Minnetonka Public Works

REQUEST FOR PROPOSAL
Solar for Public Buildings Grant

Minnetonka Water Well #3 – Ground Array

Date of Issue: **July 22, 2024**

Proposal Due Date: **12:01 p.m. August 14, 2024**

City of Minnetonka

REQUEST FOR PROPOSALS
for Solar for Public Buildings Grant

Date of Issue:	**July 22, 2024**
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I. Contents

II. OBJECTIVE

City of Minnetonka is soliciting competitive sealed proposals from qualified contractors to design, build, and maintain a solar installation on local government property and provide power to local government facilities. The City has been approved to submit a full grant application for two separate sites through the Minnesota Solar for Public Buildings Grant Program.

Responses shall be submitted no later than 12:01 p.m., August 14, 2024; late responses will not be considered. Each response shall be treated as confidential until this deadline, after which each response shall become public.

III. OVERVIEW

City of Minnetonka is seeking proposals from interested firms capable of designing, engineering, installing, and maintaining a solar PV ground-mounted array.

In the long term, the local government may be interested in developing solar energy for other sites, and the results of this RFP may be used for future projects. For the purposes of this RFP, respondents should limit their responses to only this site identified herein.

The local government believes on-site PV power generation will provide a long-term financial benefit by reducing energy costs through the reduction of peak demand loads and daily energy consumption at the sites. Through on-site PV solar generation, the Local Government hopes to:

- Reap the financial benefits of more affordable electricity at minimal cost.
- Reduce environmental impact.
- Provide an example of successful renewable energy generation and showcase our organization as a leader in the development of renewable energy sources.

Through this RFP process, the Minnetonka intends to select only one provider for each solar project and is looking for the "best value" proposal based on the selection criteria stated within this RFP.

IV. RFP SCHEDULE

The following schedule and deadlines apply to this solicitation:

Pre-Bid Conference – Available in person or via WebEx
Tuesday, July 30, 2024 - 1:00 PM CDST

Location: Minnetonka Public Works
11522 Minnetonka Blvd.
Minnetonka, MN 55305

Video Link: https://logis.webex.com/logis/j.php?MTID=m1cb4d2ecaaa5c04cd851d47ea0966626
To join from a mobile device (attendees only)
+1-312-535-8110,,26346603664## United States Toll (Chicago)
+1-415-655-0001,,26346603664## US Toll
Meeting number (access code): 2634 660 366 Meeting password: sfEnrJgm938

Submit RFP questions to: Kevin Maas, SFP Facilities Manager/Public Works
(952) 988-8412
kmaas@minnetonkamn.gov

Request for Proposals Due: 12:01 p.m. August 14, 2024
Final question submittal by Noon-Monday August 5, 2024.

Send proposals to:

William Manchester, P.E.
wmanchester@minnetonkamn.gov
Email Subject Line: "Minnetonka Solar for Public Buildings RFP – Well#3"

or mail to: City of Minnetonka Public Works
C/O Solar on Public Buildings RFP – Attn: William Manchester
11522 Minnetonka Blvd
Minnetonka, MN 55305

V. SITE INFORMATION

From January of 2021 to May of 2024 the City of Minnetonka has averaged 25,504,254.51 kilowatt-hours (kWh). Approximately 52% of our demand is enrolled in Community Solar Gardens.

The City of Minnetonka has identified this site, which is the ground field east and north of a Water Well #3, close to Minnetonka Middle School East, 17000 Lake Street Extension, Minnetonka, MN 55345. This proposed ground mounted array needs to avoid in ground utilities and access points for the final design. There is adequate space for the project allowing for avoidance of the in-ground utilities. This well building site is fenced from the south access point and is adjacent to the middle school and a Regional Trail to the North.

VI. EXAMINATION OF SITE BEFORE SUBMITTING PROPOSAL

Each provider must inform themselves fully of the conditions relating to the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of the obligation to carry out the provisions of the contract.

The provider will design, install, and maintain a solar photovoltaic system to maximize the solar resources considering the facilities' electrical demand and load patterns, proposed installation site, available solar resources, applicable zoning ordinances, installation costs, and other relevant factors, which shall be discussed in the provider's proposal. The provider should make every effort to visit the site and determine the best course of action. The ability to tour the site will be part of the pre-bid conference.

