

CORPORATION YARD BUILDING MICROGRID FINANCIAL RESULTS

FINANCIAL RESULTS

The detailed results of the Financial Modeling for Corporation Yard 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	3,795	9,057	4,920	0	35	2,282	1,309	350	3,941
February	Winter	0	3,273	8,420	4,642	0	42	2,038	1,359	338	3,735
March	Winter	0	3,322	8,875	5,049	0	35	2,146	1,309	343	3,799
April	Winter	0	2,922	7,718	4,433	0	32	1,875	1,205	330	3,410
May	Winter	0	2,751	7,132	4,559	0	29	1,786	1,100	326	3,212
June	Summer	2,095	688	11,476	0	32	29	1,888	2,038	325	4,251
July	Summer	2,383	1,102	13,448	0	35	32	2,247	2,154	341	4,743
August	Summer	2,830	952	14,026	0	35	35	2,371	2,154	347	4,871
September	Summer	2,586	1,078	13,568	0	38	35	2,292	2,350	343	4,985
October	Winter	0	3,355	7,675	5,039	0	32	1,988	1,205	336	3,529
November	Winter	0	3,375	8,231	4,557	0	32	2,018	1,284	337	3,639
December	Winter	0	3,875	8,844	4,801	0	35	2,192	1,309	345	3,846
Total		9,894	30,490	118,470	38,000	141	403	25,122	18,777	4,062	47,961

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	42	5,732	3,486	0	29	1,159	638	242	2,039
February	Winter	0	171	5,242	2,605	0	32	977	644	241	1,863
March	Winter	0	0	3,646	1,758	0	0	610	577	240	1,427
April	Winter	0	0	3,566	942	0	0	406	313	240	959
May	Winter	0	0	5,730	588	0	0	527	313	240	1,081
June	Summer	0	0	7,155	0	0	0	373	313	241	927
July	Summer	0	0	5,326	0	0	0	10	313	240	563
August	Summer	77	0	5,277	0	32	0	212	660	240	1,112
September	Summer	0	0	5,224	0	0	0	486	534	240	1,259
October	Winter	0	0	4,659	1,710	0	0	644	534	240	1,418
November	Winter	0	28	4,280	3,351	0	26	910	631	241	1,782
December	Winter	0	479	6,328	3,647	0	35	1,278	651	242	2,171
Total		77	721	62,165	18,086	32	122	7,593	6,122	2,885	16,600

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

Key Financial Outputs			
PV Cost	(\$352,655)	Total Energy Financial Benefit (Year 1)	\$30,185
BESS Cost	(\$1,053,328)	25-Year Total Energy Financial Benefit	\$1,172,239
Upfront Payment	(\$1,405,983)	25-Year NPV	(\$239,737)
Total O&M Cost	(\$427,788)	Payback Year	26+
Total Project Costs	(\$1,833,771)		
Total Incentives	\$421,795		
Net Payments	(\$1,411,976)		

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	-	-	-	-	(352,655)	(1,053,328)	-	-	-	(1,405,983)	(1,405,983)	(1,405,983)	(1,405,983)
1	166,234	17,529	12,656	30,185	-	-	421,795	(1,990)	(10,534)	439,456	426,656	(966,527)	(979,326)
2	165,403	17,971	13,129	31,100	-	-	-	(2,040)	(10,797)	18,263	17,215	(948,264)	(962,112)
3	164,576	18,429	13,857	32,286	-	-	-	(2,091)	(11,067)	19,128	17,505	(929,135)	(944,607)
4	163,753	18,899	14,613	33,513	-	-	-	(2,143)	(11,344)	20,026	17,793	(909,110)	(926,814)
5	162,934	19,380	15,082	34,462	-	-	-	(2,196)	(11,628)	20,638	17,803	(888,472)	(909,011)
6	162,120	19,868	15,760	35,627	-	-	-	(2,251)	(11,918)	21,457	17,970	(867,014)	(891,041)
7	161,309	20,362	16,334	36,696	-	-	-	(2,308)	(12,216)	22,172	18,028	(844,842)	(873,013)
8	160,502	20,870	17,041	37,911	-	-	-	(2,365)	(12,522)	23,024	18,175	(821,819)	(854,838)
9	159,700	21,393	17,991	39,384	-	-	-	(2,425)	(12,835)	24,125	18,490	(797,694)	(836,348)
10	158,901	21,925	18,853	40,778	-	-	-	(2,485)	(13,156)	25,137	18,705	(772,556)	(817,644)
11	158,107	22,465	19,576	42,041	-	-	-	(2,547)	(13,484)	26,010	18,790	(746,546)	(798,854)

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	157,316	23,015	20,555	43,570	-	-	-	(2,611)	(13,822)	27,138	19,034	(719,409)	(779,820)
13	156,530	23,570	21,650	45,220	-	-	-	(2,676)	(14,167)	28,377	19,323	(691,032)	(760,497)
14	155,747	24,139	22,952	47,090	-	-	-	(2,743)	(14,521)	29,826	19,718	(661,206)	(740,779)
15	154,968	24,724	23,896	48,620	-	-	-	(2,812)	(14,884)	30,924	19,849	(630,282)	(720,930)
16	154,193	25,314	24,658	49,973	-	-	-	(2,882)	(15,256)	31,834	19,838	(598,448)	(701,092)
17	153,423	25,915	26,103	52,018	-	-	-	(2,954)	(15,638)	33,426	20,223	(565,022)	(680,868)
18	152,655	26,521	27,393	53,914	-	-	-	(3,028)	(16,029)	34,858	20,475	(530,164)	(660,393)
19	151,892	27,135	28,853	55,988	-	-	-	(3,104)	(16,429)	36,455	20,790	(493,709)	(639,603)
20	151,133	27,769	30,201	57,970	-	-	-	(3,181)	(16,840)	37,949	21,012	(455,760)	(618,592)
21	150,377	28,416	31,856	60,272	-	-	-	(3,261)	(17,261)	39,750	21,367	(416,010)	(597,224)
22	149,625	29,070	32,858	61,928	-	-	-	(3,342)	(17,693)	40,893	21,342	(375,117)	(575,882)
23	148,877	29,736	34,962	64,698	-	-	-	(3,426)	(18,135)	43,137	21,857	(331,980)	(554,025)
24	148,133	30,408	36,825	67,233	-	-	-	(3,511)	(18,588)	45,133	22,202	(286,847)	(531,823)
25	147,392	31,096	38,666	69,762	-	-	-	(3,599)	(19,053)	47,110	22,500	(239,737)	(509,323)
Total	3,915,800	595,918	576,320	1,172,239	(352,655)	(1,053,328)	421,795	(67,971)	(359,818)	-	-	-	-

