

APADANA SOLAR TECHNOLOGIES



Preliminary Design

Prince of Peace Lutheran Church (PPA)

2561 Victoria St N,
Roseville, MN 55113

12/16/2022

Rev 2B

Contact:
Buff Grace
651-323-3167
buff@mnipl.org

System Size: 75 kW DC / 183 Panels

Environmental Benefits

- 71,949 kWh in 1st year; 1,970,106 kWh over 30 years
- 1,456,894 lbs. of CO₂, which is equivalent to 23,033 trees growing for 10 years



Project Cost \$0.00

**Price Valid Until* 12/30/2022

1st Year Net Cost \$0.00

Total Revenue \$101,295

**30 years cumulative; system will operate beyond 30 years*

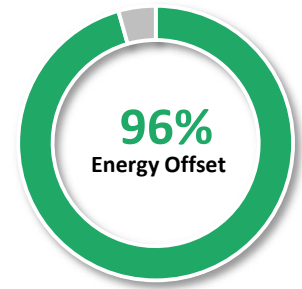
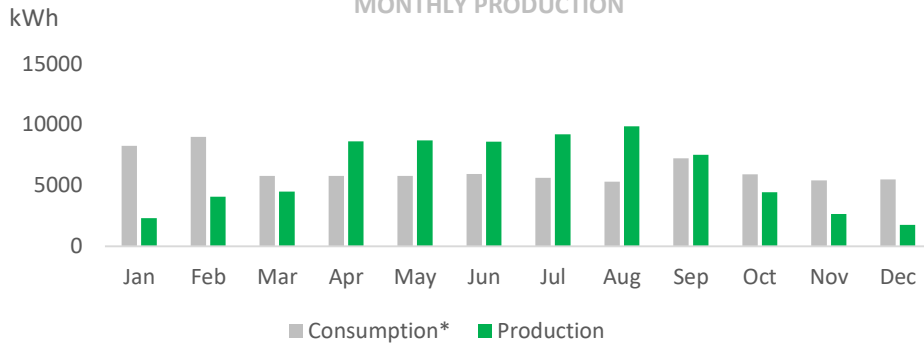
IRR N/A

**Internal Rate of Return*

Cash Payback N/A

APADANA SOLAR TECHNOLOGIES

MONTHLY PRODUCTION



*Consumption data is estimated with the 11 months of supplied usage data

■ Solar ■ Utility

YOUR SOLAR SPECS

What will my system size be?

- 75 kW, 183 panels

What kind of material will be installed?

- Monocrystalline 410 Watt Jinko Tier 1 Panels or Equivalent
- CPS String Inverters (or equivalent)
- Ecolibrium Ecofoot 2+ Racking

YOUR PRODUCT WARRANTIES

What are my warranties?

- 25 Year Panel Production Warranty
- 20 Year Inverter Warranty
 - Extended from Standard 10 Year Warranty
- 25 Year Racking Warranty
- 25 Year Installation Workmanship Warranty
 - Extended from Standard 5 Year Warranty

This Letter of Intent (LOI) is made between Apadana and Prince of Peace Lutheran Church(Client) who agree to negotiate in good faith toward implementation of a solar Power Purchase Agreement (PPA) under which a Third-Party investor will purchase, own and operate a solar PV system on Client property for a specified period. Client will then purchase the electricity generated by the solar system, at a discount from standard rates, until such time that ownership of the system is conveyed to the Client. All costs associated with the design and installation of the solar system will be paid to Apadana by the third-party investor and Client will have no out-of-pocket costs relating to the system purchase and installation.

The Parties acknowledge that the exact terms of the PPA will be finalized upon completion of due diligence and engineering work by Apadana (to commence upon execution of this LOI), which will determine exact system size and placement of the panels. This LOI provides both Apadana and the Third-Party Investor assurances that Client will make all reasonable efforts to successfully complete the PPA once finalized and presented for Client consideration. If Client fails to accept the PPA, then Client agrees to reimburse Apadana for expenses incurred on its behalf to prepare the PPA, not to exceed \$2,400.

The LOI becomes effective on the date signed below and remains in effect for a period of 90 days

Rev 2B

I accept the solar system proposal by Apadana Energy LLC dba Apadana Solar Technologies.

