

CITY HALL BUILDING

MICROGRID FINANCIAL RESULTS

FINANCIAL RESULTS

The detailed results of the Financial Modeling for City Hall Building 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	8,376	17,304	16,770	0	86	5,275	3,142	505	8,921
February	Winter	0	7,601	15,697	15,219	0	83	4,657	3,196	474	8,327
March	Winter	0	8,174	17,394	16,650	0	77	5,106	2,987	496	8,589
April	Winter	0	8,108	16,694	15,649	0	83	4,903	2,878	485	8,266
May	Winter	0	8,718	17,604	17,234	0	86	5,266	2,983	504	8,753
June	Summer	7,064	2,226	35,440	0	93	70	5,947	5,917	512	12,376
July	Summer	7,986	3,272	41,070	0	115	83	6,968	7,208	558	14,734
August	Summer	8,702	2,711	43,386	0	112	86	7,287	7,171	573	15,032
September	Summer	7,957	3,011	42,219	0	118	90	7,064	7,563	563	15,190
October	Winter	0	9,885	19,075	19,888	0	106	5,887	4,008	537	10,431
November	Winter	0	8,159	16,103	15,646	0	86	4,830	2,983	482	8,295
December	Winter	0	8,530	17,755	16,572	0	93	5,195	3,271	500	8,966
Total		31,709	78,771	299,742	133,628	438	1,030	68,383	53,308	6,190	127,881

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	2,047	18,916	3,833	0	72	3,152	1,437	248	4,836
February	Winter	0	1,609	16,845	3,261	0	67	2,642	1,428	246	4,316
March	Winter	0	0	18,054	669	0	0	2,158	865	245	3,268
April	Winter	0	0	17,490	201	0	0	1,874	865	245	2,983
May	Winter	0	0	18,296	328	0	0	1,948	865	245	3,058
June	Summer	534	0	19,357	0	64	0	1,747	1,231	245	3,224
July	Summer	169	0	17,769	0	80	0	1,452	1,604	245	3,301
August	Summer	742	0	17,020	0	80	0	1,895	1,620	245	3,760
September	Summer	1,660	147	19,353	0	90	61	2,569	1,793	246	4,608
October	Winter	0	1,495	18,863	2,449	0	90	2,865	1,475	247	4,587
November	Winter	0	419	19,179	2,139	0	72	2,696	1,149	246	4,091
December	Winter	0	3,093	19,442	5,388	0	79	3,443	1,542	249	5,234
Total		3,104	8,809	220,582	18,268	314	440	28,441	15,873	2,951	47,265

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

Key Financial Outputs			
PV Cost	(\$1,162,128)	Total Energy Financial Benefit (Year 1)	\$77,376
BESS Cost	(\$1,671,068)	25-Year Total Energy Financial Benefit	\$3,121,213
Upfront Payment	(\$2,833,196)	25-Year NPV	\$399,505
Total O&M Cost	(\$738,470)	Payback Year	23
Total Project Costs	(\$3,571,666)		
Total Incentives	\$849,959		
Net Payments	(\$2,721,708)		

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	-	-	-	-	(1,162,128)	(1,671,068)	-	-	-	(2,833,196)	(2,833,196)	(2,833,196)	(2,833,196)
1	399,554	39,942	37,434	77,376	-	-	849,959	(4,910)	(16,709)	905,716	879,336	(1,927,480)	(1,953,860)
2	397,556	40,940	38,850	79,790	-	-	-	(5,033)	(17,127)	57,630	54,322	(1,869,850)	(1,899,538)
3	395,568	41,974	40,756	82,731	-	-	-	(5,159)	(17,555)	60,017	54,924	(1,809,833)	(1,844,614)
4	393,591	43,027	42,947	85,974	-	-	-	(5,288)	(17,994)	62,693	55,702	(1,747,141)	(1,788,913)
5	391,623	44,105	45,245	89,350	-	-	-	(5,420)	(18,444)	65,486	56,489	(1,681,655)	(1,732,424)
6	389,665	45,208	47,123	92,331	-	-	-	(5,556)	(18,905)	67,871	56,841	(1,613,784)	(1,675,583)
7	387,716	46,349	49,314	95,663	-	-	-	(5,695)	(19,377)	70,591	57,397	(1,543,193)	(1,618,186)
8	385,778	47,515	51,703	99,217	-	-	-	(5,837)	(19,862)	73,519	58,036	(1,469,674)	(1,560,150)
9	383,849	48,710	54,156	102,866	-	-	-	(5,983)	(20,358)	76,525	58,650	(1,393,149)	(1,501,500)
10	381,930	49,924	56,967	106,891	-	-	-	(6,132)	(20,867)	79,892	59,447	(1,313,257)	(1,442,053)
11	380,020	51,183	60,203	111,385	-	-	-	(6,286)	(21,389)	83,711	60,474	(1,229,547)	(1,381,579)

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	378,120	52,467	63,204	115,671	-	-	-	(6,443)	(21,924)	87,304	61,233	(1,142,242)	(1,320,345)
13	376,229	53,785	65,998	119,783	-	-	-	(6,604)	(22,472)	90,707	61,767	(1,051,535)	(1,258,578)
14	374,348	55,137	69,012	124,149	-	-	-	(6,769)	(23,034)	94,347	62,374	(957,189)	(1,196,204)
15	372,476	56,530	72,741	129,271	-	-	-	(6,938)	(23,609)	98,724	63,367	(858,465)	(1,132,837)
16	370,614	57,943	76,780	134,724	-	-	-	(7,112)	(24,200)	103,412	64,443	(755,053)	(1,068,394)
17	368,761	59,401	80,526	139,927	-	-	-	(7,290)	(24,805)	107,833	65,241	(647,219)	(1,003,153)
18	366,917	60,873	84,159	145,032	-	-	-	(7,472)	(25,425)	112,135	65,868	(535,084)	(937,285)
19	365,082	62,429	88,084	150,513	-	-	-	(7,659)	(26,060)	116,794	66,606	(418,290)	(870,679)
20	363,257	64,008	92,271	156,279	-	-	-	(7,850)	(26,712)	121,717	67,392	(296,572)	(803,287)
21	361,441	65,610	97,282	162,892	-	-	-	(8,046)	(27,380)	127,466	68,519	(169,106)	(734,768)
22	359,634	67,242	102,120	169,362	-	-	-	(8,247)	(28,064)	133,051	69,438	(36,055)	(665,329)
23	357,835	68,941	107,667	176,609	-	-	-	(8,454)	(28,766)	139,389	70,627	103,334	(594,702)
24	356,046	70,684	112,486	183,170	-	-	-	(8,665)	(29,485)	145,020	71,340	248,354	(523,362)
25	354,266	72,481	117,774	190,255	-	-	-	(8,882)	(30,222)	151,151	72,191	399,505	(451,171)
Total	9,411,875	1,366,409	1,754,804	3,121,213	(1,162,128)	(1,671,068)	849,959	(167,728)	(570,742)	-	-	-	-

