	(1,311)	(21,444)	34,217	20,099	(706,961)	(826,008)
19	65,918	10,220	49,538	59,758	-	-	-	(1,343)	(21,980)	36,434	20,778	(670,527)	(805,230)
20	65,588	10,486	51,780	62,267	-	-	-	(1,377)	(22,530)	38,360	21,239	(632,167)	(783,991)
21	65,260	10,762	53,930	64,692	-	-	-	(1,411)	(23,093)	40,187	21,603	(591,980)	(762,389)
22	64,934	11,049	56,535	67,584	-	-	-	(1,447)	(23,670)	42,467	22,163	(549,513)	(740,226)
23	64,609	11,325	60,136	71,461	-	-	-	(1,483)	(24,262)	45,717	23,164	(503,796)	(717,061)
24	64,286	11,643	63,137	74,779	-	-	-	(1,520)	(24,869)	48,391	23,805	(455,406)	(693,256)
25	63,965	11,973	66,347	78,320	-	-	-	(1,558)	(25,490)	51,272	24,488	(404,133)	(668,768)
<b>Total</b>	<b>1,699,373</b>	<b>224,386</b>	<b>977,672</b>	<b>1,202,058</b>	<b>(155,513)</b>	<b>(1,409,325)</b>	<b>469,451</b>	<b>(29,420)</b>	<b>(481,385)</b>	-	-	-	-

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

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.191	Total Energy Financial Benefit (Year 1)	\$27,222
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$1,202,058
PPA Payment (Year 1)	(\$13,986)	25-Year NPV	(\$749,685)
PPA Payments Term (20-Year)	(\$307,729)	Payback Year	26+
PPA Termination Value	(\$23,295)		
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 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	72,142	6,610	20,613	27,222	(13,986)	-	(70,466)	-	(57,230)	(55,563)	(57,230)	(55,563)
2	71,781	6,776	21,602	28,378	(14,125)	-	(70,466)	-	(56,213)	(52,986)	(113,443)	(108,549)
3	71,422	6,943	22,642	29,586	(14,265)	-	(70,466)	-	(55,146)	(50,466)	(168,588)	(159,015)
4	71,065	7,108	23,583	30,691	(14,406)	-	(70,466)	-	(54,182)	(48,140)	(222,770)	(207,155)
5	70,710	7,275	24,799	32,074	(14,549)	-	(70,466)	-	(52,942)	(45,668)	(275,712)	(252,823)
6	70,356	7,442	26,011	33,452	(14,694)	-	(70,466)	-	(51,708)	(43,304)	(327,419)	(296,127)
7	70,005	7,616	27,594	35,210	(14,840)	-	(70,466)	-	(50,096)	(40,733)	(377,516)	(336,860)
8	69,655	7,808	28,997	36,805	(14,987)	-	(70,466)	-	(48,648)	(38,403)	(426,163)	(375,263)
9	69,306	7,997	30,310	38,307	(15,136)	-	(70,466)	-	(47,295)	(36,248)	(473,458)	(411,510)
10	68,960	8,194	31,815	40,008	(15,286)	-	(70,466)	-	(45,744)	(34,038)	(519,202)	(445,548)

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	68,615	8,379	33,240	41,618	(15,438)	-	(70,466)	-	(44,285)	(31,993)	(563,487)	(477,541)
12	68,272	8,575	35,197	43,772	(15,591)	-	(70,466)	-	(42,285)	(29,658)	(605,773)	(507,199)
13	67,931	8,796	36,953	45,749	(15,746)	-	(70,466)	-	(40,463)	(27,553)	(646,235)	(534,752)
14	67,591	9,028	38,763	47,791	(15,902)	-	(70,466)	-	(38,577)	(25,504)	(684,812)	(560,256)
15	67,253	9,250	40,265	49,515	(16,060)	-	(70,466)	-	(37,011)	(23,756)	(721,823)	(584,012)
16	66,917	9,479	42,340	51,819	(16,219)	-	(70,466)	-	(34,866)	(21,728)	(756,689)	(605,739)
17	66,582	9,707	44,520	54,227	(16,380)	-	(70,466)	-	(32,619)	(19,735)	(789,308)	(625,474)
18	66,249	9,947	47,025	56,972	(16,543)	-	(70,466)	-	(30,037)	(17,643)	(819,345)	(643,118)
19	65,918	10,220	49,538	59,758	(16,707)	-	(70,466)	-	(27,415)	(15,634)	(846,760)	(658,752)
20	65,588	10,486	51,780	62,267	(16,873)	(23,295)	(70,466)	(211,394)	(259,761)	(143,823)	(1,106,521)	(802,575)
21	65,260	10,762	53,930	64,692	-	-	-	-	64,692	34,775	(1,041,829)	(767,801)
22	64,934	11,049	56,535	67,584	-	-	-	-	67,584	35,272	(974,246)	(732,529)
23	64,609	11,325	60,136	71,461	-	-	-	-	71,461	36,209	(902,784)	(696,320)
24	64,286	11,643	63,137	74,779	-	-	-	-	74,779	36,786	(828,005)	(659,534)
25	63,965	11,973	66,347	78,320	-	-	-	-	78,320	37,406	(749,685)	(622,127)
<b>Total</b>	<b>1,699,373</b>	<b>224,386</b>	<b>977,672</b>	<b>1,202,058</b>	<b>(307,729)</b>	<b>(23,295)</b>	<b>(1,409,325)</b>	<b>(211,394)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Key Financial Outputs			
PV Cost	(\$155,513)	Total Energy Financial Benefit (Year 1)	\$27,222
Total PV O&M Cost	(\$29,420)	25-Year Total Energy Financial Benefit	\$1,202,058
BESS Lease Payment (Year 1)	(\$70,466)	25-Year NPV	(\$556,940)
BESS Lease Payment Term (20-Year)	(\$1,409,325)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$211,394)		
Total Incentives	\$46,654		

