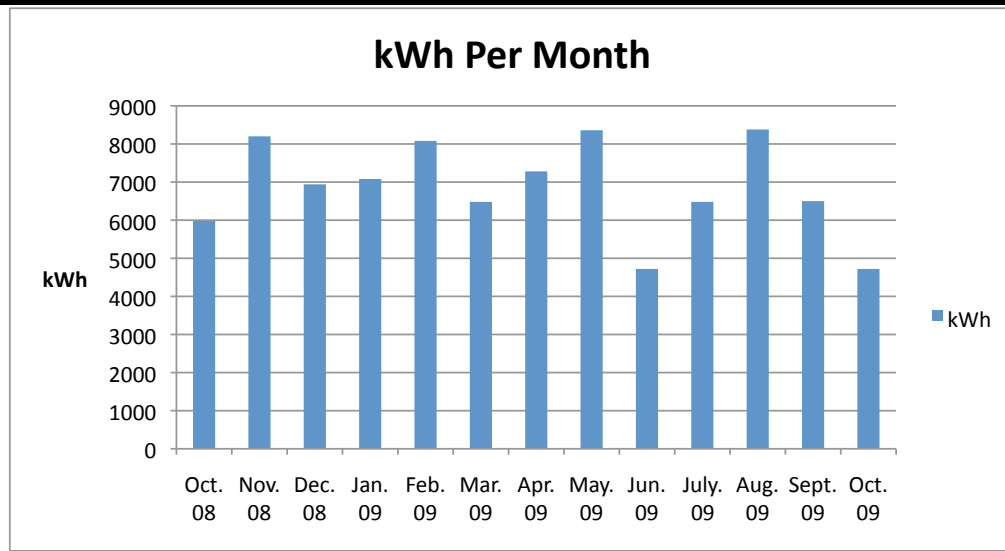


Summit United Methodist Church

Months	kWh	Monthly Cost (dollars)
Oct. 08	5980	693.68
Nov. 08	8200	951.20
Dec. 08	6940	805.04
Jan. 09	7080	821.28
Feb. 09	8080	937.28
Mar. 09	6480	751.68
Apr. 09	7280	844.48
May. 09	8360	969.76
Jun. 09	4720	547.52
July. 09	6480	751.68
Aug. 09	8380	972.08
Sept. 09	6500	754.00
Oct. 09	4720	547.52
Average	6861.54	804.46
Lowest	4720	547.52
Highest	8380	972.08
Total Average per year	82338.46	9653.52
Actual Total per year	89200	9653.52



Assumptions
1.) 11.6 cents per kWh
2.) Electricity increases by 4% in cost each year
3.) There is a 80% efficiency between converting DC (solar) to AC (church electricity)
4.) Assume panels see a yearly average of 4.6 hours of sun a day for Ohio

Option 1	~ 17% Reduction in Monthly Electric Bill with 4% increase per year												
Dollar System Cost (after benefits)	21622	Begin Profit											
Year	1	2	3	4	5	6	7	8	9	10	11	12	
Elect. Cost (cents/kWh)	11.60	12.06	12.55	13.05	13.57	14.11	14.68	15.26	15.88	16.51	17.17	17.86	
kWh generated from Solar Panels per year	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	
Dollar Amount Saved per year from Panels	1604.23	1668.40	1735.14	1804.54	1876.72	1951.79	2029.87	2111.06	2195.50	2283.32	2374.66	2469.64	
Dollar Sum of Savings	1604.23	3272.63	5007.77	6812.31	8689.04	10640.83	12670.70	14781.76	16977.26	19260.58	21635.24	24104.88	
Dollar Profit	-20017.77	-18349.37	-16614.23	-14809.69	-12932.96	-10981.17	-8951.30	-6840.24	-4644.74	-2361.42	13.24	2482.88	
Year	13	14	15	16	17	18	19	20	21	22	23	24	25
Cost (cents/kWh)	18.57	19.31	20.09	20.89	21.73	22.60	23.50	24.44	25.42	26.43	27.49	28.59	29.73
kWh generated from Panels per year	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59
Dollar Amount Saved per year	2568.43	2671.16	2778.01	2889.13	3004.70	3124.88	3249.88	3379.88	3515.07	3655.67	3801.90	3953.98	4112.13
Dollar Sum of Savings	26673.31	29344.47	32122.48	35011.61	38016.31	41141.19	44391.07	47770.95	51286.02	54941.69	58743.59	62697.57	66809.70
Dollar Profit	5051.31	7722.47	10500.48	13389.61	16394.31	19519.19	22769.07	26148.95	29664.02	33319.69	37121.59	41075.57	45187.70