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

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.263	Total Energy Financial Benefit (Year 1)	\$77,376
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$3,121,213
PPA Payment (Year 1)	(\$106,659)	25-Year NPV	(\$1,321,759)
PPA Payments Term (20-Year)	(\$2,346,810)	Payback Year	26+
PPA Termination Value	(\$174,458)		
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 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	399,554	39,942	37,434	77,376	(\$106,659)	-	(\$83,553)	-	(\$112,836)	(\$109,550)	(\$112,836)	(\$109,550)
2	397,556	40,940	38,850	79,790	(\$107,718)	-	(\$83,553)	-	(\$111,481)	(\$105,081)	(\$224,317)	(\$214,631)
3	395,568	41,974	40,756	82,731	(\$108,787)	-	(\$83,553)	-	(\$109,609)	(\$100,308)	(\$333,926)	(\$314,939)
4	393,591	43,027	42,947	85,974	(\$109,866)	-	(\$83,553)	-	(\$107,445)	(\$95,464)	(\$441,372)	(\$410,403)
5	391,623	44,105	45,245	89,350	(\$110,957)	-	(\$83,553)	-	(\$105,160)	(\$90,712)	(\$546,532)	(\$501,115)
6	389,665	45,208	47,123	92,331	(\$112,058)	-	(\$83,553)	-	(\$103,280)	(\$86,496)	(\$649,812)	(\$587,611)
7	387,716	46,349	49,314	95,663	(\$113,170)	-	(\$83,553)	-	(\$101,061)	(\$82,171)	(\$750,873)	(\$669,782)
8	385,778	47,515	51,703	99,217	(\$114,293)	-	(\$83,553)	-	(\$98,630)	(\$77,859)	(\$849,502)	(\$747,641)
9	383,849	48,710	54,156	102,866	(\$115,428)	-	(\$83,553)	-	(\$96,115)	(\$73,664)	(\$945,617)	(\$821,305)
10	381,930	49,924	56,967	106,891	(\$116,573)	-	(\$83,553)	-	(\$93,235)	(\$69,376)	(\$1,038,853)	(\$890,681)

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	380,020	51,183	60,203	111,385	(117,730)	-	(83,553)	-	(89,898)	(64,944)	(1,128,751)	(955,626)
12	378,120	52,467	63,204	115,671	(118,899)	-	(83,553)	-	(86,782)	(60,867)	(1,215,533)	(1,016,493)
13	376,229	53,785	65,998	119,783	(120,079)	-	(83,553)	-	(83,849)	(57,097)	(1,299,382)	(1,073,590)
14	374,348	55,137	69,012	124,149	(121,271)	-	(83,553)	-	(80,675)	(53,336)	(1,380,057)	(1,126,926)
15	372,476	56,530	72,741	129,271	(122,474)	-	(83,553)	-	(76,756)	(49,267)	(1,456,813)	(1,176,192)
16	370,614	57,943	76,780	134,724	(123,690)	-	(83,553)	-	(72,520)	(45,192)	(1,529,333)	(1,221,384)
17	368,761	59,401	80,526	139,927	(124,917)	-	(83,553)	-	(68,544)	(41,470)	(1,597,876)	(1,262,854)
18	366,917	60,873	84,159	145,032	(126,157)	-	(83,553)	-	(64,679)	(37,992)	(1,662,555)	(1,300,846)
19	365,082	62,429	88,084	150,513	(127,409)	-	(83,553)	-	(60,449)	(34,474)	(1,723,005)	(1,335,320)
20	363,257	64,008	92,271	156,279	(128,674)	(174,458)	(83,553)	(250,635)	(481,042)	(266,341)	(2,204,047)	(1,601,661)
21	361,441	65,610	97,282	162,892	-	-	-	-	162,892	87,562	(2,041,155)	(1,514,099)
22	359,634	67,242	102,120	169,362	-	-	-	-	169,362	88,389	(1,871,792)	(1,425,710)
23	357,835	68,941	107,667	176,609	-	-	-	-	176,609	89,486	(1,695,184)	(1,336,223)
24	356,046	70,684	112,486	183,170	-	-	-	-	183,170	90,107	(1,512,014)	(1,246,116)
25	354,266	72,481	117,774	190,255	-	-	-	-	190,255	90,867	(1,321,759)	(1,155,249)
Total	9,411,875	1,366,409	1,754,804	3,121,213	(2,346,810)	(174,458)	(1,671,068)	(250,635)	-	-	-	-

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

Key Financial Outputs			
PV Cost	(\$1,162,128)	Total Energy Financial Benefit (Year 1)	\$77,376
Total PV O&M Cost	(\$167,728)	25-Year Total Energy Financial Benefit	\$3,121,213
BESS Lease Payment (Year 1)	(\$83,553)	25-Year NPV	\$218,292
BESS Lease Payment Term (20-Year)	(\$1,671,068)	Payback Year	24
Lease Escalation Rate	0%		
Lease Termination Value	(\$250,635)		
Total Incentives	\$348,638		