**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	-	-	-	-	(155,513)	-	-	-	-	(155,513)	(155,513)	(155,513)	(155,513)
1	72,142	6,610	20,613	27,222	-	(70,466)	-	46,654	(861)	2,548	2,474	(152,964)	(153,038)
2	71,781	6,776	21,602	28,378	-	(70,466)	-	-	(883)	(42,971)	(40,504)	(195,935)	(193,543)
3	71,422	6,943	22,642	29,586	-	(70,466)	-	-	(905)	(41,786)	(38,240)	(237,721)	(231,783)
4	71,065	7,108	23,583	30,691	-	(70,466)	-	-	(928)	(40,703)	(36,164)	(278,424)	(267,947)
5	70,710	7,275	24,799	32,074	-	(70,466)	-	-	(951)	(39,343)	(33,938)	(317,767)	(301,884)
6	70,356	7,442	26,011	33,452	-	(70,466)	-	-	(974)	(37,988)	(31,815)	(355,755)	(333,699)
7	70,005	7,616	27,594	35,210	-	(70,466)	-	-	(999)	(36,255)	(29,479)	(392,011)	(363,178)
8	69,655	7,808	28,997	36,805	-	(70,466)	-	-	(1,024)	(34,685)	(27,380)	(426,695)	(390,558)
9	69,306	7,997	30,310	38,307	-	(70,466)	-	-	(1,049)	(33,209)	(25,452)	(459,904)	(416,010)
10	68,960	8,194	31,815	40,008	-	(70,466)	-	-	(1,076)	(31,534)	(23,464)	(491,437)	(439,474)
11	68,615	8,379	33,240	41,618	-	(70,466)	-	-	(1,103)	(29,950)	(21,637)	(521,388)	(461,111)

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	68,272	8,575	35,197	43,772	-	(70,466)	-	-	(1,130)	(27,825)	(19,516)	(549,212)	(480,626)
13	67,931	8,796	36,953	45,749	-	(70,466)	-	-	(1,158)	(25,875)	(17,620)	(575,088)	(498,246)
14	67,591	9,028	38,763	47,791	-	(70,466)	-	-	(1,187)	(23,863)	(15,776)	(598,950)	(514,022)
15	67,253	9,250	40,265	49,515	-	(70,466)	-	-	(1,217)	(22,168)	(14,229)	(621,118)	(528,251)
16	66,917	9,479	42,340	51,819	-	(70,466)	-	-	(1,247)	(19,895)	(12,398)	(641,013)	(540,648)
17	66,582	9,707	44,520	54,227	-	(70,466)	-	-	(1,279)	(17,518)	(10,599)	(658,531)	(551,247)
18	66,249	9,947	47,025	56,972	-	(70,466)	-	-	(1,311)	(14,805)	(8,696)	(673,335)	(559,943)
19	65,918	10,220	49,538	59,758	-	(70,466)	-	-	(1,343)	(12,052)	(6,873)	(685,387)	(566,816)
20	65,588	10,486	51,780	62,267	-	(70,466)	(211,394)	-	(1,377)	(220,971)	(122,346)	(906,358)	(689,162)
21	65,260	10,762	53,930	64,692	-	-	-	-	(1,411)	63,280	34,016	(843,078)	(655,146)
22	64,934	11,049	56,535	67,584	-	-	-	-	(1,447)	66,137	34,517	(776,940)	(620,630)
23	64,609	11,325	60,136	71,461	-	-	-	-	(1,483)	69,979	35,458	(706,962)	(585,172)
24	64,286	11,643	63,137	74,779	-	-	-	-	(1,520)	73,259	36,039	(633,702)	(549,133)
25	63,965	11,973	66,347	78,320	-	-	-	-	(1,558)	76,763	36,662	(556,940)	(512,471)
<b>Total</b>	<b>1,699,373</b>	<b>224,386</b>	<b>977,672</b>	<b>1,202,058</b>	<b>(155,513)</b>	<b>(1,409,325)</b>	<b>(211,394)</b>	<b>46,654</b>	<b>(29,420)</b>	-	-	-	-

**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	4,255	5,644	7,758	0	56	2,163	1,830	349	4,342
February	Winter	0	3,867	5,283	7,020	0	50	1,934	1,661	337	3,932
March	Winter	0	4,302	6,096	8,079	0	48	2,208	1,768	351	4,327
April	Winter	0	4,193	5,746	7,866	0	48	2,125	1,728	347	4,200
May	Winter	0	4,679	6,432	8,854	0	51	2,382	1,793	360	4,534
June	Summer	3,778	1,142	14,942	0	56	50	2,675	3,466	359	6,501
July	Summer	5,350	2,146	20,820	0	66	61	3,829	4,213	411	8,454
August	Summer	5,944	1,727	23,165	0	69	61	4,155	4,369	427	8,950
September	Summer	5,657	2,108	24,912	0	77	75	4,383	5,097	438	9,918
October	Winter	0	6,028	8,463	11,503	0	61	3,102	2,146	397	5,645
November	Winter	0	4,421	6,550	8,226	0	62	2,300	2,039	355	4,694
December	Winter	0	4,110	6,246	7,268	0	43	2,121	1,491	346	3,958
<b>Total</b>		<b>20,729</b>	<b>42,977</b>	<b>134,298</b>	<b>66,574</b>	<b>267</b>	<b>666</b>	<b>33,378</b>	<b>31,601</b>	<b>4,476</b>	<b>69,455</b>