Option 1	~ 17% Reduction in Monthly Electric Bill with electricity bill staying at 11.6 cents/kWh												
Year	1	2	3	4	5	6	7	8	9	10	11	12	
Elect. Cost (cents/kWh)	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	
kWh generated from Solar Panels per year	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	
Dollar Amount Saved per year from Panels	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	
Dollar Sum of Savings	1604.23	3208.46	4812.70	6416.93	8021.16	9625.39	11229.62	12833.86	14438.09	16042.32	17646.55	19250.79	
Dollar Profit	-20017.77	-18413.54	-16809.30	-15205.07	-13600.84	-11996.61	-10392.38	-8788.14	-7183.91	-5579.68	-3975.45	-2371.21	
Begin Profit													
Year	13	14	15	16	17	18	19	20	21	22	23	24	25
Cost (cents/kWh)	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60
kWh generated from Panels per year	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59	13829.59
Dollar Amount Saved per year	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23	1604.23
Dollar Sum of Savings	20855.02	22459.25	24063.48	25667.71	27271.95	28876.18	30480.41	32084.64	33688.87	35293.11	36897.34	38501.57	40105.80
Dollar Profit	-766.98	837.25	2441.48	4045.71	5649.95	7254.18	8858.41	10462.64	12066.87	13671.11	15275.34	16879.57	18483.80

Option 2	~ 50% Reduction in Monthly Electric Bill with a 4% increase per year														
Dollar System Cost (after benefits)	64864.8														
Year	1	2	3	4	5	6	7	8	9	10	11	12	Begin Profit		
Elect. Cost (cents/kWh)	11.60	12.06	12.55	13.05	13.57	14.11	14.68	15.26	15.88	16.51	17.17	17.86			
kWh generated from Solar Panels per year	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76			
Dollar Amount Saved per year from Panels	4812.70	5005.20	5205.41	5413.63	5630.17	5855.38	6089.60	6333.18	6586.51	6849.97	7123.97	7408.92			
Dollar Sum of Savings	4812.70	9817.90	15023.31	20436.94	26067.12	31922.50	38012.09	44345.27	50931.78	57781.75	64905.71	72314.64			
Dollar Profit	-60052.10	-55046.90	-49841.49	-44427.86	-38797.68	-32942.30	-26852.71	-20519.53	-13933.02	-7083.05	40.91	7449.84			
Begin Profit															
Year	13	14	15	16	17	18	19	20	21	22	23	24	25		
Cost (cents/kWh)	18.57	19.31	20.09	20.89	21.73	22.60	23.50	24.44	25.42	26.43	27.49	28.59	29.73		
kWh generated from Panels per year	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76		
Dollar Amount Saved per year	7705.28	8013.49	8334.03	8667.39	9014.09	9374.65	9749.64	10139.63	10545.21	10967.02	11405.70	11861.93	12336.40		
Dollar Sum of Savings	80019.92	88033.41	96367.45	105034.84	114048.93	123423.58	133173.22	143312.85	153858.06	164825.08	176230.78	188092.71	200429.11		
Dollar Profit	15155.12	23168.61	31502.65	40170.04	49184.13	58558.78	68308.42	78448.05	88993.26	99960.28	111365.98	123227.91	135564.31		