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

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.218	Total Energy Financial Benefit (Year 1)	\$30,185
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$1,172,239
PPA Payment (Year 1)	(\$36,783)	25-Year NPV	(\$901,393)
PPA Payments Term (20-Year)	(\$809,325)	Payback Year	26+
PPA Termination Value	(\$52,968)		
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	166,234	17,529	12,656	30,185	(36,783)	-	(52,666)	-	(59,264)	(57,538)	(59,264)	(57,538)
2	165,403	17,971	13,129	31,100	(37,148)	-	(52,666)	-	(58,714)	(55,344)	(117,978)	(112,881)
3	164,576	18,429	13,857	32,286	(37,516)	-	(52,666)	-	(57,897)	(52,984)	(175,875)	(165,865)
4	163,753	18,899	14,613	33,513	(37,889)	-	(52,666)	-	(57,043)	(50,682)	(232,917)	(216,547)
5	162,934	19,380	15,082	34,462	(38,265)	-	(52,666)	-	(56,469)	(48,711)	(289,386)	(265,257)
6	162,120	19,868	15,760	35,627	(38,645)	-	(52,666)	-	(55,684)	(46,634)	(345,070)	(311,892)
7	161,309	20,362	16,334	36,696	(39,028)	-	(52,666)	-	(54,999)	(44,719)	(400,069)	(356,611)
8	160,502	20,870	17,041	37,911	(39,415)	-	(52,666)	-	(54,171)	(42,763)	(454,240)	(399,374)
9	159,700	21,393	17,991	39,384	(39,807)	-	(52,666)	-	(53,089)	(40,688)	(507,329)	(440,062)
10	158,901	21,925	18,853	40,778	(40,202)	-	(52,666)	-	(52,090)	(38,760)	(559,419)	(478,822)

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	158,107	22,465	19,576	42,041	(40,601)	-	(52,666)	-	(51,226)	(37,007)	(610,645)	(515,828)
12	157,316	23,015	20,555	43,570	(41,004)	-	(52,666)	-	(50,100)	(35,139)	(660,745)	(550,968)
13	156,530	23,570	21,650	45,220	(41,411)	-	(52,666)	-	(48,857)	(33,269)	(709,602)	(584,237)
14	155,747	24,139	22,952	47,090	(41,822)	-	(52,666)	-	(47,398)	(31,336)	(757,000)	(615,573)
15	154,968	24,724	23,896	48,620	(42,237)	-	(52,666)	-	(46,283)	(29,707)	(803,283)	(645,280)
16	154,193	25,314	24,658	49,973	(42,656)	-	(52,666)	-	(45,350)	(28,260)	(848,633)	(673,540)
17	153,423	25,915	26,103	52,018	(43,079)	-	(52,666)	-	(43,728)	(26,456)	(892,360)	(699,996)
18	152,655	26,521	27,393	53,914	(43,507)	-	(52,666)	-	(42,259)	(24,823)	(934,619)	(724,819)
19	151,892	27,135	28,853	55,988	(43,939)	-	(52,666)	-	(40,617)	(23,163)	(975,236)	(747,982)
20	151,133	27,769	30,201	57,970	(44,375)	(52,968)	(52,666)	(158,011)	(250,049)	(138,446)	(1,225,285)	(886,428)
21	150,377	28,416	31,856	60,272	-	-	-	-	60,272	32,399	(1,165,013)	(854,029)
22	149,625	29,070	32,858	61,928	-	-	-	-	61,928	32,320	(1,103,085)	(821,710)
23	148,877	29,736	34,962	64,698	-	-	-	-	64,698	32,782	(1,038,388)	(788,928)
24	148,133	30,408	36,825	67,233	-	-	-	-	67,233	33,074	(971,155)	(755,854)
25	147,392	31,096	38,666	69,762	-	-	-	-	69,762	33,319	(901,393)	(722,535)
Total	3,915,800	595,918	576,320	1,172,239	(809,325)	(52,968)	(1,053,328)	(158,011)	-	-	-	-

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

Key Financial Outputs			
PV Cost	(\$352,655)	Total Energy Financial Benefit (Year 1)	\$30,185
Total PV O&M Cost	(\$67,971)	25-Year Total Energy Financial Benefit	\$1,172,239
BESS Lease Payment (Year 1)	(\$52,666)	25-Year NPV	(\$353,928)
BESS Lease Payment Term (20-Year)	(\$1,053,328)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$158,011)		
Total Incentives	\$105,796		