**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	3,569	7,022	3,257	0	47	1,801	763	243	2,808
February	Winter	0	3,161	6,547	2,754	0	46	1,575	761	243	2,578
March	Winter	0	3,400	7,117	2,306	0	41	1,643	753	243	2,639
April	Winter	0	3,101	6,463	1,781	0	44	1,456	704	242	2,402
May	Winter	0	3,561	6,870	2,864	0	47	1,686	751	243	2,680
June	Summer	3,137	648	9,975	0	49	44	1,866	951	243	3,060
July	Summer	4,734	1,822	14,883	0	64	61	2,937	1,230	246	4,413
August	Summer	5,400	1,525	17,222	0	64	60	3,293	1,240	247	4,780
September	Summer	5,330	1,956	19,526	0	73	64	3,635	1,411	248	5,294
October	Winter	0	5,668	8,715	6,467	0	59	2,584	945	246	3,775
November	Winter	0	4,040	7,773	3,578	0	59	1,947	944	244	3,135
December	Winter	0	3,487	7,753	2,996	0	43	1,810	690	243	2,743
<b>Total</b>		<b>18,601</b>	<b>35,938</b>	<b>119,865</b>	<b>26,003</b>	<b>251</b>	<b>616</b>	<b>26,233</b>	<b>11,143</b>	<b>2,931</b>	<b>40,307</b>

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

Key Financial Outputs			
PV Cost	(\$155,513)	Total Energy Financial Benefit (Year 1)	\$27,602
BESS Cost	(\$1,671,068)	25-Year Total Energy Financial Benefit	\$1,219,181
Upfront Payment	(\$1,826,581)	25-Year NPV	(\$573,989)
Total O&M Cost	(\$514,563)	Payback Year	26+
Total Project Costs	(\$2,341,143)		
Total Incentives	\$547,974		
Net Payments	(\$1,793,169)		

**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	-	-	-	-	(155,513)	(1,671,068)	-	-	-	(1,826,581)	(1,826,581)	(1,826,581)	(1,826,581)
1	72,142	7,145	20,458	27,602	-	-	547,974	(861)	(14,203)	560,512	544,186	(1,266,068)	(1,282,394)
2	71,781	7,336	21,439	28,775	-	-	-	(883)	(14,558)	13,334	12,569	(1,252,734)	(1,269,825)
3	71,422	7,531	22,470	30,001	-	-	-	(905)	(14,922)	14,174	12,972	(1,238,560)	(1,256,854)
4	71,065	7,729	23,402	31,132	-	-	-	(928)	(15,295)	14,909	13,246	(1,223,651)	(1,243,607)
5	70,710	7,932	24,608	32,541	-	-	-	(951)	(15,677)	15,913	13,726	(1,207,738)	(1,229,881)
6	70,356	8,141	25,810	33,951	-	-	-	(974)	(16,069)	16,907	14,159	(1,190,831)	(1,215,721)
7	70,005	8,354	27,402	35,756	-	-	-	(999)	(16,471)	18,286	14,868	(1,172,546)	(1,200,854)
8	69,655	8,576	28,795	37,371	-	-	-	(1,024)	(16,883)	19,465	15,366	(1,153,081)	(1,185,488)
9	69,306	8,804	30,098	38,903	-	-	-	(1,049)	(17,305)	20,548	15,748	(1,132,533)	(1,169,739)
10	68,960	9,039	31,592	40,631	-	-	-	(1,076)	(17,738)	21,818	16,235	(1,110,714)	(1,153,505)
11	68,615	9,276	33,012	42,289	-	-	-	(1,103)	(18,181)	23,005	16,619	(1,087,709)	(1,136,885)
12	68,272	9,522	34,959	44,481	-	-	-	(1,130)	(18,636)	24,715	17,335	(1,062,994)	(1,119,551)
13	67,931	9,777	36,704	46,481	-	-	-	(1,158)	(19,101)	26,221	17,855	(1,036,774)	(1,101,696)
14	67,591	10,042	38,501	48,543	-	-	-	(1,187)	(19,579)	27,776	18,363	(1,008,997)	(1,083,332)
15	67,253	10,309	39,991	50,300	-	-	-	(1,217)	(20,068)	29,015	18,624	(979,982)	(1,064,708)