VII. PROVIDER QUALIFICATIONS

To qualify as the provider for the award of this agreement, the provider must either individually or collectively demonstrate extensive training, relevant expertise, and a thorough knowledge of the professional services, functions, activities, and related responsibilities to successfully perform their role in this solar photovoltaic installation.

VIII. PERSONNEL QUALIFICATIONS AND ABILITIES

Specialized experience is required of the proposed project personnel to undertake the work assignments. Proposals must demonstrate the capability, academic background, training, certifications, and experience of the proposed personnel. The availability of the proposed staff is also of crucial importance and must be demonstrated. The specific responsibility of staff to be assigned to the project must be included, as well as the professional background and caliber of previous experience of key persons and consultants to be assigned to the project. If sub-consultants are employed, similar information must be provided and the portions to be sub-consulted must be identified. (There is no penalty for the use of sub-consultants; the qualifications of the entire team will be evaluated).

Provider(s) shall possess:

- Valid and pertinent State of Minnesota contractor construction licenses.
- Minnesota Professional Engineering (PE) registration for photovoltaic/electrical, structural, civil, and fire protection work.
- North American Board of Certified Energy Practitioners (NABCEP) certification.

IX. PROJECT SCOPE AND STANDARDS

The provider will design, provide, install, and maintain the solar photovoltaic systems. The scope of this project is all-inclusive and includes planning, engineering, labor, materials, delivery, installation, and commissioning, as well as all warranties and maintenance. This includes all structural and utility modifications that are required. The provider shall include in its proposal all elements necessary for a turn-key project including rebate applications, grid connection agreement, all permits and approvals from governing agencies, and all labor, taxes, services, and equipment. The provider shall apply for and obtain all necessary required approvals and permits. All fees required shall be the responsibility of the applicant.

The provider shall decide on the best location for metering and the number of meters required. If a roof-mounted array is deemed the best option as opposed to the proposed ground-mounted array, all proposed roof-mounted solar panels, tracks, and anchoring equipment shall not exceed ten pounds per square foot. The provider shall verify the structural capacity of the roof.

The provider shall submit the Solar for Public Buildings full grant application to the State of Minnesota and abide by grant requirements.

Ownership of Solar Renewable Energy Credits (RECS) or Certificates should be assumed to be owned by the local government unless otherwise specified by the provider as part of the proposal.

The provider is responsible for all connections and agreements with the utility, Xcel Energy. City staff shall provide support of the Provider; recognizing that the City is a large commercial customer and has current agreements in place; including a franchise agreement and community solar gardens.

All equipment shall be UL listed. All installations shall comply with current local government-approved building and electrical codes. The guaranteed minimum output from the system shall be 85% of the expected performance output from the system.

X. CONTENT OF PROPOSAL

To maintain uniformity with all proposals furnished by the provider, proposals shall include the following:

- Overview of Principal Elements. A project understanding summary that includes an overview of the principal elements of the proposal, a demonstration of an understanding of the project objectives, and a description of your approach to solar systems. Include any suggestions or special concerns that the local government should be made aware of, the proposed configuration of equipment, and any additional scope of work tasks you feel are necessary for the successful completion of the project. Include a discussion of work assignments between the provider and subcontractors used, if any.

- Schematic Design Layout. Provider shall provide a system schematic design layout for the systems, including photovoltaic model type and model no., wattage, number of modules, year 1 production, degradation percentage, inverter type and model, mounting system type, azimuth, tilt, system size AC and DC, and the impact on the utility rates and demand charges.

- Cost. The local government is eligible to receive a Solar for Public Buildings grant of 50% of the cost of the project not to exceed $60,000. Additionally, the local government intends to apply for elective pay from the federal government. The provider shall incorporate the grant and federal incentives into the proposal. Provider shall identify costs to the local government and anticipated savings over 25 years. Please identify the breakeven years before any federal incentives.

- Minimum Qualifications. Sufficient information to evaluate the provider's ability to complete the scope of work and to meet the following minimum qualifications:
  - Appropriate business and contracting licenses in good standing
  - Appropriate other licensing in good standing
  - A list of personnel who will work on the project, including resumes of proposed project team members that delineate education, current licenses and certificates, prior employment, and titles.
  - Project Team Structure: An organizational chart describing the roles and responsibilities of each person.