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	-	-	-	-	(352,655)	-	-	-	-	(352,655)	(352,655)	(352,655)	(352,655)
1	166,234	17,529	12,656	30,185	-	(52,666)	-	105,796	(1,990)	81,325	78,956	(271,330)	(273,698)
2	165,403	17,971	13,129	31,100	-	(52,666)	-	-	(2,040)	(23,606)	(22,251)	(294,935)	(295,949)
3	164,576	18,429	13,857	32,286	-	(52,666)	-	-	(2,091)	(22,471)	(20,564)	(317,406)	(316,513)
4	163,753	18,899	14,613	33,513	-	(52,666)	-	-	(2,143)	(21,297)	(18,922)	(338,703)	(335,435)
5	162,934	19,380	15,082	34,462	-	(52,666)	-	-	(2,196)	(20,401)	(17,598)	(359,104)	(353,033)
6	162,120	19,868	15,760	35,627	-	(52,666)	-	-	(2,251)	(19,291)	(16,156)	(378,394)	(369,188)
7	161,309	20,362	16,334	36,696	-	(52,666)	-	-	(2,308)	(18,278)	(14,862)	(396,673)	(384,051)
8	160,502	20,870	17,041	37,911	-	(52,666)	-	-	(2,365)	(17,121)	(13,515)	(413,794)	(397,566)
9	159,700	21,393	17,991	39,384	-	(52,666)	-	-	(2,425)	(15,707)	(12,038)	(429,501)	(409,604)
10	158,901	21,925	18,853	40,778	-	(52,666)	-	-	(2,485)	(14,373)	(10,695)	(443,874)	(420,299)
11	158,107	22,465	19,576	42,041	-	(52,666)	-	-	(2,547)	(13,172)	(9,516)	(457,046)	(429,815)

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	157,316	23,015	20,555	43,570	-	(52,666)	-	-	(2,611)	(11,707)	(8,211)	(468,754)	(438,026)
13	156,530	23,570	21,650	45,220	-	(52,666)	-	-	(2,676)	(10,123)	(6,893)	(478,876)	(444,919)
14	155,747	24,139	22,952	47,090	-	(52,666)	-	-	(2,743)	(8,319)	(5,500)	(487,196)	(450,419)
15	154,968	24,724	23,896	48,620	-	(52,666)	-	-	(2,812)	(6,858)	(4,402)	(494,054)	(454,821)
16	154,193	25,314	24,658	49,973	-	(52,666)	-	-	(2,882)	(5,576)	(3,475)	(499,630)	(458,296)
17	153,423	25,915	26,103	52,018	-	(52,666)	-	-	(2,954)	(3,602)	(2,180)	(503,232)	(460,476)
18	152,655	26,521	27,393	53,914	-	(52,666)	-	-	(3,028)	(1,780)	(1,045)	(505,012)	(461,521)
19	151,892	27,135	28,853	55,988	-	(52,666)	-	-	(3,104)	218	124	(504,794)	(461,397)
20	151,133	27,769	30,201	57,970	-	(52,666)	(158,011)	-	(3,181)	(155,888)	(86,311)	(660,682)	(547,708)
21	150,377	28,416	31,856	60,272	-	-	-	-	(3,261)	57,011	30,646	(603,671)	(517,062)
22	149,625	29,070	32,858	61,928	-	-	-	-	(3,342)	58,586	30,576	(545,085)	(486,486)
23	148,877	29,736	34,962	64,698	-	-	-	-	(3,426)	61,272	31,046	(483,813)	(455,440)
24	148,133	30,408	36,825	67,233	-	-	-	-	(3,511)	63,721	31,347	(420,092)	(424,094)
25	147,392	31,096	38,666	69,762	-	-	-	-	(3,599)	66,163	31,600	(353,928)	(392,494)
Total	3,915,800	595,918	576,320	1,172,239	(352,655)	(1,053,328)	(158,011)	105,796	(67,971)	-	-	-	-

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	3,795	9,057	4,920	0	35	2,282	1,309	350	3,941
February	Winter	0	3,273	8,420	4,642	0	42	2,038	1,359	338	3,735
March	Winter	0	3,322	8,875	5,049	0	35	2,146	1,309	343	3,799
April	Winter	0	2,922	7,718	4,433	0	32	1,875	1,205	330	3,410
May	Winter	0	2,751	7,132	4,559	0	29	1,786	1,100	326	3,212
June	Summer	2,095	688	11,476	0	32	29	1,888	2,038	325	4,251
July	Summer	2,383	1,102	13,448	0	35	32	2,247	2,154	341	4,743
August	Summer	2,830	952	14,026	0	35	35	2,371	2,154	347	4,871
September	Summer	2,586	1,078	13,568	0	38	35	2,292	2,350	343	4,985
October	Winter	0	3,355	7,675	5,039	0	32	1,988	1,205	336	3,529
November	Winter	0	3,375	8,231	4,557	0	32	2,018	1,284	337	3,639
December	Winter	0	3,875	8,844	4,801	0	35	2,192	1,309	345	3,846
Total		9,894	30,490	118,470	38,000	141	403	25,122	18,777	4,062	47,961

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	42	5,660	3,511	0	29	1,147	638	242	2,027
February	Winter	0	171	5,213	2,617	0	32	976	644	241	1,861
March	Winter	0	0	3,600	1,750	0	0	606	577	240	1,423
April	Winter	0	0	3,556	942	0	0	406	313	240	959
May	Winter	0	0	5,730	588	0	0	527	313	240	1,081
June	Summer	0	0	7,155	0	0	0	373	313	241	927
July	Summer	0	0	5,326	0	0	0	10	313	240	563
August	Summer	36	0	5,260	0	32	0	204	660	240	1,104
September	Summer	0	0	5,114	0	0	0	485	534	240	1,259
October	Winter	0	0	4,610	1,715	0	0	641	340	240	1,222
November	Winter	0	28	4,232	3,350	0	26	903	631	241	1,775
December	Winter	0	435	6,314	3,739	0	35	1,280	651	242	2,173
Total		36	677	61,768	18,213	32	122	7,560	5,928	2,885	16,374