Option 2	~ 50% Reduction in Monthly Electric Bill with electricity bill staying at 11.6 cents/kWh														
Dollar System Cost (after benefits)	64864.8														
Year	1	2	3	4	5	6	7	8	9	10	11	12	Begin Profit		
Elect. Cost (cents/kWh)	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60			
kWh generated from Solar Panels per year	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76			
Dollar Amount Saved per year from Panels	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70			
Dollar Sum of Savings	4812.70	9625.39	14438.09	19250.79	24063.48	28876.18	33688.87	38501.57	43314.27	48126.96	52939.66	57752.36			
Dollar Profit	-60052.10	-55239.41	-50426.71	-45614.01	-40801.32	-35988.62	-31175.93	-26363.23	-21550.53	-16737.84	-11925.14	-7112.44			
Begin Profit															
Year	13	14	15	16	17	18	19	20	21	22	23	24	25		
Cost (cents/kWh)	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60		
kWh generated from Panels per year	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76	41488.76		
Dollar Amount Saved per year	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70	4812.70		
Dollar Sum of Savings	62565.05	67377.75	72190.45	77003.14	81815.84	86628.53	91441.23	96253.93	101066.62	105879.32	110692.02	115504.71	120317.41		
Dollar Profit	-2299.75	2512.95	7325.65	12138.34	16951.04	21763.73	26576.43	31389.13	36201.82	41014.52	45827.22	50639.91	55452.61		

Option 3	~ 100% Reduction in Monthly Electric Bill with a 4% increase per year													
Dollar System Cost (after benefits)	129730											Begin Profit		
Year	1	2	3	4	5	6	7	8	9	10	11	12		
Elect. Cost (cents/kWh)	11.60	12.06	12.55	13.05	13.57	14.11	14.68	15.26	15.88	16.51	17.17	17.86		
kWh generated from Solar Panels per year	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52		
Dollar Amount Saved per year from Panels	9625.39	10010.41	10410.82	10827.26	11260.35	11710.76	12179.19	12666.36	13173.01	13699.94	14247.93	14817.85		
Dollar Sum of Savings	9625.39	19635.80	30046.63	40873.88	52134.23	63844.99	76024.19	88690.55	101863.56	115563.50	129811.43	144629.28		
Dollar Profit	-120104.61	-110094.20	-99683.37	-88856.12	-77595.77	-65885.01	-53705.81	-41039.45	-27866.44	-14166.50	81.43	14899.28		
Begin Profit														
Year	13	14	15	16	17	18	19	20	21	22	23	24	25	
Cost (cents/kWh)	18.57	19.31	20.09	20.89	21.73	22.60	23.50	24.44	25.42	26.43	27.49	28.59	29.73	
kWh generated from Panels per year	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	
Dollar Amount Saved per year	15410.56	16026.99	16668.07	17334.79	18028.18	18749.31	19499.28	20279.25	21090.42	21934.04	22811.40	23723.85	24672.81	
Dollar Sum of Savings	160039.84	176066.83	192734.89	210069.68	228097.86	246847.17	266346.45	286625.70	307716.12	329650.16	352461.56	376185.41	400858.22	
Dollar Profit	30309.84	46336.83	63004.89	80339.68	98367.86	117117.17	136616.45	156895.70	177986.12	199920.16	222731.56	246455.41	271128.22	

Option 3	~ 100% Reduction in Monthly Electric Bill with electricity bill staying at 11.6 cents/kWh													
Dollar System Cost (after benefits)	129730											Begin Profit		
Year	1	2	3	4	5	6	7	8	9	10	11	12		
Elect. Cost (cents/kWh)	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60		
kWh generated from Solar Panels per year	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52		
Dollar Amount Saved per year from Panels	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39		
Dollar Sum of Savings	9625.39	19250.79	28876.18	38501.57	48126.96	57752.36	67377.75	77003.14	86628.53	96253.93	105879.32	115504.71		
Dollar Profit	-120104.61	-110479.21	-100853.82	-91228.43	-81603.04	-71977.64	-62352.25	-52726.86	-43101.47	-33476.07	-23850.68	-14225.29		
Begin Profit														
Year	13	14	15	16	17	18	19	20	21	22	23	24	25	
Cost (cents/kWh)	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	
kWh generated from Panels per year	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	82977.52	
Dollar Amount Saved per year	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	9625.39	
Dollar Sum of Savings	125130.10	134755.50	144380.89	154006.28	163631.68	173257.07	182882.46	192507.85	202133.25	211758.64	221384.03	231009.42	240634.82	
Dollar Profit	-4599.90	5025.50	14650.89	24276.28	33901.68	43527.07	53152.46	62777.85	72403.25	82028.64	91654.03	101279.42	110904.82	