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	66,917	10,585	42,053	52,637	-	-	-	(1,247)	(20,570)	30,820	19,206	(949,162)	(1,045,503)
17	66,582	10,866	44,167	55,034	-	-	-	(1,279)	(21,084)	32,671	19,766	(916,492)	(1,025,736)
18	66,249	11,157	46,625	57,782	-	-	-	(1,311)	(21,612)	34,860	20,476	(881,632)	(1,005,260)
19	65,918	11,457	49,119	60,576	-	-	-	(1,343)	(22,152)	37,081	21,147	(844,551)	(984,113)
20	65,588	11,765	51,341	63,106	-	-	-	(1,377)	(22,706)	39,024	21,607	(805,527)	(962,507)
21	65,260	12,080	53,470	65,550	-	-	-	(1,411)	(23,273)	40,866	21,967	(764,662)	(940,539)
22	64,934	12,405	56,055	68,460	-	-	-	(1,447)	(23,855)	43,158	22,524	(721,503)	(918,015)
23	64,609	12,733	59,634	72,367	-	-	-	(1,483)	(24,451)	46,433	23,527	(675,070)	(894,488)
24	64,286	13,075	62,612	75,687	-	-	-	(1,520)	(25,063)	49,104	24,156	(625,966)	(870,332)
25	63,965	13,426	65,799	79,225	-	-	-	(1,558)	(25,689)	51,978	24,825	(573,989)	(845,507)
<b>Total</b>	<b>1,699,373</b>	<b>249,063</b>	<b>970,117</b>	<b>1,219,181</b>	<b>(155,513)</b>	<b>(1,671,068)</b>	<b>547,974</b>	<b>(29,420)</b>	<b>(485,143)</b>	-	-	-	-

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

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.191	Total Energy Financial Benefit (Year 1)	\$27,602
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$1,219,181
PPA Payment (Year 1)	(\$13,986)	25-Year NPV	(\$1,033,546)
PPA Payments Term (20-Year)	(\$307,729)	Payback Year	26+
PPA Termination Value	(\$23,295)		
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 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	72,142	7,145	20,458	27,602	(13,986)	-	(83,553)	-	(69,937)	(67,900)	(69,937)	(67,900)
2	71,781	7,336	21,439	28,775	(14,125)	-	(83,553)	-	(68,903)	(64,948)	(138,840)	(132,848)
3	71,422	7,531	22,470	30,001	(14,265)	-	(83,553)	-	(67,817)	(62,062)	(206,657)	(194,910)
4	71,065	7,729	23,402	31,132	(14,406)	-	(83,553)	-	(66,828)	(59,376)	(273,485)	(254,286)
5	70,710	7,932	24,608	32,541	(14,549)	-	(83,553)	-	(65,562)	(56,554)	(339,047)	(310,840)
6	70,356	8,141	25,810	33,951	(14,694)	-	(83,553)	-	(64,296)	(53,847)	(403,343)	(364,687)
7	70,005	8,354	27,402	35,756	(14,840)	-	(83,553)	-	(62,637)	(50,930)	(465,981)	(415,617)
8	69,655	8,576	28,795	37,371	(14,987)	-	(83,553)	-	(61,169)	(48,287)	(527,149)	(463,904)
9	69,306	8,804	30,098	38,903	(15,136)	-	(83,553)	-	(59,786)	(45,821)	(586,936)	(509,726)
10	68,960	9,039	31,592	40,631	(15,286)	-	(83,553)	-	(58,208)	(43,312)	(645,144)	(553,038)
11	68,615	9,276	33,012	42,289	(15,438)	-	(83,553)	-	(56,702)	(40,963)	(701,846)	(594,001)
12	68,272	9,522	34,959	44,481	(15,591)	-	(83,553)	-	(54,664)	(38,340)	(756,510)	(632,341)
13	67,931	9,777	36,704	46,481	(15,746)	-	(83,553)	-	(52,818)	(35,967)	(809,328)	(668,307)
14	67,591	10,042	38,501	48,543	(15,902)	-	(83,553)	-	(50,912)	(33,659)	(860,240)	(701,966)

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	67,253	10,309	39,991	50,300	(16,060)	-	(83,553)	-	(49,313)	(31,652)	(909,553)	(733,618)
16	66,917	10,585	42,053	52,637	(16,219)	-	(83,553)	-	(47,135)	(29,373)	(956,688)	(762,991)
17	66,582	10,866	44,167	55,034	(16,380)	-	(83,553)	-	(44,900)	(27,165)	(1,001,588)	(790,156)
18	66,249	11,157	46,625	57,782	(16,543)	-	(83,553)	-	(42,314)	(24,855)	(1,043,902)	(815,011)
19	65,918	11,457	49,119	60,576	(16,707)	-	(83,553)	-	(39,684)	(22,631)	(1,083,586)	(837,643)
20	65,588	11,765	51,341	63,106	(16,873)	(23,295)	(83,553)	(250,635)	(311,249)	(172,331)	(1,394,835)	(1,009,974)
21	65,260	12,080	53,470	65,550	-	-	-	-	65,550	35,236	(1,329,285)	(974,737)
22	64,934	12,405	56,055	68,460	-	-	-	-	68,460	35,729	(1,260,825)	(939,009)
23	64,609	12,733	59,634	72,367	-	-	-	-	72,367	36,668	(1,188,458)	(902,341)
24	64,286	13,075	62,612	75,687	-	-	-	-	75,687	37,233	(1,112,771)	(865,108)
25	63,965	13,426	65,799	79,225	-	-	-	-	79,225	37,838	(1,033,546)	(827,270)
<b>Total</b>	<b>1,699,373</b>	<b>249,063</b>	<b>970,117</b>	<b>1,219,181</b>	<b>(307,729)</b>	<b>(23,295)</b>	<b>(1,671,068)</b>	<b>(250,635)</b>	-	-	-	-