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

Key Financial Outputs			
PV Cost	(\$352,655)	Total Energy Financial Benefit (Year 1)	\$30,411
BESS Cost	(\$1,409,325)	25-Year Total Energy Financial Benefit	\$1,180,662
Upfront Payment	(\$1,761,980)	25-Year NPV	(\$529,870)
Total O&M Cost	(\$477,146)	Payback Year	26+
Total Project Costs	(\$2,239,126)		
Total Incentives	\$528,594		
Net Payments	(\$1,710,532)		

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	-	-	-	-	(352,655)	(1,409,325)	-	-	-	(1,761,980)	(1,761,980)	(1,761,980)	(1,761,980)
1	166,234	17,562	12,849	30,411	-	-	528,594	(1,990)	(11,979)	545,036	529,161	(1,216,944)	(1,232,818)
2	165,403	18,010	13,307	31,317	-	-	-	(2,040)	(12,278)	16,998	16,023	(1,199,945)	(1,216,796)
3	164,576	18,475	13,953	32,428	-	-	-	(2,091)	(12,585)	17,752	16,245	(1,182,194)	(1,200,550)
4	163,753	18,949	14,714	33,662	-	-	-	(2,143)	(12,900)	18,619	16,543	(1,163,574)	(1,184,007)
5	162,934	19,432	15,242	34,673	-	-	-	(2,196)	(13,223)	19,254	16,609	(1,144,320)	(1,167,398)
6	162,120	19,926	16,097	36,023	-	-	-	(2,251)	(13,553)	20,219	16,933	(1,124,101)	(1,150,465)
7	161,309	20,429	16,687	37,116	-	-	-	(2,308)	(13,892)	20,917	17,007	(1,103,184)	(1,133,458)
8	160,502	20,947	17,522	38,469	-	-	-	(2,365)	(14,239)	21,864	17,260	(1,081,320)	(1,116,199)
9	159,700	21,482	18,380	39,862	-	-	-	(2,425)	(14,595)	22,842	17,506	(1,058,478)	(1,098,692)
10	158,901	22,025	19,240	41,265	-	-	-	(2,485)	(14,960)	23,820	17,724	(1,034,658)	(1,080,968)
11	158,107	22,577	20,041	42,618	-	-	-	(2,547)	(15,334)	24,737	17,870	(1,009,922)	(1,063,098)
12	157,316	23,141	20,921	44,063	-	-	-	(2,611)	(15,717)	25,734	18,049	(984,187)	(1,045,048)
13	156,530	23,714	21,659	45,373	-	-	-	(2,676)	(16,110)	26,587	18,104	(957,601)	(1,026,944)
14	155,747	24,301	22,952	47,252	-	-	-	(2,743)	(16,513)	27,996	18,509	(929,605)	(1,008,435)
15	154,968	24,904	23,896	48,801	-	-	-	(2,812)	(16,926)	29,063	18,654	(900,542)	(989,781)

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	154,193	25,513	24,724	50,237	-	-	-	(2,882)	(17,349)	30,006	18,699	(870,536)	(971,082)
17	153,423	26,134	26,205	52,339	-	-	-	(2,954)	(17,783)	31,602	19,120	(838,934)	(951,963)
18	152,655	26,762	27,515	54,277	-	-	-	(3,028)	(18,227)	33,021	19,397	(805,913)	(932,566)
19	151,892	27,401	28,981	56,382	-	-	-	(3,104)	(18,683)	34,595	19,729	(771,317)	(912,837)
20	151,133	28,060	30,236	58,296	-	-	-	(3,181)	(19,150)	35,964	19,913	(735,353)	(892,924)
21	150,377	28,730	31,856	60,586	-	-	-	(3,261)	(19,629)	37,696	20,264	(697,657)	(872,661)
22	149,625	29,406	32,973	62,379	-	-	-	(3,342)	(20,120)	38,917	20,311	(658,739)	(852,350)
23	148,877	30,094	34,962	65,055	-	-	-	(3,426)	(20,623)	41,007	20,778	(617,732)	(831,572)
24	148,133	30,788	36,825	67,613	-	-	-	(3,511)	(21,138)	42,963	21,135	(574,769)	(810,437)
25	147,392	31,499	38,666	70,165	-	-	-	(3,599)	(21,667)	44,899	21,444	(529,870)	(788,993)
Total	3,915,800	600,259	580,403	1,180,662	(352,655)	(1,409,325)	528,594	(67,971)	(409,176)	-	-	-	-