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	-	-	-	-	(1,162,128)	-	-	-	-	(1,162,128)	(1,162,128)	(1,162,128)	(1,162,128)
1	399,554	39,942	37,434	77,376	-	(83,553)	-	348,638	(4,910)	337,551	327,719	(824,577)	(834,409)
2	397,556	40,940	38,850	79,790	-	(83,553)	-	-	(5,033)	(8,796)	(8,291)	(833,373)	(842,700)
3	395,568	41,974	40,756	82,731	-	(83,553)	-	-	(5,159)	(5,982)	(5,474)	(839,355)	(848,174)
4	393,591	43,027	42,947	85,974	-	(83,553)	-	-	(5,288)	(2,867)	(2,547)	(842,222)	(850,722)
5	391,623	44,105	45,245	89,350	-	(83,553)	-	-	(5,420)	376	325	(841,846)	(850,397)
6	389,665	45,208	47,123	92,331	-	(83,553)	-	-	(5,556)	3,222	2,698	(838,624)	(847,699)
7	387,716	46,349	49,314	95,663	-	(83,553)	-	-	(5,695)	6,415	5,216	(832,209)	(842,483)
8	385,778	47,515	51,703	99,217	-	(83,553)	-	-	(5,837)	9,827	7,757	(822,382)	(834,725)
9	383,849	48,710	54,156	102,866	-	(83,553)	-	-	(5,983)	13,330	10,216	(809,052)	(824,509)
10	381,930	49,924	56,967	106,891	-	(83,553)	-	-	(6,132)	17,206	12,803	(791,846)	(811,706)
11	380,020	51,183	60,203	111,385	-	(83,553)	-	-	(6,286)	21,546	15,565	(770,300)	(796,141)

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	378,120	52,467	63,204	115,671	-	(83,553)	-	-	(6,443)	25,674	18,008	(744,626)	(778,133)
13	376,229	53,785	65,998	119,783	-	(83,553)	-	-	(6,604)	29,626	20,174	(715,000)	(757,960)
14	374,348	55,137	69,012	124,149	-	(83,553)	-	-	(6,769)	33,827	22,363	(681,173)	(735,596)
15	372,476	56,530	72,741	129,271	-	(83,553)	-	-	(6,938)	38,780	24,891	(642,394)	(710,705)
16	370,614	57,943	76,780	134,724	-	(83,553)	-	-	(7,112)	44,059	27,456	(598,335)	(683,249)
17	368,761	59,401	80,526	139,927	-	(83,553)	-	-	(7,290)	49,084	29,697	(549,251)	(653,552)
18	366,917	60,873	84,159	145,032	-	(83,553)	-	-	(7,472)	54,007	31,723	(495,244)	(621,829)
19	365,082	62,429	88,084	150,513	-	(83,553)	-	-	(7,659)	59,301	33,819	(435,943)	(588,010)
20	363,257	64,008	92,271	156,279	-	(83,553)	(250,635)	-	(7,850)	(185,759)	(102,850)	(621,702)	(690,861)
21	361,441	65,610	97,282	162,892	-	-	-	-	(8,046)	154,846	83,237	(466,857)	(607,624)
22	359,634	67,242	102,120	169,362	-	-	-	-	(8,247)	161,115	84,085	(305,742)	(523,539)
23	357,835	68,941	107,667	176,609	-	-	-	-	(8,454)	168,155	85,203	(137,587)	(438,336)
24	356,046	70,684	112,486	183,170	-	-	-	-	(8,665)	174,505	85,845	36,918	(352,491)
25	354,266	72,481	117,774	190,255	-	-	-	-	(8,882)	181,373	86,625	218,292	(265,867)
Total	9,411,875	1,366,409	1,754,804	3,121,213	(1,162,128)	(1,671,068)	(250,635)	348,638	(167,728)	-	-	-	-

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	8,376	17,304	16,770	0	86	5,275	3,142	505	8,921
February	Winter	0	7,601	15,697	15,219	0	83	4,657	3,196	474	8,327
March	Winter	0	8,174	17,394	16,650	0	77	5,106	2,987	496	8,589
April	Winter	0	8,108	16,694	15,649	0	83	4,903	2,878	485	8,266
May	Winter	0	8,718	17,604	17,234	0	86	5,266	2,983	504	8,753
June	Summer	7,064	2,226	35,440	0	93	70	5,947	5,917	512	12,376
July	Summer	7,986	3,272	41,070	0	115	83	6,968	7,208	558	14,734
August	Summer	8,702	2,711	43,386	0	112	86	7,287	7,171	573	15,032
September	Summer	7,957	3,011	42,219	0	118	90	7,064	7,563	563	15,190
October	Winter	0	9,885	19,075	19,888	0	106	5,887	4,008	537	10,431
November	Winter	0	8,159	16,103	15,646	0	86	4,830	2,983	482	8,295
December	Winter	0	8,530	17,755	16,572	0	93	5,195	3,271	500	8,966
Total		31,709	78,771	299,742	133,628	438	1,030	68,383	53,308	6,190	127,881

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	36	18,588	4,765	0	51	3,064	1,085	247	4,396
February	Winter	0	0	16,711	3,036	0	0	2,491	865	245	3,601
March	Winter	0	0	18,054	615	0	0	2,155	865	245	3,265
April	Winter	0	0	17,490	201	0	0	1,874	865	245	2,983
May	Winter	0	0	18,296	328	0	0	1,948	865	245	3,058
June	Summer	0	0	19,028	0	0	0	1,655	865	245	2,765
July	Summer	0	0	15,968	0	0	0	1,413	865	244	2,522
August	Summer	374	0	15,964	0	74	0	1,708	1,543	244	3,495
September	Summer	930	147	18,677	0	90	61	2,493	1,793	245	4,531
October	Winter	0	576	18,540	3,730	0	70	2,940	1,436	247	4,622
November	Winter	0	0	19,179	2,455	0	0	2,680	865	246	3,791
December	Winter	0	1,454	19,126	6,661	0	75	3,399	1,533	248	5,181
Total		1,304	2,213	215,620	21,793	163	257	27,820	13,443	2,947	44,210