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

Key Financial Outputs			
PV Cost	(\$155,513)	Total Energy Financial Benefit (Year 1)	\$27,602
Total PV O&M Cost	(\$29,420)	25-Year Total Energy Financial Benefit	\$1,219,181
BESS Lease Payment (Year 1)	(\$83,553)	25-Year NPV	(\$840,801)
BESS Lease Payment Term (20-Year)	(\$1,671,068)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$250,635)		
Total Incentives	\$46,654		

**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	-	-	-	-	(155,513)	-	-	-	-	(155,513)	(155,513)	(155,513)	(155,513)
1	72,142	7,145	20,458	27,602	-	(83,553)	-	46,654	(861)	(10,159)	(9,863)	(165,671)	(165,375)
2	71,781	7,336	21,439	28,775	-	(83,553)	-	-	(883)	(55,661)	(52,466)	(221,332)	(217,841)
3	71,422	7,531	22,470	30,001	-	(83,553)	-	-	(905)	(54,457)	(49,836)	(275,789)	(267,677)
4	71,065	7,729	23,402	31,132	-	(83,553)	-	-	(928)	(53,349)	(47,400)	(329,139)	(315,077)
5	70,710	7,932	24,608	32,541	-	(83,553)	-	-	(951)	(51,963)	(44,824)	(381,102)	(359,901)
6	70,356	8,141	25,810	33,951	-	(83,553)	-	-	(974)	(50,577)	(42,357)	(431,679)	(402,259)
7	70,005	8,354	27,402	35,756	-	(83,553)	-	-	(999)	(48,797)	(39,676)	(480,476)	(441,935)
8	69,655	8,576	28,795	37,371	-	(83,553)	-	-	(1,024)	(47,206)	(37,265)	(527,681)	(479,200)
9	69,306	8,804	30,098	38,903	-	(83,553)	-	-	(1,049)	(45,700)	(35,025)	(573,382)	(514,225)
10	68,960	9,039	31,592	40,631	-	(83,553)	-	-	(1,076)	(43,998)	(32,738)	(617,379)	(546,963)
11	68,615	9,276	33,012	42,289	-	(83,553)	-	-	(1,103)	(42,367)	(30,607)	(659,746)	(577,570)
12	68,272	9,522	34,959	44,481	-	(83,553)	-	-	(1,130)	(40,203)	(28,198)	(699,949)	(605,768)
13	67,931	9,777	36,704	46,481	-	(83,553)	-	-	(1,158)	(38,231)	(26,034)	(738,180)	(631,801)
14	67,591	10,042	38,501	48,543	-	(83,553)	-	-	(1,187)	(36,198)	(23,931)	(774,378)	(655,732)
15	67,253	10,309	39,991	50,300	-	(83,553)	-	-	(1,217)	(34,470)	(22,125)	(808,848)	(677,857)
16	66,917	10,585	42,053	52,637	-	(83,553)	-	-	(1,247)	(32,163)	(20,043)	(841,012)	(697,901)
17	66,582	10,866	44,167	55,034	-	(83,553)	-	-	(1,279)	(29,798)	(18,029)	(870,810)	(715,929)

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	66,249	11,157	46,625	57,782	-	(83,553)	-	-	(1,311)	(27,082)	(15,908)	(897,892)	(731,837)
19	65,918	11,457	49,119	60,576	-	(83,553)	-	-	(1,343)	(24,321)	(13,870)	(922,213)	(745,707)
20	65,588	11,765	51,341	63,106	-	(83,553)	(250,635)	-	(1,377)	(272,459)	(150,854)	(1,194,672)	(896,561)
21	65,260	12,080	53,470	65,550	-	-	-	-	(1,411)	64,139	34,478	(1,130,533)	(862,083)
22	64,934	12,405	56,055	68,460	-	-	-	-	(1,447)	67,013	34,974	(1,063,520)	(827,109)
23	64,609	12,733	59,634	72,367	-	-	-	-	(1,483)	70,885	35,917	(992,635)	(791,193)
24	64,286	13,075	62,612	75,687	-	-	-	-	(1,520)	74,167	36,485	(918,469)	(754,707)
25	63,965	13,426	65,799	79,225	-	-	-	-	(1,558)	77,667	37,094	(840,801)	(717,613)
<b>Total</b>	<b>1,699,373</b>	<b>249,063</b>	<b>970,117</b>	<b>1,219,181</b>	<b>(155,513)</b>	<b>(1,671,068)</b>	<b>(250,635)</b>	<b>46,654</b>	<b>(29,420)</b>	-	-	-	-

**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	4,255	5,644	7,758	0	56	2,163	1,830	349	4,342
February	Winter	0	3,867	5,283	7,020	0	50	1,934	1,661	337	3,932
March	Winter	0	4,302	6,096	8,079	0	48	2,208	1,768	351	4,327
April	Winter	0	4,193	5,746	7,866	0	48	2,125	1,728	347	4,200
May	Winter	0	4,679	6,432	8,854	0	51	2,382	1,793	360	4,534
June	Summer	3,778	1,142	14,942	0	56	50	2,675	3,466	359	6,501
July	Summer	5,350	2,146	20,820	0	66	61	3,829	4,213	411	8,454
August	Summer	5,944	1,727	23,165	0	69	61	4,155	4,369	427	8,950
September	Summer	5,657	2,108	24,912	0	77	75	4,383	5,097	438	9,918
October	Winter	0	6,028	8,463	11,503	0	61	3,102	2,146	397	5,645
November	Winter	0	4,421	6,550	8,226	0	62	2,300	2,039	355	4,694
December	Winter	0	4,110	6,246	7,268	0	43	2,121	1,491	346	3,958
<b>Total</b>		<b>20,729</b>	<b>42,977</b>	<b>134,298</b>	<b>66,574</b>	<b>267</b>	<b>666</b>	<b>33,378</b>	<b>31,601</b>	<b>4,476</b>	<b>69,455</b>