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

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.218	Total Energy Financial Benefit (Year 1)	\$30,411
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$1,180,662
PPA Payment (Year 1)	(\$36,783)	25-Year NPV	(\$1,302,350)
PPA Payments Term (20-Year)	(\$809,325)	Payback Year	26+
PPA Termination Value	(\$52,968)		
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	166,234	17,562	12,849	30,411	(36,783)	-	(70,466)	-	(76,838)	(74,600)	(76,838)	(74,600)
2	165,403	18,010	13,307	31,317	(37,148)	-	(70,466)	-	(76,297)	(71,918)	(153,135)	(146,517)
3	164,576	18,475	13,953	32,428	(37,516)	-	(70,466)	-	(75,555)	(69,143)	(228,690)	(215,661)
4	163,753	18,949	14,714	33,662	(37,889)	-	(70,466)	-	(74,692)	(66,363)	(303,383)	(282,024)
5	162,934	19,432	15,242	34,673	(38,265)	-	(70,466)	-	(74,058)	(63,883)	(377,440)	(345,907)
6	162,120	19,926	16,097	36,023	(38,645)	-	(70,466)	-	(73,088)	(61,210)	(450,528)	(407,117)
7	161,309	20,429	16,687	37,116	(39,028)	-	(70,466)	-	(72,378)	(58,850)	(522,906)	(465,966)
8	160,502	20,947	17,522	38,469	(39,415)	-	(70,466)	-	(71,413)	(56,374)	(594,319)	(522,340)
9	159,700	21,482	18,380	39,862	(39,807)	-	(70,466)	-	(70,411)	(53,964)	(664,730)	(576,305)
10	158,901	22,025	19,240	41,265	(40,202)	-	(70,466)	-	(69,403)	(51,642)	(734,133)	(627,947)
11	158,107	22,577	20,041	42,618	(40,601)	-	(70,466)	-	(68,449)	(49,449)	(802,582)	(677,396)
12	157,316	23,141	20,921	44,063	(41,004)	-	(70,466)	-	(67,407)	(47,278)	(869,989)	(724,674)
13	156,530	23,714	21,659	45,373	(41,411)	-	(70,466)	-	(66,504)	(45,286)	(936,492)	(769,960)
14	155,747	24,301	22,952	47,252	(41,822)	-	(70,466)	-	(65,036)	(42,996)	(1,001,528)	(812,956)

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	154,968	24,904	23,896	48,801	(42,237)	-	(70,466)	-	(63,902)	(41,017)	(1,065,431)	(853,973)
16	154,193	25,513	24,724	50,237	(42,656)	-	(70,466)	-	(62,885)	(39,188)	(1,128,316)	(893,160)
17	153,423	26,134	26,205	52,339	(43,079)	-	(70,466)	-	(61,207)	(37,031)	(1,189,522)	(930,192)
18	152,655	26,762	27,515	54,277	(43,507)	-	(70,466)	-	(59,696)	(35,065)	(1,249,219)	(965,257)
19	151,892	27,401	28,981	56,382	(43,939)	-	(70,466)	-	(58,023)	(33,090)	(1,307,242)	(998,346)
20	151,133	28,060	30,236	58,296	(44,375)	(52,968)	(70,466)	(211,394)	(320,908)	(177,679)	(1,628,149)	(1,176,025)
21	150,377	28,730	31,856	60,586	-	-	-	-	60,586	32,568	(1,567,563)	(1,143,457)
22	149,625	29,406	32,973	62,379	-	-	-	-	62,379	32,555	(1,505,184)	(1,110,902)
23	148,877	30,094	34,962	65,055	-	-	-	-	65,055	32,963	(1,440,128)	(1,077,939)
24	148,133	30,788	36,825	67,613	-	-	-	-	67,613	33,261	(1,372,516)	(1,044,678)
25	147,392	31,499	38,666	70,165	-	-	-	-	70,165	33,511	(1,302,350)	(1,011,167)
Total	3,915,800	600,259	580,403	1,180,662	(809,325)	(52,968)	(1,409,325)	(211,394)	-	-	-	-

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

Key Financial Outputs			
PV Cost	(\$352,655)	Total Energy Financial Benefit (Year 1)	\$30,411
Total PV O&M Cost	(\$67,971)	25-Year Total Energy Financial Benefit	\$1,180,662
BESS Lease Payment (Year 1)	(\$70,466)	25-Year NPV	(\$754,886)
BESS Lease Payment Term (20-Year)	(\$1,409,325)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$211,394)		
Total Incentives	\$105,796		

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	-	-	-	-	(352,655)	-	-	-	-	(352,655)	(352,655)	(352,655)	(352,655)
1	166,234	17,562	12,849	30,411	-	(70,466)	-	105,796	(1,990)	63,751	61,894	(288,903)	(290,760)
2	165,403	18,010	13,307	31,317	-	(70,466)	-	-	(2,040)	(41,189)	(38,825)	(330,093)	(329,585)
3	164,576	18,475	13,953	32,428	-	(70,466)	-	-	(2,091)	(40,129)	(36,724)	(370,222)	(366,309)
4	163,753	18,949	14,714	33,662	-	(70,466)	-	-	(2,143)	(38,947)	(34,604)	(409,169)	(400,913)
5	162,934	19,432	15,242	34,673	-	(70,466)	-	-	(2,196)	(37,989)	(32,770)	(447,158)	(433,682)
6	162,120	19,926	16,097	36,023	-	(70,466)	-	-	(2,251)	(36,694)	(30,731)	(483,852)	(464,413)
7	161,309	20,429	16,687	37,116	-	(70,466)	-	-	(2,308)	(35,657)	(28,993)	(519,510)	(493,406)
8	160,502	20,947	17,522	38,469	-	(70,466)	-	-	(2,365)	(34,363)	(27,126)	(553,873)	(520,533)
9	159,700	21,482	18,380	39,862	-	(70,466)	-	-	(2,425)	(33,029)	(25,314)	(586,902)	(545,847)
10	158,901	22,025	19,240	41,265	-	(70,466)	-	-	(2,485)	(31,686)	(23,578)	(618,588)	(569,424)
11	158,107	22,577	20,041	42,618	-	(70,466)	-	-	(2,547)	(30,396)	(21,958)	(648,983)	(591,383)
12	157,316	23,141	20,921	44,063	-	(70,466)	-	-	(2,611)	(29,015)	(20,350)	(677,998)	(611,733)
13	156,530	23,714	21,659	45,373	-	(70,466)	-	-	(2,676)	(27,769)	(18,909)	(705,767)	(630,642)
14	155,747	24,301	22,952	47,252	-	(70,466)	-	-	(2,743)	(25,957)	(17,161)	(731,724)	(647,803)
15	154,968	24,904	23,896	48,801	-	(70,466)	-	-	(2,812)	(24,477)	(15,711)	(756,202)	(663,514)
16	154,193	25,513	24,724	50,237	-	(70,466)	-	-	(2,882)	(23,111)	(14,402)	(779,313)	(677,916)
17	153,423	26,134	26,205	52,339	-	(70,466)	-	-	(2,954)	(21,082)	(12,755)	(800,394)	(690,671)