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

Key Financial Outputs			
PV Cost	(\$1,162,128)	Total Energy Financial Benefit (Year 1)	\$80,428
BESS Cost	(\$2,328,880)	25-Year Total Energy Financial Benefit	\$3,201,011
Upfront Payment	(\$3,491,008)	25-Year NPV	(\$86,200)
Total O&M Cost	(\$843,505)	Payback Year	26+
Total Project Costs	(\$4,334,513)		
Total Incentives	\$1,047,302		
Net Payments	(\$3,287,211)		

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	-	-	-	-	(1,162,128)	(2,328,880)	-	-	-	(3,491,008)	(3,491,008)	(3,491,008)	(3,491,008)
1	399,554	40,563	39,865	80,428	-	-	1,047,302	(4,910)	(19,784)	1,103,036	1,070,908	(2,387,972)	(2,420,100)
2	397,556	41,597	41,524	83,122	-	-	-	(5,033)	(20,279)	57,810	54,491	(2,330,163)	(2,365,608)
3	395,568	42,663	43,444	86,106	-	-	-	(5,159)	(20,786)	60,162	55,057	(2,270,001)	(2,310,552)
4	393,591	43,761	45,765	89,526	-	-	-	(5,288)	(21,305)	62,933	55,915	(2,207,068)	(2,254,637)
5	391,623	44,881	47,625	92,506	-	-	-	(5,420)	(21,838)	65,248	56,283	(2,141,820)	(2,198,354)
6	389,665	46,013	48,874	94,887	-	-	-	(5,556)	(22,384)	66,948	56,068	(2,074,873)	(2,142,286)
7	387,716	47,180	50,931	98,110	-	-	-	(5,695)	(22,943)	69,472	56,487	(2,005,401)	(2,085,799)
8	385,778	48,372	54,419	102,791	-	-	-	(5,837)	(23,517)	73,437	57,972	(1,931,963)	(2,027,827)
9	383,849	49,597	56,510	106,107	-	-	-	(5,983)	(24,105)	76,019	58,262	(1,855,944)	(1,969,564)
10	381,930	50,844	58,797	109,642	-	-	-	(6,132)	(24,708)	78,802	58,636	(1,777,142)	(1,910,928)
11	380,020	52,150	62,157	114,306	-	-	-	(6,286)	(25,325)	82,695	59,741	(1,694,447)	(1,851,187)
12	378,120	53,470	64,869	118,339	-	-	-	(6,443)	(25,958)	85,938	60,275	(1,608,509)	(1,790,912)
13	376,229	54,822	67,719	122,540	-	-	-	(6,604)	(26,607)	89,329	60,829	(1,519,180)	(1,730,083)
14	374,348	56,205	72,185	128,390	-	-	-	(6,769)	(27,272)	94,348	62,375	(1,424,831)	(1,667,708)
15	372,476	57,613	74,577	132,190	-	-	-	(6,938)	(27,954)	97,297	62,451	(1,327,534)	(1,605,257)

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	370,614	59,076	78,727	137,803	-	-	-	(7,112)	(28,653)	102,039	63,587	(1,225,495)	(1,541,670)
17	368,761	60,582	82,314	142,896	-	-	-	(7,290)	(29,369)	106,237	64,275	(1,119,259)	(1,477,395)
18	366,917	62,094	85,891	147,985	-	-	-	(7,472)	(30,104)	110,410	64,854	(1,008,849)	(1,412,541)
19	365,082	63,677	89,967	153,644	-	-	-	(7,659)	(30,856)	115,129	65,657	(893,720)	(1,346,884)
20	363,257	65,271	95,418	160,689	-	-	-	(7,850)	(31,628)	121,211	67,112	(772,508)	(1,279,772)
21	361,441	66,897	99,224	166,121	-	-	-	(8,046)	(32,418)	125,656	67,546	(646,852)	(1,212,226)
22	359,634	68,547	103,938	172,485	-	-	-	(8,247)	(33,229)	131,009	68,373	(515,843)	(1,143,853)
23	357,835	70,275	109,702	179,978	-	-	-	(8,454)	(34,060)	137,464	69,652	(378,379)	(1,074,201)
24	356,046	72,034	114,601	186,635	-	-	-	(8,665)	(34,911)	143,059	70,375	(235,320)	(1,003,826)
25	354,266	73,834	119,952	193,785	-	-	-	(8,882)	(35,784)	149,120	71,220	(86,200)	(932,605)
Total	9,411,875	1,392,018	1,808,993	3,201,011	(1,162,128)	(2,328,880)	1,047,302	(167,728)	(675,777)	-	-	-	-

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

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.263	Total Energy Financial Benefit (Year 1)	\$80,428
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$3,201,011
PPA Payment (Year 1)	(\$106,659)	25-Year NPV	(\$1,998,272)
PPA Payments Term (20-Year)	(\$2,346,810)	Payback Year	26+
PPA Termination Value	(\$174,458)		
BESS Lease Payment (Year 1)	(\$116,444)		
BESS Lease Payment Term (20-Year)	(\$2,328,880)		
Lease Escalation Rate	0%		
Lease Termination Value	(\$349,134)		