**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	3,291	7,861	2,753	0	47	1,826	763	243	2,832
February	Winter	0	2,933	7,330	2,274	0	46	1,602	761	243	2,605
March	Winter	0	3,137	7,969	1,802	0	41	1,672	661	243	2,575
April	Winter	0	2,821	7,294	1,314	0	44	1,483	704	242	2,429
May	Winter	0	3,327	7,636	2,415	0	47	1,712	751	243	2,706
June	Summer	3,112	446	10,284	0	49	44	1,868	951	243	3,062
July	Summer	4,734	1,731	15,059	0	64	61	2,944	1,230	246	4,420
August	Summer	5,400	1,517	17,296	0	64	60	3,301	1,240	247	4,788
September	Summer	5,330	1,956	19,557	0	73	64	3,639	1,411	248	5,298
October	Winter	0	5,589	9,097	6,207	0	59	2,598	945	246	3,790
November	Winter	0	3,784	8,501	3,177	0	59	1,970	944	244	3,158
December	Winter	0	3,102	8,615	2,607	0	40	1,835	639	243	2,717
<b>Total</b>		<b>18,576</b>	<b>33,634</b>	<b>126,498</b>	<b>22,549</b>	<b>251</b>	<b>613</b>	<b>26,450</b>	<b>11,000</b>	<b>2,931</b>	<b>40,382</b>

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

Key Financial Outputs			
<b>PV Cost</b>	<b>(\$155,513)</b>	<b>Total Energy Financial Benefit (Year 1)</b>	<b>\$27,528</b>
<b>BESS Cost</b>	<b>(\$2,240,000)</b>	<b>25-Year Total Energy Financial Benefit</b>	<b>\$1,215,347</b>
<b>Upfront Payment</b>	<b>(\$2,395,513)</b>	<b>25-Year NPV</b>	<b>(\$1,076,020)</b>
<b>Total O&amp;M Cost</b>	<b>(\$614,508)</b>	<b>Payback Year</b>	<b>26+</b>
<b>Total Project Costs</b>	<b>(\$3,010,021)</b>		
<b>Total Incentives</b>	<b>\$718,654</b>		
<b>Net Payments</b>	<b>(\$2,291,367)</b>		

**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	-	-	-	-	(155,513)	(2,240,000)	-	-	-	(2,395,513)	(2,395,513)	(2,395,513)	(2,395,513)
1	72,142	6,927	20,601	27,528	-	-	718,654	(861)	(17,129)	728,192	706,982	(1,667,321)	(1,688,530)
2	71,781	7,119	21,589	28,708	-	-	-	(883)	(17,557)	10,268	9,679	(1,657,053)	(1,678,852)
3	71,422	7,315	22,627	29,942	-	-	-	(905)	(17,996)	11,041	10,104	(1,646,011)	(1,668,747)
4	71,065	7,513	23,567	31,079	-	-	-	(928)	(18,446)	11,706	10,400	(1,634,306)	(1,658,347)
5	70,710	7,715	24,781	32,496	-	-	-	(951)	(18,907)	12,638	10,901	(1,621,668)	(1,647,445)
6	70,356	7,921	25,991	33,912	-	-	-	(974)	(19,380)	13,558	11,354	(1,608,110)	(1,636,091)
7	70,005	8,133	27,591	35,724	-	-	-	(999)	(19,864)	14,861	12,083	(1,593,249)	(1,624,008)
8	69,655	8,355	28,969	37,324	-	-	-	(1,024)	(20,361)	15,939	12,583	(1,577,310)	(1,611,425)
9	69,306	8,580	30,230	38,810	-	-	-	(1,049)	(20,870)	16,891	12,945	(1,560,419)	(1,598,480)
10	68,960	8,811	31,730	40,541	-	-	-	(1,076)	(21,392)	18,074	13,449	(1,542,345)	(1,585,031)
11	68,615	9,043	33,157	42,199	-	-	-	(1,103)	(21,927)	19,170	13,849	(1,523,175)	(1,571,182)
12	68,272	9,282	35,109	44,391	-	-	-	(1,130)	(22,475)	20,787	14,579	(1,502,389)	(1,556,603)
13	67,931	9,532	36,805	46,336	-	-	-	(1,158)	(23,037)	22,141	15,077	(1,480,247)	(1,541,526)
14	67,591	9,790	38,501	48,291	-	-	-	(1,187)	(23,613)	23,491	15,530	(1,456,756)	(1,525,995)
15	67,253	10,049	39,991	50,040	-	-	-	(1,217)	(24,203)	24,620	15,803	(1,432,136)	(1,510,192)
16	66,917	10,315	42,053	52,368	-	-	-	(1,247)	(24,808)	26,313	16,397	(1,405,823)	(1,493,795)
17	66,582	10,586	44,219	54,805	-	-	-	(1,279)	(25,428)	28,098	17,000	(1,377,725)	(1,476,796)