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	152,655	26,762	27,515	54,277	-	(70,466)	-	-	(3,028)	(19,217)	(11,288)	(819,612)	(701,959)
19	151,892	27,401	28,981	56,382	-	(70,466)	-	-	(3,104)	(17,188)	(9,802)	(836,799)	(711,761)
20	151,133	28,060	30,236	58,296	-	(70,466)	(211,394)	-	(3,181)	(226,746)	(125,544)	(1,063,546)	(837,305)
21	150,377	28,730	31,856	60,586	-	-	-	-	(3,261)	57,325	30,815	(1,006,220)	(806,490)
22	149,625	29,406	32,973	62,379	-	-	-	-	(3,342)	59,037	30,811	(947,183)	(775,679)
23	148,877	30,094	34,962	65,055	-	-	-	-	(3,426)	61,630	31,227	(885,553)	(744,451)
24	148,133	30,788	36,825	67,613	-	-	-	-	(3,511)	64,101	31,534	(821,452)	(712,918)
25	147,392	31,499	38,666	70,165	-	-	-	-	(3,599)	66,566	31,792	(754,886)	(681,125)
Total	3,915,800	600,259	580,403	1,180,662	(352,655)	(1,409,325)	(211,394)	105,796	(67,971)	-	-	-	-

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	3,795	9,057	4,920	0	35	2,282	1,309	350	3,941
February	Winter	0	3,273	8,420	4,642	0	42	2,038	1,359	338	3,735
March	Winter	0	3,322	8,875	5,049	0	35	2,146	1,309	343	3,799
April	Winter	0	2,922	7,718	4,433	0	32	1,875	1,205	330	3,410
May	Winter	0	2,751	7,132	4,559	0	29	1,786	1,100	326	3,212
June	Summer	2,095	688	11,476	0	32	29	1,888	2,038	325	4,251
July	Summer	2,383	1,102	13,448	0	35	32	2,247	2,154	341	4,743
August	Summer	2,830	952	14,026	0	35	35	2,371	2,154	347	4,871
September	Summer	2,586	1,078	13,568	0	38	35	2,292	2,350	343	4,985
October	Winter	0	3,355	7,675	5,039	0	32	1,988	1,205	336	3,529
November	Winter	0	3,375	8,231	4,557	0	32	2,018	1,284	337	3,639
December	Winter	0	3,875	8,844	4,801	0	35	2,192	1,309	345	3,846
Total		9,894	30,490	118,470	38,000	141	403	25,122	18,777	4,062	47,961

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	42	5,461	3,505	0	29	1,118	638	241	1,997
February	Winter	0	171	5,210	2,619	0	32	976	644	241	1,861
March	Winter	0	0	3,400	1,756	0	0	586	577	240	1,403
April	Winter	0	0	3,556	959	0	0	413	313	240	966
May	Winter	0	0	5,730	588	0	0	527	313	240	1,081
June	Summer	0	0	7,155	0	0	0	373	313	241	927
July	Summer	0	0	5,326	0	0	0	10	313	240	563
August	Summer	33	0	5,059	0	32	0	179	616	240	1,034
September	Summer	0	0	4,990	0	0	0	497	445	240	1,181
October	Winter	0	0	4,594	1,720	0	0	641	313	240	1,194
November	Winter	0	28	4,034	3,343	0	26	876	631	241	1,748
December	Winter	0	428	6,314	3,769	0	35	1,282	651	242	2,175
Total		33	669	60,830	18,260	32	122	7,478	5,767	2,885	16,130

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

Key Financial Outputs			
PV Cost	(\$352,655)	Total Energy Financial Benefit (Year 1)	\$30,654
BESS Cost	(\$1,671,068)	25-Year Total Energy Financial Benefit	\$1,208,095
Upfront Payment	(\$2,023,723)	25-Year NPV	(\$713,086)
Total O&M Cost	(\$504,575)	Payback Year	26+
Total Project Costs	(\$2,528,298)		
Total Incentives	\$607,117		
Net Payments	(\$1,921,181)		

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	-	-	-	-	(352,655)	(1,671,068)	-	-	-	(2,023,723)	(2,023,723)	(2,023,723)	(2,023,723)
1	166,234	17,644	13,010	30,654	-	-	607,117	(1,990)	(12,782)	622,999	604,853	(1,400,724)	(1,418,869)
2	165,403	18,094	13,538	31,632	-	-	-	(2,040)	(13,102)	16,491	15,544	(1,384,233)	(1,403,325)
3	164,576	18,560	14,532	33,091	-	-	-	(2,091)	(13,429)	17,572	16,081	(1,366,661)	(1,387,244)
4	163,753	19,037	15,124	34,161	-	-	-	(2,143)	(13,765)	18,253	16,218	(1,348,408)	(1,371,026)
5	162,934	19,526	15,564	35,090	-	-	-	(2,196)	(14,109)	18,785	16,204	(1,329,623)	(1,354,822)
6	162,120	20,028	16,491	36,519	-	-	-	(2,251)	(14,462)	19,806	16,587	(1,309,817)	(1,338,235)
7	161,309	20,539	17,159	37,699	-	-	-	(2,308)	(14,823)	20,568	16,724	(1,289,249)	(1,321,512)
8	160,502	21,065	18,017	39,082	-	-	-	(2,365)	(15,194)	21,523	16,991	(1,267,726)	(1,304,521)
9	159,700	21,609	19,343	40,952	-	-	-	(2,425)	(15,574)	22,953	17,592	(1,244,772)	(1,286,929)
10	158,901	22,166	20,060	42,226	-	-	-	(2,485)	(15,963)	23,778	17,693	(1,220,994)	(1,269,236)
11	158,107	22,736	20,956	43,692	-	-	-	(2,547)	(16,362)	24,783	17,904	(1,196,211)	(1,251,332)
12	157,316	23,321	21,874	45,195	-	-	-	(2,611)	(16,771)	25,813	18,104	(1,170,398)	(1,233,228)
13	156,530	23,916	22,519	46,435	-	-	-	(2,676)	(17,190)	26,569	18,092	(1,143,830)	(1,215,136)
14	155,747	24,533	23,864	48,397	-	-	-	(2,743)	(17,620)	28,034	18,534	(1,115,796)	(1,196,602)
15	154,968	25,169	25,159	50,328	-	-	-	(2,812)	(18,061)	29,456	18,907	(1,086,340)	(1,177,695)
16	154,193	25,814	26,050	51,864	-	-	-	(2,882)	(18,512)	30,470	18,988	(1,055,870)	(1,158,707)
17	153,423	26,476	27,597	54,073	-	-	-	(2,954)	(18,975)	32,144	19,448	(1,023,726)	(1,139,260)