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	399,554	40,563	39,865	80,428	(106,659)	-	(116,444)	-	(142,675)	(138,520)	(142,675)	(138,520)
2	397,556	41,597	41,524	83,122	(107,718)	-	(116,444)	-	(141,040)	(132,944)	(283,715)	(271,463)
3	395,568	42,663	43,444	86,106	(108,787)	-	(116,444)	-	(139,124)	(127,318)	(422,840)	(398,782)
4	393,591	43,761	45,765	89,526	(109,866)	-	(116,444)	-	(136,784)	(121,531)	(559,624)	(520,313)
5	391,623	44,881	47,625	92,506	(110,957)	-	(116,444)	-	(134,895)	(116,362)	(694,519)	(636,675)
6	389,665	46,013	48,874	94,887	(112,058)	-	(116,444)	-	(133,615)	(111,900)	(828,134)	(748,575)
7	387,716	47,180	50,931	98,110	(113,170)	-	(116,444)	-	(131,504)	(106,925)	(959,638)	(855,500)
8	385,778	48,372	54,419	102,791	(114,293)	-	(116,444)	-	(127,946)	(101,002)	(1,087,584)	(956,502)
9	383,849	49,597	56,510	106,107	(115,428)	-	(116,444)	-	(125,765)	(96,388)	(1,213,349)	(1,052,890)
10	381,930	50,844	58,797	109,642	(116,573)	-	(116,444)	-	(123,375)	(91,803)	(1,336,725)	(1,144,693)
11	380,020	52,150	62,157	114,306	(117,730)	-	(116,444)	-	(119,868)	(86,595)	(1,456,593)	(1,231,288)
12	378,120	53,470	64,869	118,339	(118,899)	-	(116,444)	-	(117,004)	(82,064)	(1,573,596)	(1,313,352)
13	376,229	54,822	67,719	122,540	(120,079)	-	(116,444)	-	(113,983)	(77,617)	(1,687,579)	(1,390,969)
14	374,348	56,205	72,185	128,390	(121,271)	-	(116,444)	-	(109,325)	(72,277)	(1,796,904)	(1,463,246)

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	372,476	57,613	74,577	132,190	(122,474)	-	(116,444)	-	(106,728)	(68,505)	(1,903,632)	(1,531,751)
16	370,614	59,076	78,727	137,803	(123,690)	-	(116,444)	-	(102,330)	(63,769)	(2,005,963)	(1,595,519)
17	368,761	60,582	82,314	142,896	(124,917)	-	(116,444)	-	(98,466)	(59,573)	(2,104,429)	(1,655,093)
18	366,917	62,094	85,891	147,985	(126,157)	-	(116,444)	-	(94,616)	(55,577)	(2,199,045)	(1,710,670)
19	365,082	63,677	89,967	153,644	(127,409)	-	(116,444)	-	(90,209)	(51,445)	(2,289,254)	(1,762,115)
20	363,257	65,271	95,418	160,689	(128,674)	(174,458)	(116,444)	(349,134)	(608,022)	(336,647)	(2,897,275)	(2,098,762)
21	361,441	66,897	99,224	166,121	-	-	-	-	166,121	89,298	(2,731,155)	(2,009,464)
22	359,634	68,547	103,938	172,485	-	-	-	-	172,485	90,019	(2,558,669)	(1,919,445)
23	357,835	70,275	109,702	179,978	-	-	-	-	179,978	91,193	(2,378,691)	(1,828,252)
24	356,046	72,034	114,601	186,635	-	-	-	-	186,635	91,812	(2,192,057)	(1,736,440)
25	354,266	73,834	119,952	193,785	-	-	-	-	193,785	92,553	(1,998,272)	(1,643,887)
Total	9,411,875	1,392,018	1,808,993	3,201,011	(2,346,810)	(174,458)	(2,328,880)	(349,134)	-	-	-	-

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

Key Financial Outputs			
PV Cost	(\$1,162,128)	Total Energy Financial Benefit (Year 1)	\$80,428
Total PV O&M Cost	(\$167,728)	25-Year Total Energy Financial Benefit	\$3,201,011
BESS Lease Payment (Year 1)	(\$116,444)	25-Year NPV	(\$458,221)
BESS Lease Payment Term (20-Year)	(\$2,328,880)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$349,134)		
Total Incentives	\$348,638		

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	-	-	-	-	(1,162,128)	-	-	-	-	(1,162,128)	(1,162,128)	(1,162,128)	(1,162,128)
1	399,554	40,563	39,865	80,428	-	(116,444)	-	348,638	(4,910)	307,712	298,749	(854,416)	(863,379)
2	397,556	41,597	41,524	83,122	-	(116,444)	-	-	(5,033)	(38,356)	(36,154)	(892,772)	(899,533)
3	395,568	42,663	43,444	86,106	-	(116,444)	-	-	(5,159)	(35,497)	(32,484)	(928,269)	(932,017)
4	393,591	43,761	45,765	89,526	-	(116,444)	-	-	(5,288)	(32,206)	(28,615)	(960,475)	(960,632)
5	391,623	44,881	47,625	92,506	-	(116,444)	-	-	(5,420)	(29,359)	(25,325)	(989,833)	(985,957)
6	389,665	46,013	48,874	94,887	-	(116,444)	-	-	(5,556)	(27,113)	(22,706)	(1,016,946)	(1,008,663)
7	387,716	47,180	50,931	98,110	-	(116,444)	-	-	(5,695)	(24,028)	(19,537)	(1,040,974)	(1,028,200)
8	385,778	48,372	54,419	102,791	-	(116,444)	-	-	(5,837)	(19,490)	(15,385)	(1,060,464)	(1,043,586)
9	383,849	49,597	56,510	106,107	-	(116,444)	-	-	(5,983)	(16,320)	(12,508)	(1,076,784)	(1,056,094)
10	381,930	50,844	58,797	109,642	-	(116,444)	-	-	(6,132)	(12,935)	(9,625)	(1,089,718)	(1,065,718)
11	380,020	52,150	62,157	114,306	-	(116,444)	-	-	(6,286)	(8,423)	(6,085)	(1,098,142)	(1,071,803)
12	378,120	53,470	64,869	118,339	-	(116,444)	-	-	(6,443)	(4,548)	(3,190)	(1,102,690)	(1,074,993)