Name of authorized representative

Signature

Date



Prepared by: Apadana
3401 Nevada Ave N
New Hope, MN 55427
Solar@apadanatech.com
www.ApadanaSolarTech.com

Prepared for: Prince of Peace Lutheran Church (PPA)
2561 Victoria St N, Roseville, MN 55113

Proposal ID: **Rev 2B (PPA Host)**

Date: 12/16/2022
Offer Expire: 1/15/2023

INVESTMENT SNAPSHOT	
Total Project Cost \$	-
Installed System Cost (\$/Watt) \$	-
Federal Investment Tax Credit (ITC) \$	-
Tax Savings \$	-
Cost Net of Incentives & Tax Savings \$	-
Project Payback (Years)	N/A
Cumulative Solar Savings (30 yrs) \$	101,295

SYSTEM SNAPSHOT	
System Type	Grid-tied Solar PV
System Capacity (DC kW)	75.030
Number of Modules	183
Approximate Module Area (sq. ft)	6,766
Avg Utility Electric Rate (\$/kWh, 30 yrs) \$	0.132
Average Solar Cost (\$/kWh, 30 yrs) \$	[0.001]
Current Annual Consumption (kWh)	75,256
Solar Portion of Electric Consumption	96%

INPUT DATA & ASSUMPTIONS	
Starting Cost of Elec. (\$/kWh)	0.085
Rate Escalation (%/year)	3.5%
Post-Solar Demand Savings	6.8%
* Federal Tax Rate	21%
** State Tax Rate	9.8%
Year 1 Module Degradation	2.5%
Year 2+ Module Degradation	0.5%
Bi-Facial Production Gain	0.00%
Utility Provider	Xcel Energy

FINANCIAL DETAILS											
Year	System Production [kWh]	Production & Energy Savings [\$]	Demand Savings* [\$]	Incentives / Grants / Rebate [\$]	Investment Tax Credit [\$]	* Federal [\$] Depreciation	** First Year State Depr [\$]	Energy Discount [\$]	Cash Flow [\$]	Cumulative Cash Flow [\$]	Year
	1,970,107	\$ 276,527	\$ 14,070					\$ 21,032		\$ 101,295	
0											0
1	71,949	5,637	375					564	939	939	1
2	70,150	5,762	380					576	957	1,895	2
3	69,800	5,949	386					595	981	2,876	3
4	69,451	6,142	392					614	1,006	3,882	4
5	69,103	6,341	398					634	1,032	4,914	5
6	68,758	6,547	404					655	1,059	5,973	6
7	68,414	6,760	410					676	1,086	7,059	7
8	68,072	6,979	416					698	1,114	8,173	8
9	67,732	7,206	422					721	1,143	9,315	9
10	67,393	7,440	429					744	1,173	10,488	10
11	67,056	7,682	435					768	1,203	11,691	11
12	66,721	7,932	442					793	1,235	12,926	12
13	66,387	8,190	448					819	1,267	14,193	13
14	66,055	8,456	455					846	1,300	15,494	14
15	65,725	8,731	462					873	1,335	16,828	15
16	65,396	9,015	469					902	1,370	18,199	16
17	65,069	9,309	476					931	1,407	19,605	17
18	64,744	9,612	483					961	1,444	21,049	18
19	64,420	9,925	490					992	1,482	22,531	19
20	64,098	10,248	497					1,025	1,522	24,054	20
21	63,778	10,582	505					1,058	1,563	25,617	21
22	63,459	10,926	512					1,093	1,605	27,222	22
23	63,141	11,282	520					1,128	1,648	28,870	23
24	62,826	11,650	528					1,165	1,693	30,563	24
25 ²	62,512	12,030	536					1,203	1,739	32,302	25 ²
26	62,199	12,422	544					(1)	12,965	45,266	26
27	61,888	12,827	552						13,379	58,645	27
28	61,579	13,245	560						13,805	72,450	28
29	61,271	13,646	569						14,215	86,665	29
30	60,964	14,053	577						14,630	101,295	30
Totals	1,970,107	\$ 66,192	\$ 14,070	\$ -	\$ -	\$ -	\$ -	\$ 21,032		\$ 101,295	

*The numbers above are estimates based on industry standards compiled by a 20 year average of geo-specific data. Actual numbers may vary.