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	152,655	27,147	28,977	56,124	-	-	-	(3,028)	(19,449)	33,647	19,764	(990,079)	(1,119,496)
19	151,892	27,832	29,817	57,649	-	-	-	(3,104)	(19,936)	34,610	19,738	(955,469)	(1,099,758)
20	151,133	28,542	31,301	59,843	-	-	-	(3,181)	(20,434)	36,228	20,059	(919,241)	(1,079,700)
21	150,377	29,269	32,990	62,259	-	-	-	(3,261)	(20,945)	38,054	20,456	(881,187)	(1,059,244)
22	149,625	30,006	34,164	64,170	-	-	-	(3,342)	(21,468)	39,360	20,542	(841,827)	(1,038,702)
23	148,877	30,759	35,952	66,711	-	-	-	(3,426)	(22,005)	41,280	20,916	(800,547)	(1,017,786)
24	148,133	31,520	37,392	68,913	-	-	-	(3,511)	(22,555)	42,846	21,077	(757,701)	(996,709)
25	147,392	32,305	39,029	71,334	-	-	-	(3,599)	(23,119)	44,616	21,309	(713,086)	(975,400)
Total	3,915,800	607,616	600,480	1,208,095	(352,655)	(1,671,068)	607,117	(67,971)	(436,605)	-	-	-	-

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

Key Financial Outputs			
PV PPA Rate (/kWh)	\$0.218	Total Energy Financial Benefit (Year 1)	\$30,654
PPA Escalation Rate	1.5%	25-Year Total Energy Financial Benefit	\$1,208,095
PPA Payment (Year 1)	(\$36,783)	25-Year NPV	(\$1,575,901)
PPA Payments Term (20-Year)	(\$809,325)	Payback Year	26+
PPA Termination Value	(\$52,968)		
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	166,234	17,644	13,010	30,654	(36,783)	-	(83,553)	-	(89,682)	(87,070)	(89,682)	(87,070)
2	165,403	18,094	13,538	31,632	(37,148)	-	(83,553)	-	(89,069)	(83,956)	(178,751)	(171,026)
3	164,576	18,560	14,532	33,091	(37,516)	-	(83,553)	-	(87,978)	(80,513)	(266,729)	(251,539)
4	163,753	19,037	15,124	34,161	(37,889)	-	(83,553)	-	(87,281)	(77,548)	(354,010)	(329,087)
5	162,934	19,526	15,564	35,090	(38,265)	-	(83,553)	-	(86,728)	(74,812)	(440,738)	(403,899)
6	162,120	20,028	16,491	36,519	(38,645)	-	(83,553)	-	(85,679)	(71,755)	(526,417)	(475,653)
7	161,309	20,539	17,159	37,699	(39,028)	-	(83,553)	-	(84,883)	(69,017)	(611,300)	(544,671)
8	160,502	21,065	18,017	39,082	(39,415)	-	(83,553)	-	(83,886)	(66,221)	(695,186)	(610,892)
9	159,700	21,609	19,343	40,952	(39,807)	-	(83,553)	-	(82,408)	(63,159)	(777,594)	(674,051)
10	158,901	22,166	20,060	42,226	(40,202)	-	(83,553)	-	(81,529)	(60,665)	(859,123)	(734,716)
11	158,107	22,736	20,956	43,692	(40,601)	-	(83,553)	-	(80,462)	(58,127)	(939,585)	(792,843)
12	157,316	23,321	21,874	45,195	(41,004)	-	(83,553)	-	(79,362)	(55,663)	(1,018,948)	(848,507)
13	156,530	23,916	22,519	46,435	(41,411)	-	(83,553)	-	(78,529)	(53,474)	(1,097,477)	(901,981)
14	155,747	24,533	23,864	48,397	(41,822)	-	(83,553)	-	(76,978)	(50,891)	(1,174,454)	(952,872)
15	154,968	25,169	25,159	50,328	(42,237)	-	(83,553)	-	(75,462)	(48,436)	(1,249,916)	(1,001,308)