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 (\$)
13	376,229	54,822	67,719	122,540	-	(116,444)	-	-	(6,604)	(508)	(346)	(1,103,197)	(1,075,339)
14	374,348	56,205	72,185	128,390	-	(116,444)	-	-	(6,769)	5,177	3,422	(1,098,020)	(1,071,916)
15	372,476	57,613	74,577	132,190	-	(116,444)	-	-	(6,938)	8,808	5,653	(1,089,213)	(1,066,263)
16	370,614	59,076	78,727	137,803	-	(116,444)	-	-	(7,112)	14,248	8,879	(1,074,965)	(1,057,384)
17	368,761	60,582	82,314	142,896	-	(116,444)	-	-	(7,290)	19,162	11,593	(1,055,803)	(1,045,791)
18	366,917	62,094	85,891	147,985	-	(116,444)	-	-	(7,472)	24,069	14,138	(1,031,734)	(1,031,653)
19	365,082	63,677	89,967	153,644	-	(116,444)	-	-	(7,659)	29,542	16,847	(1,002,192)	(1,014,805)
20	363,257	65,271	95,418	160,689	-	(116,444)	(349,134)	-	(7,850)	(312,739)	(173,156)	(1,314,931)	(1,187,962)
21	361,441	66,897	99,224	166,121	-	-	-	-	(8,046)	158,075	84,973	(1,156,857)	(1,102,989)
22	359,634	68,547	103,938	172,485	-	-	-	-	(8,247)	164,238	85,715	(992,618)	(1,017,274)
23	357,835	70,275	109,702	179,978	-	-	-	-	(8,454)	171,524	86,910	(821,094)	(930,364)
24	356,046	72,034	114,601	186,635	-	-	-	-	(8,665)	177,970	87,549	(643,125)	(842,815)
25	354,266	73,834	119,952	193,785	-	-	-	-	(8,882)	184,904	88,311	(458,221)	(754,504)
Total	9,411,875	1,392,018	1,808,993	3,201,011	(1,162,128)	(2,328,880)	(349,134)	348,638	(167,728)	-	-	-	-

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	8,376	17,304	16,770	0	86	5,275	3,142	505	8,921
February	Winter	0	7,601	15,697	15,219	0	83	4,657	3,196	474	8,327
March	Winter	0	8,174	17,394	16,650	0	77	5,106	2,987	496	8,589
April	Winter	0	8,108	16,694	15,649	0	83	4,903	2,878	485	8,266
May	Winter	0	8,718	17,604	17,234	0	86	5,266	2,983	504	8,753
June	Summer	7,064	2,226	35,440	0	93	70	5,947	5,917	512	12,376
July	Summer	7,986	3,272	41,070	0	115	83	6,968	7,208	558	14,734
August	Summer	8,702	2,711	43,386	0	112	86	7,287	7,171	573	15,032
September	Summer	7,957	3,011	42,219	0	118	90	7,064	7,563	563	15,190
October	Winter	0	9,885	19,075	19,888	0	106	5,887	4,008	537	10,431
November	Winter	0	8,159	16,103	15,646	0	86	4,830	2,983	482	8,295
December	Winter	0	8,530	17,755	16,572	0	93	5,195	3,271	500	8,966
Total		31,709	78,771	299,742	133,628	438	1,030	68,383	53,308	6,190	127,881

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	0	18,576	4,773	0	0	3,063	865	247	4,175
February	Winter	0	0	16,711	3,036	0	0	2,491	865	245	3,601
March	Winter	0	0	18,054	615	0	0	2,155	865	245	3,265
April	Winter	0	0	17,490	201	0	0	1,874	865	245	2,983
May	Winter	0	0	18,296	328	0	0	1,948	865	245	3,058
June	Summer	0	0	19,028	0	0	0	1,655	865	245	2,765
July	Summer	0	0	15,968	0	0	0	1,413	865	244	2,522
August	Summer	0	0	15,419	0	0	0	1,577	865	244	2,685
September	Summer	930	147	18,634	0	90	61	2,487	1,793	245	4,525
October	Winter	0	576	18,540	3,730	0	70	2,940	1,436	247	4,622
November	Winter	0	0	19,179	3,085	0	0	2,771	865	246	3,882
December	Winter	0	771	19,049	6,727	0	69	3,310	1,521	248	5,079
Total		930	1,494	214,943	22,495	90	200	27,683	12,533	2,946	43,162

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

Key Financial Outputs			
PV Cost	(\$1,162,128)	Total Energy Financial Benefit (Year 1)	\$81,475
BESS Cost	(\$3,695,000)	25-Year Total Energy Financial Benefit	\$3,246,440
Upfront Payment	(\$4,857,128)	25-Year NPV	(\$1,286,918)
Total O&M Cost	(\$1,133,368)	Payback Year	26+
Total Project Costs	(\$5,990,496)		
Total Incentives	\$1,457,138		
Net Payments	(\$4,533,358)		