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	66,249	10,865	46,710	57,575	-	-	-	(1,311)	(26,064)	30,201	17,740	(1,347,525)	(1,459,056)
19	65,918	11,155	49,209	60,363	-	-	-	(1,343)	(26,715)	32,304	18,423	(1,315,220)	(1,440,633)
20	65,588	11,450	51,435	62,885	-	-	-	(1,377)	(27,383)	34,125	18,894	(1,281,095)	(1,421,739)
21	65,260	11,751	53,568	65,319	-	-	-	(1,411)	(28,068)	35,840	19,266	(1,245,256)	(1,402,473)
22	64,934	12,061	56,157	68,218	-	-	-	(1,447)	(28,770)	38,002	19,833	(1,207,254)	(1,382,640)
23	64,609	12,372	59,741	72,113	-	-	-	(1,483)	(29,489)	41,142	20,846	(1,166,112)	(1,361,794)
24	64,286	12,700	62,723	75,424	-	-	-	(1,520)	(30,226)	43,678	21,487	(1,122,434)	(1,340,308)
25	63,965	13,038	65,916	78,953	-	-	-	(1,558)	(30,982)	46,414	22,168	(1,076,020)	(1,318,140)
<b>Total</b>	<b>1,699,373</b>	<b>242,379</b>	<b>972,968</b>	<b>1,215,347</b>	<b>(155,513)</b>	<b>(2,240,000)</b>	<b>718,654</b>	<b>(29,420)</b>	<b>(585,088)</b>	-	-	-	-

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

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.191	Total Energy Financial Benefit (Year 1)	\$27,528
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$1,215,347
PPA Payment (Year 1)	(\$13,986)	25-Year NPV	(\$1,691,532)
PPA Payments Term (20-Year)	(\$307,729)	Payback Year	26+
PPA Termination Value	(\$23,295)		
BESS Lease Payment (Year 1)	(\$112,000)		
BESS Lease Payment Term (20-Year)	(\$2,240,000)		
Lease Escalation Rate	0%		
Lease Termination Value	(\$335,856)		

**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	72,142	6,927	20,601	27,528	(13,986)	-	(112,000)	-	(98,458)	(95,590)	(98,458)	(95,590)
2	71,781	7,119	21,589	28,708	(14,125)	-	(112,000)	-	(97,416)	(91,824)	(195,874)	(187,414)
3	71,422	7,315	22,627	29,942	(14,265)	-	(112,000)	-	(96,322)	(88,149)	(292,196)	(275,563)
4	71,065	7,513	23,567	31,079	(14,406)	-	(112,000)	-	(95,327)	(84,697)	(387,523)	(360,260)
5	70,710	7,715	24,781	32,496	(14,549)	-	(112,000)	-	(94,054)	(81,132)	(481,577)	(441,391)
6	70,356	7,921	25,991	33,912	(14,694)	-	(112,000)	-	(92,782)	(77,703)	(574,359)	(519,094)
7	70,005	8,133	27,591	35,724	(14,840)	-	(112,000)	-	(91,116)	(74,085)	(665,474)	(593,180)
8	69,655	8,355	28,969	37,324	(14,987)	-	(112,000)	-	(89,663)	(70,781)	(755,137)	(663,960)
9	69,306	8,580	30,230	38,810	(15,136)	-	(112,000)	-	(88,326)	(67,694)	(843,463)	(731,654)
10	68,960	8,811	31,730	40,541	(15,286)	-	(112,000)	-	(86,744)	(64,546)	(930,207)	(796,200)
11	68,615	9,043	33,157	42,199	(15,438)	-	(112,000)	-	(85,238)	(61,578)	(1,015,445)	(857,778)
12	68,272	9,282	35,109	44,391	(15,591)	-	(112,000)	-	(83,199)	(58,354)	(1,098,645)	(916,133)
13	67,931	9,532	36,805	46,336	(15,746)	-	(112,000)	-	(81,409)	(55,436)	(1,180,054)	(971,569)
14	67,591	9,790	38,501	48,291	(15,902)	-	(112,000)	-	(79,611)	(52,632)	(1,259,665)	(1,024,201)
15	67,253	10,049	39,991	50,040	(16,060)	-	(112,000)	-	(78,019)	(50,078)	(1,337,684)	(1,074,278)

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	66,917	10,315	42,053	52,368	(16,219)	-	(112,000)	-	(75,851)	(47,268)	(1,413,536)	(1,121,546)
17	66,582	10,586	44,219	54,805	(16,380)	-	(112,000)	-	(73,575)	(44,514)	(1,487,111)	(1,166,061)
18	66,249	10,865	46,710	57,575	(16,543)	-	(112,000)	-	(70,967)	(41,686)	(1,558,078)	(1,207,747)
19	65,918	11,155	49,209	60,363	(16,707)	-	(112,000)	-	(68,344)	(38,975)	(1,626,422)	(1,246,722)
20	65,588	11,450	51,435	62,885	(16,873)	(23,295)	(112,000)	(335,856)	(425,138)	(235,389)	(2,051,560)	(1,482,110)
21	65,260	11,751	53,568	65,319	-	-	-	-	65,319	35,112	(1,986,241)	(1,446,998)
22	64,934	12,061	56,157	68,218	-	-	-	-	68,218	35,603	(1,918,023)	(1,411,396)
23	64,609	12,372	59,741	72,113	-	-	-	-	72,113	36,539	(1,845,909)	(1,374,856)
24	64,286	12,700	62,723	75,424	-	-	-	-	75,424	37,103	(1,770,485)	(1,337,753)
25	63,965	13,038	65,916	78,953	-	-	-	-	78,953	37,709	(1,691,532)	(1,300,044)
<b>Total</b>	<b>1,699,373</b>	<b>242,379</b>	<b>972,968</b>	<b>1,215,347</b>	<b>(307,729)</b>	<b>(23,295)</b>	<b>(2,240,000)</b>	<b>(335,856)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