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	154,193	25,814	26,050	51,864	(42,656)	-	(83,553)	-	(74,345)	(46,329)	(1,324,261)	(1,047,638)
17	153,423	26,476	27,597	54,073	(43,079)	-	(83,553)	-	(72,560)	(43,900)	(1,396,821)	(1,091,538)
18	152,655	27,147	28,977	56,124	(43,507)	-	(83,553)	-	(70,936)	(41,668)	(1,467,757)	(1,133,205)
19	151,892	27,832	29,817	57,649	(43,939)	-	(83,553)	-	(69,843)	(39,830)	(1,537,600)	(1,173,036)
20	151,133	28,542	31,301	59,843	(44,375)	(52,968)	(83,553)	(250,635)	(371,688)	(205,795)	(1,909,288)	(1,378,830)
21	150,377	29,269	32,990	62,259	-	-	-	-	62,259	33,467	(1,847,029)	(1,345,363)
22	149,625	30,006	34,164	64,170	-	-	-	-	64,170	33,490	(1,782,859)	(1,311,873)
23	148,877	30,759	35,952	66,711	-	-	-	-	66,711	33,802	(1,716,148)	(1,278,071)
24	148,133	31,520	37,392	68,913	-	-	-	-	68,913	33,901	(1,647,235)	(1,244,170)
25	147,392	32,305	39,029	71,334	-	-	-	-	71,334	34,070	(1,575,901)	(1,210,101)
Total	3,915,800	607,616	600,480	1,208,095	(809,325)	(52,968)	(1,671,068)	(250,635)	-	-	-	-

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

Key Financial Outputs			
PV Cost	(\$352,655)	Total Energy Financial Benefit (Year 1)	\$30,654
Total PV O&M Cost	(\$67,971)	25-Year Total Energy Financial Benefit	\$1,208,095
BESS Lease Payment (Year 1)	(\$83,553)	25-Year NPV	(\$1,028,437)
BESS Lease Payment Term (20-Year)	(\$1,671,068)	Payback Year	26+
Lease Escalation Rate	0%		
Lease Termination Value	(\$250,635)		
Total Incentives	\$105,796		

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	-	-	-	-	(352,655)	-	-	-	-	(352,655)	(352,655)	(352,655)	(352,655)
1	166,234	17,644	13,010	30,654	-	(83,553)	-	105,796	(1,990)	50,907	49,424	(301,747)	(303,230)
2	165,403	18,094	13,538	31,632	-	(83,553)	-	-	(2,040)	(53,961)	(50,863)	(355,708)	(354,094)
3	164,576	18,560	14,532	33,091	-	(83,553)	-	-	(2,091)	(52,553)	(48,093)	(408,261)	(402,187)
4	163,753	19,037	15,124	34,161	-	(83,553)	-	-	(2,143)	(51,535)	(45,788)	(459,796)	(447,975)
5	162,934	19,526	15,564	35,090	-	(83,553)	-	-	(2,196)	(50,660)	(43,699)	(510,456)	(491,674)
6	162,120	20,028	16,491	36,519	-	(83,553)	-	-	(2,251)	(49,286)	(41,276)	(559,741)	(532,950)
7	161,309	20,539	17,159	37,699	-	(83,553)	-	-	(2,308)	(48,162)	(39,160)	(607,904)	(572,111)
8	160,502	21,065	18,017	39,082	-	(83,553)	-	-	(2,365)	(46,836)	(36,973)	(654,740)	(609,084)
9	159,700	21,609	19,343	40,952	-	(83,553)	-	-	(2,425)	(45,026)	(34,509)	(699,766)	(643,593)
10	158,901	22,166	20,060	42,226	-	(83,553)	-	-	(2,485)	(43,812)	(32,601)	(743,579)	(676,193)
11	158,107	22,736	20,956	43,692	-	(83,553)	-	-	(2,547)	(42,408)	(30,637)	(785,987)	(706,830)
12	157,316	23,321	21,874	45,195	-	(83,553)	-	-	(2,611)	(40,970)	(28,735)	(826,957)	(735,565)
13	156,530	23,916	22,519	46,435	-	(83,553)	-	-	(2,676)	(39,794)	(27,098)	(866,751)	(762,663)
14	155,747	24,533	23,864	48,397	-	(83,553)	-	-	(2,743)	(37,899)	(25,056)	(904,650)	(787,719)
15	154,968	25,169	25,159	50,328	-	(83,553)	-	-	(2,812)	(36,037)	(23,131)	(940,687)	(810,850)

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	154,193	25,814	26,050	51,864	-	(83,553)	-	-	(2,882)	(34,571)	(21,544)	(975,258)	(832,393)
17	153,423	26,476	27,597	54,073	-	(83,553)	-	-	(2,954)	(32,435)	(19,623)	(1,007,693)	(852,017)
18	152,655	27,147	28,977	56,124	-	(83,553)	-	-	(3,028)	(30,457)	(17,890)	(1,038,150)	(869,907)
19	151,892	27,832	29,817	57,649	-	(83,553)	-	-	(3,104)	(29,008)	(16,543)	(1,067,158)	(886,450)
20	151,133	28,542	31,301	59,843	-	(83,553)	(250,635)	-	(3,181)	(277,526)	(153,660)	(1,344,685)	(1,040,110)
21	150,377	29,269	32,990	62,259	-	-	-	-	(3,261)	58,998	31,715	(1,285,686)	(1,008,395)
22	149,625	30,006	34,164	64,170	-	-	-	-	(3,342)	60,828	31,746	(1,224,858)	(976,649)
23	148,877	30,759	35,952	66,711	-	-	-	-	(3,426)	63,285	32,066	(1,161,573)	(944,583)
24	148,133	31,520	37,392	68,913	-	-	-	-	(3,511)	65,401	32,173	(1,096,172)	(912,410)
25	147,392	32,305	39,029	71,334	-	-	-	-	(3,599)	67,735	32,351	(1,028,437)	(880,060)
Total	3,915,800	607,616	600,480	1,208,095	(352,655)	(1,671,068)	(250,635)	105,796	(67,971)	-	-	-	-