- References. A list of similar projects that your firm completed within the last 5 years. To be considered, respondents are required to have designed, installed, operated, maintained, and completed a minimum of five (5) solar PV projects in the United States that are commercial grid-connected solar PV systems. One (1) of the referenced projects must be with a local government, school, state, or tribal government.

  Project information should include a short project description, agency or client name along with the person to contact, telephone number(s) and e-mail addresses, year completed, and project construction and design cost.

- Proposal submittal and signature. The proposal shall be signed by a company official with the power to bind the company in its proposal. All proposals must be completely responsive to the RFP.

- Warranties/Guarantees. The Respondent shall provide the following minimum warranties/guarantees:
  • 10-year inverter warranty.
  • 20-year PV panel warranty, with a maximum of 20% degradation.

XI. TECHNICAL SPECIFICATIONS

The following technical information should be discussed in this section.

- Major equipment manufacturers
- Description of technology and configuration
- Solar system layout of equipment and characteristics
- Electrical interconnection and metering/net-metering
- Foundation of PV support system
- Level of efficiency
- DC and AC capacity rating
- Expected annual energy production in kWh
- Communications, control and instrumentation
- Facility limitations that may constrain operation
- Project Management plan
- Start-up and testing
- Design life loading (wind, seismic, etc.)
- Description of frequency and duration of scheduled maintenance
- Provide any information that could impact the cost, construction schedule or output capability of the project.
- Proposals shall demonstrate a proven, comprehensive data acquisition system with current and historical data available remotely through a real-time internet site capable of tracking, but not be limited, to the following:
  - Site-specific actual kWh production (average and cumulative totals)
  - Site-specific instantaneous maximum kWh production
- Proposals shall provide evidence that the proposed technology and equipment would meet or exceed all currently applicable and proposed safety and interconnection standards. All equipment components must be listed or recognized by an appropriate safety laboratory (e.g., Underwriter's Laboratory [UL]), and meet existing facility structural and fire safety requirements.
- Proposals shall provide evidence the proposed technology and equipment would meet or exceed all currently applicable and proposed environmental standards.
- Proposals shall provide evidence the proposed technology and equipment are designed for normal operation in the Minnesota climate.
- Proposals shall provide evidence the proposed technology does not incorporate proprietary components and that the system design allows for multiple sources of supply and/or repair.
- Proposals shall describe reusability or recyclability of proposed technology and equipment.

XII. OPERATIONS AND MAINTENANCE

Describe the basic philosophy for performing O&M and include a discussion of contracting for outside services, if applicable. The successful respondent shall provide copies of the complete O&M manuals for all components of the system upon system commissioning.

The O&M plan shall include recycling for any solar module or inverter that needs to be replaced for any reason over the life of the system. At the time of any project-level work order execution, the Contractor shall use solar PV system components that are readily reusable or recyclable. The provider shall track solar system equipment that ceases to function as intended and report on an annual basis the recycling of any modules or inverters to the Minnesota Pollution Control Agency.

XIII. PROJECT SCHEDULE

All proposals must include a project schedule that includes the following milestones:

- Permitting begins
- Final design plans complete.
- Equipment ordered.
- Construction begins.
- Electrical generation begins.

XIV. FINANCIAL STATEMENTS

Please submit a detailed financial report prepared per generally accepted accounting principles (GAAP) reflecting the current (as of the most recent financial statement date) financial condition of the provider. Such a report must include a balance sheet, income statement, and statement of cash flows, along with applicable footnotes, dated concurrently for at least each of the preceding three years ending on the most recent fiscal quarter such statements were prepared. Public entities or subsidiaries should attach SEC Form 10-K along with, as applicable, detailed unaudited statements for the provider. Non-public entities may attach either unaudited financial statements or copies of tax forms and schedules that are filed with the Internal Revenue Service where applicable. Please include a statement whether the company can provide a payment and performance bond (or other surety) for the project either in its entirety or a portion, if required.

XV. SELECTION COMMITTEE

The local government has established a Selection Committee to evaluate provider proposals. The evaluation of each proposal will be based on technical criteria and qualifications, reference checks, and other information that will be gathered independently.