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	-	-	-	-	(1,162,128)	(3,695,000)	-	-	-	(4,857,128)	(4,857,128)	(4,857,128)	(4,857,128)
1	399,554	40,700	40,775	81,475	-	-	1,457,138	(4,910)	(28,270)	1,505,433	1,461,585	(3,351,695)	(3,395,543)
2	397,556	41,725	42,182	83,908	-	-	-	(5,033)	(28,977)	49,898	47,033	(3,301,797)	(3,348,509)
3	395,568	42,784	44,481	87,265	-	-	-	(5,159)	(29,701)	52,405	47,958	(3,249,392)	(3,300,551)
4	393,591	43,886	46,372	90,259	-	-	-	(5,288)	(30,444)	54,527	48,446	(3,194,865)	(3,252,104)
5	391,623	45,013	48,870	93,882	-	-	-	(5,420)	(31,205)	57,257	49,391	(3,137,608)	(3,202,714)
6	389,665	46,163	51,087	97,250	-	-	-	(5,556)	(31,985)	59,709	50,005	(3,077,899)	(3,152,708)
7	387,716	47,350	53,406	100,756	-	-	-	(5,695)	(32,785)	62,277	50,637	(3,015,622)	(3,102,071)
8	385,778	48,558	56,004	104,562	-	-	-	(5,837)	(33,604)	65,121	51,407	(2,950,500)	(3,050,664)
9	383,849	49,790	59,229	109,019	-	-	-	(5,983)	(34,444)	68,592	52,570	(2,881,908)	(2,998,094)
10	381,930	51,037	61,288	112,326	-	-	-	(6,132)	(35,305)	70,888	52,747	(2,811,020)	(2,945,347)
11	380,020	52,342	64,790	117,132	-	-	-	(6,286)	(36,188)	74,658	53,934	(2,736,362)	(2,891,412)
12	378,120	53,674	67,853	121,527	-	-	-	(6,443)	(37,093)	77,991	54,701	(2,658,371)	(2,836,711)
13	376,229	55,049	70,799	125,848	-	-	-	(6,604)	(38,020)	81,224	55,310	(2,577,147)	(2,781,401)
14	374,348	56,448	73,550	129,998	-	-	-	(6,769)	(38,971)	84,258	55,705	(2,492,888)	(2,725,696)
15	372,476	57,880	76,571	134,451	-	-	-	(6,938)	(39,945)	87,568	56,206	(2,405,321)	(2,669,490)
16	370,614	59,342	78,890	138,232	-	-	-	(7,112)	(40,943)	90,177	56,195	(2,315,144)	(2,613,294)

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 (\$)
17	368,761	60,840	82,722	143,562	-	-	-	(7,290)	(41,967)	94,306	57,056	(2,220,838)	(2,556,238)
18	366,917	62,360	86,627	148,986	-	-	-	(7,472)	(43,016)	98,498	57,857	(2,122,340)	(2,498,381)
19	365,082	63,952	92,212	156,164	-	-	-	(7,659)	(44,092)	104,414	59,546	(2,017,926)	(2,438,835)
20	363,257	65,565	95,856	161,421	-	-	-	(7,850)	(45,194)	108,377	60,006	(1,909,548)	(2,378,829)
21	361,441	67,224	99,949	167,173	-	-	-	(8,046)	(46,324)	112,803	60,637	(1,796,745)	(2,318,192)
22	359,634	68,917	105,245	174,162	-	-	-	(8,247)	(47,482)	118,433	61,809	(1,678,313)	(2,256,383)
23	357,835	70,685	110,615	181,300	-	-	-	(8,454)	(48,669)	124,177	62,920	(1,554,135)	(2,193,463)
24	356,046	72,478	115,585	188,063	-	-	-	(8,665)	(49,886)	129,513	63,712	(1,424,623)	(2,129,751)
25	354,266	74,317	123,402	197,719	-	-	-	(8,882)	(51,133)	137,705	65,769	(1,286,918)	(2,063,983)
Total	9,411,875	1,398,080	1,848,360	3,246,440	(1,162,128)	(3,695,000)	1,457,138	(167,728)	(965,640)	-	-	-	-

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

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.263	Total Energy Financial Benefit (Year 1)	\$81,475
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$3,246,440
PPA Payment (Year 1)	(\$106,659)	25-Year NPV	(\$3,524,147)
PPA Payments Term (20-Year)	(\$2,346,810)	Payback Year	26+
PPA Termination Value	(\$174,458)		
BESS Lease Payment (Year 1)	(\$184,750)		
BESS Lease Payment Term (20-Year)	(\$3,695,000)		
Lease Escalation Rate	0%		
Lease Termination Value	(\$554,318)		

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	399,554	40,700	40,775	81,475	(106,659)	-	(184,750)	-	(209,934)	(203,819)	(209,934)	(203,819)
2	397,556	41,725	42,182	83,908	(107,718)	-	(184,750)	-	(208,560)	(196,588)	(418,494)	(400,407)
3	395,568	42,784	44,481	87,265	(108,787)	-	(184,750)	-	(206,271)	(188,767)	(624,765)	(589,174)
4	393,591	43,886	46,372	90,259	(109,866)	-	(184,750)	-	(204,358)	(181,569)	(829,123)	(770,744)
5	391,623	45,013	48,870	93,882	(110,957)	-	(184,750)	-	(201,825)	(174,096)	(1,030,947)	(944,839)
6	389,665	46,163	51,087	97,250	(112,058)	-	(184,750)	-	(199,558)	(167,127)	(1,230,506)	(1,111,966)
7	387,716	47,350	53,406	100,756	(113,170)	-	(184,750)	-	(197,164)	(160,312)	(1,427,670)	(1,272,279)
8	385,778	48,558	56,004	104,562	(114,293)	-	(184,750)	-	(194,481)	(153,525)	(1,622,151)	(1,425,804)
9	383,849	49,790	59,229	109,019	(115,428)	-	(184,750)	-	(191,159)	(146,507)	(1,813,309)	(1,572,311)
10	381,930	51,037	61,288	112,326	(116,573)	-	(184,750)	-	(188,998)	(140,632)	(2,002,307)	(1,712,943)
11	380,020	52,342	64,790	117,132	(117,730)	-	(184,750)	-	(185,349)	(133,900)	(2,187,656)	(1,846,843)
12	378,120	53,674	67,853	121,527	(118,899)	-	(184,750)	-	(182,122)	(127,737)	(2,369,778)	(1,974,580)
13	376,229	55,049	70,799	125,848	(120,079)	-	(184,750)	-	(178,981)	(121,877)	(2,548,758)	(2,096,457)
14	374,348	56,448	73,550	129,998	(121,271)	-	(184,750)	-	(176,023)	(116,372)	(2,724,781)	(2,212,828)
15	372,476	57,880	76,571	134,451	(122,474)	-	(184,750)	-	(172,774)	(110,897)	(2,897,555)	(2,323,725)