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

Key Financial Outputs			
PV Cost	(\$155,513)	Total Energy Financial Benefit (Year 1)	\$27,528
Total PV O&M Cost	(\$29,420)	25-Year Total Energy Financial Benefit	\$1,215,347
BESS Lease Payment (Year 1)	(\$112,000)	25-Year NPV	(\$1,498,787)
BESS Lease Payment Term (20-Year)	(\$2,240,000)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$335,856)		
Total Incentives	\$46,654		

**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	-	-	-	-	(155,513)	-	-	-	-	(155,513)	(155,513)	(155,513)	(155,513)
1	72,142	6,927	20,601	27,528	-	(112,000)	-	46,654	(861)	(38,679)	(37,553)	(194,192)	(193,065)
2	71,781	7,119	21,589	28,708	-	(112,000)	-	-	(883)	(84,175)	(79,343)	(278,367)	(272,408)
3	71,422	7,315	22,627	29,942	-	(112,000)	-	-	(905)	(82,962)	(75,922)	(361,329)	(348,330)
4	71,065	7,513	23,567	31,079	-	(112,000)	-	-	(928)	(81,848)	(72,721)	(443,177)	(421,051)
5	70,710	7,715	24,781	32,496	-	(112,000)	-	-	(951)	(80,455)	(69,401)	(523,632)	(490,453)
6	70,356	7,921	25,991	33,912	-	(112,000)	-	-	(974)	(79,062)	(66,213)	(602,694)	(556,666)
7	70,005	8,133	27,591	35,724	-	(112,000)	-	-	(999)	(77,275)	(62,832)	(679,969)	(619,498)
8	69,655	8,355	28,969	37,324	-	(112,000)	-	-	(1,024)	(75,700)	(59,758)	(755,669)	(679,256)
9	69,306	8,580	30,230	38,810	-	(112,000)	-	-	(1,049)	(74,239)	(56,898)	(829,908)	(736,154)
10	68,960	8,811	31,730	40,541	-	(112,000)	-	-	(1,076)	(72,534)	(53,972)	(902,443)	(790,126)
11	68,615	9,043	33,157	42,199	-	(112,000)	-	-	(1,103)	(70,903)	(51,222)	(973,346)	(841,348)
12	68,272	9,282	35,109	44,391	-	(112,000)	-	-	(1,130)	(68,739)	(48,212)	(1,042,085)	(889,560)
13	67,931	9,532	36,805	46,336	-	(112,000)	-	-	(1,158)	(66,822)	(45,503)	(1,108,907)	(935,063)
14	67,591	9,790	38,501	48,291	-	(112,000)	-	-	(1,187)	(64,896)	(42,904)	(1,173,803)	(977,967)
15	67,253	10,049	39,991	50,040	-	(112,000)	-	-	(1,217)	(63,177)	(40,551)	(1,236,980)	(1,018,518)

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	66,917	10,315	42,053	52,368	-	(112,000)	-	-	(1,247)	(60,880)	(37,938)	(1,297,859)	(1,056,456)
17	66,582	10,586	44,219	54,805	-	(112,000)	-	-	(1,279)	(58,474)	(35,378)	(1,356,333)	(1,091,833)
18	66,249	10,865	46,710	57,575	-	(112,000)	-	-	(1,311)	(55,735)	(32,739)	(1,412,069)	(1,124,572)
19	65,918	11,155	49,209	60,363	-	(112,000)	-	-	(1,343)	(52,980)	(30,214)	(1,465,049)	(1,154,786)
20	65,588	11,450	51,435	62,885	-	(112,000)	(335,856)	-	(1,377)	(386,348)	(213,911)	(1,851,397)	(1,368,697)
21	65,260	11,751	53,568	65,319	-	-	-	-	(1,411)	63,908	34,353	(1,787,489)	(1,334,344)
22	64,934	12,061	56,157	68,218	-	-	-	-	(1,447)	66,772	34,848	(1,720,717)	(1,299,496)
23	64,609	12,372	59,741	72,113	-	-	-	-	(1,483)	70,631	35,788	(1,650,087)	(1,263,708)
24	64,286	12,700	62,723	75,424	-	-	-	-	(1,520)	73,904	36,356	(1,576,183)	(1,227,353)
25	63,965	13,038	65,916	78,953	-	-	-	-	(1,558)	77,396	36,965	(1,498,787)	(1,190,388)
<b>Total</b>	<b>1,699,373</b>	<b>242,379</b>	<b>972,968</b>	<b>1,215,347</b>	<b>(155,513)</b>	<b>(2,240,000)</b>	<b>(335,856)</b>	<b>46,654</b>	<b>(29,420)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>