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	370,614	59,342	78,890	138,232	(123,690)	-	(184,750)	-	(170,208)	(106,068)	(3,067,762)	(2,429,793)
17	368,761	60,840	82,722	143,562	(124,917)	-	(184,750)	-	(166,105)	(100,496)	(3,233,868)	(2,530,289)
18	366,917	62,360	86,627	148,986	(126,157)	-	(184,750)	-	(161,921)	(95,112)	(3,395,789)	(2,625,401)
19	365,082	63,952	92,212	156,164	(127,409)	-	(184,750)	-	(155,995)	(88,962)	(3,551,784)	(2,714,363)
20	363,257	65,565	95,856	161,421	(128,674)	(174,458)	(184,750)	(554,318)	(880,779)	(487,666)	(4,432,564)	(3,202,029)
21	361,441	67,224	99,949	167,173	-	-	-	-	167,173	89,864	(4,265,391)	(3,112,165)
22	359,634	68,917	105,245	174,162	-	-	-	-	174,162	90,894	(4,091,229)	(3,021,272)
23	357,835	70,685	110,615	181,300	-	-	-	-	181,300	91,863	(3,909,929)	(2,929,409)
24	356,046	72,478	115,585	188,063	-	-	-	-	188,063	92,515	(3,721,866)	(2,836,894)
25	354,266	74,317	123,402	197,719	-	-	-	-	197,719	94,432	(3,524,147)	(2,742,462)
Total	9,411,875	1,398,080	1,848,360	3,246,440	(2,346,810)	(174,458)	(3,695,000)	(554,318)	-	-	-	-

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

Key Financial Outputs			
PV Cost	(\$1,162,128)	Total Energy Financial Benefit (Year 1)	\$81,475
Total PV O&M Cost	(\$167,728)	25-Year Total Energy Financial Benefit	\$3,246,440
BESS Lease Payment (Year 1)	(\$184,750)	25-Year NPV	(\$1,984,096)
BESS Lease Payment Term (20-Year)	(\$3,695,000)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$554,318)		
Total Incentives	\$348,638		

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	-	-	-	-	(1,162,128)	-	-	-	-	(1,162,128)	(1,162,128)	(1,162,128)	(1,162,128)
1	399,554	40,700	40,775	81,475	-	(184,750)	-	348,638	(4,910)	240,453	233,450	(921,675)	(928,678)
2	397,556	41,725	42,182	83,908	-	(184,750)	-	-	(5,033)	(105,875)	(99,798)	(1,027,550)	(1,028,476)
3	395,568	42,784	44,481	87,265	-	(184,750)	-	-	(5,159)	(102,644)	(93,934)	(1,130,194)	(1,122,410)
4	393,591	43,886	46,372	90,259	-	(184,750)	-	-	(5,288)	(99,779)	(88,653)	(1,229,973)	(1,211,062)
5	391,623	45,013	48,870	93,882	-	(184,750)	-	-	(5,420)	(96,288)	(83,059)	(1,326,261)	(1,294,121)
6	389,665	46,163	51,087	97,250	-	(184,750)	-	-	(5,556)	(93,056)	(77,933)	(1,419,317)	(1,372,054)
7	387,716	47,350	53,406	100,756	-	(184,750)	-	-	(5,695)	(89,688)	(72,925)	(1,509,006)	(1,444,979)
8	385,778	48,558	56,004	104,562	-	(184,750)	-	-	(5,837)	(86,025)	(67,909)	(1,595,030)	(1,512,888)
9	383,849	49,790	59,229	109,019	-	(184,750)	-	-	(5,983)	(81,714)	(62,627)	(1,676,744)	(1,575,514)
10	381,930	51,037	61,288	112,326	-	(184,750)	-	-	(6,132)	(78,557)	(58,454)	(1,755,301)	(1,633,968)
11	380,020	52,342	64,790	117,132	-	(184,750)	-	-	(6,286)	(73,904)	(53,390)	(1,829,205)	(1,687,358)
12	378,120	53,674	67,853	121,527	-	(184,750)	-	-	(6,443)	(69,666)	(48,862)	(1,898,871)	(1,736,220)
13	376,229	55,049	70,799	125,848	-	(184,750)	-	-	(6,604)	(65,506)	(44,606)	(1,964,377)	(1,780,826)
14	374,348	56,448	73,550	129,998	-	(184,750)	-	-	(6,769)	(61,521)	(40,673)	(2,025,898)	(1,821,499)
15	372,476	57,880	76,571	134,451	-	(184,750)	-	-	(6,938)	(57,238)	(36,739)	(2,083,135)	(1,858,238)

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	370,614	59,342	78,890	138,232	-	(184,750)	-	-	(7,112)	(53,630)	(33,420)	(2,136,765)	(1,891,658)
17	368,761	60,840	82,722	143,562	-	(184,750)	-	-	(7,290)	(48,477)	(29,330)	(2,185,242)	(1,920,987)
18	366,917	62,360	86,627	148,986	-	(184,750)	-	-	(7,472)	(43,235)	(25,396)	(2,228,478)	(1,946,384)
19	365,082	63,952	92,212	156,164	-	(184,750)	-	-	(7,659)	(36,245)	(20,670)	(2,264,722)	(1,967,053)
20	363,257	65,565	95,856	161,421	-	(184,750)	(554,318)	-	(7,850)	(585,497)	(324,176)	(2,850,219)	(2,291,229)
21	361,441	67,224	99,949	167,173	-	-	-	-	(8,046)	159,127	85,539	(2,691,092)	(2,205,691)
22	359,634	68,917	105,245	174,162	-	-	-	-	(8,247)	165,914	86,589	(2,525,178)	(2,119,101)
23	357,835	70,685	110,615	181,300	-	-	-	-	(8,454)	172,846	87,580	(2,352,332)	(2,031,521)
24	356,046	72,478	115,585	188,063	-	-	-	-	(8,665)	179,398	88,252	(2,172,934)	(1,943,269)
25	354,266	74,317	123,402	197,719	-	-	-	-	(8,882)	188,838	90,190	(1,984,096)	(1,853,079)
Total	9,411,875	1,398,080	1,848,360	3,246,440	(1,162,128)	(3,695,000)	(554,318)	348,638	(167,728)	-	-	-	-