XVI. LOCAL GOVERNMENT RESPONSIBILITY

The local government will be responsible for the following:

- Providing all available existing relevant plans and records.
- Coordinating access to the site for review before the bid due date.

XVII. PROVIDER SELECTION CRITERIA

The local government, based on the requirements of this RFP has designated the following items as selection criteria for the successful provider. Each item will be individually and separately scored by Selection Committee members.

A. Proposal Completeness (10 points): The measure for which the provider has provided all the requested information in a clear non ambiguous way as requested in this RFP.
B. Cost/Best Value: (35 points): Cost information provided by the provider detailing the cost to the owner and potential savings over a 30-year period.
C. Targeted Group (5 points): Utilize certified Women, Minority, Disabled, or veteran-owned businesses to supply materials or services.
D. Financial Strength and Stability (10 points): Provide information indicating the provider's financial strength in terms of capital and liquid assets sufficient to complete the project listed in this RFP; and the stability of the provider in terms of length of service, professional capabilities, construction experience and capabilities over time. Ability to provide surety or bond
E. Photovoltaic engineering, project, and construction experience, including a minimum of three successful photovoltaic projects within the scope of this RFP (20 points). Project commissioning process and warranty.
F. Project engineering analysis (10 points). Information provided by the provider detailing the estimated KWh generated by the proposed photovoltaic systems in this RFP; including all necessary assumptions for example sunlight availability, dark time, maintenance downtime, MTBF (mean time between failures), efficiency of the systems proposed, efficiency losses, net metering, etc. Project close out, commissioning and warranty.
G. Photovoltaic performance monitoring (5 points). The provider's capabilities of monitoring photovoltaic generating systems, for example, how many systems does the provider monitor in centralized stations, etc.
H. Provider customer service, and maintenance capabilities (5 points). The ability of the provider to respond quickly, efficiently, and cost-effectively to warranty or maintenance service calls so the photovoltaic systems are operating at optimum output.

XVIII. RIGHT TO REJECT PROPOSALS

Respondent proposals shall remain valid for 60 days after the opening of the proposals.

The local government reserves the right to reject any or all proposals.

All costs incurred in the preparation of the proposal, the submission of additional information, and/or any aspect of a proposal before the award of a written contract will be borne by the provider.

The local government will provide only the staff assistance and documentation specifically referred to herein and will not be responsible for any other cost or obligation of any kind that may be incurred by the respondent. All proposals submitted become the property of the local government.

XIX. RFP EXHIBITS

ATTACHMENT A: MN Solar Suitability App report
ATTACHMENT B: PVWatts Report
ATTACHMENT C: 24 Months of Utility Bills
ATTACHMENT D: Map of Proposed Location
ATTACHMENT E: City Permitting Information

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at //sam.nrel.gov) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a Fixed (open rack) PV system at this location.

RESULTS

46,775 kWh/Year*

System output may range from 44,399 to 47,841 kWh per year near this location.

Month	Solar Radiation (kWh / m^2 / day)	AC Energy (kWh)
January	2.61	2,436
February	4.00	3,369
March	5.05	4,514
April	5.63	4,689
May	5.63	4,693
June	6.22	4,941
July	6.62	5,351
August	6.04	4,884
September	5.13	4,133
October	3.94	3,414
November	2.66	2,326
December	2.14	2,024
Annual	**4.64**	**46,774**

Location and Station Identification

Requested Location	17000 Lake St Ext; 55345
Weather Data Source	Lat, Lng: 44.93, -93.5 0.3 mi
Latitude	44.93° N
Longitude	93.50° W

PV System Specifications

DC System Size	40 kW
Module Type	Standard
Array Type	Fixed (open rack)
System Losses	25.82%
Array Tilt	20°
Array Azimuth	180°
DC to AC Size Ratio	1.2
Inverter Efficiency	96%
Ground Coverage Ratio	0.4
Albedo	*From weather file*
Bifacial	No (0)
Monthly Irradiance Loss	Jan Feb Mar Apr May June 0% 0% 0% 0% 0% 0% July Aug Sept Oct Nov Dec 0% 0% 0% 0% 0% 0%

Performance Metrics

DC Capacity Factor	13.3%

Solar Suitability Report

Latitude: 44.930403 Longitude: -93.494146

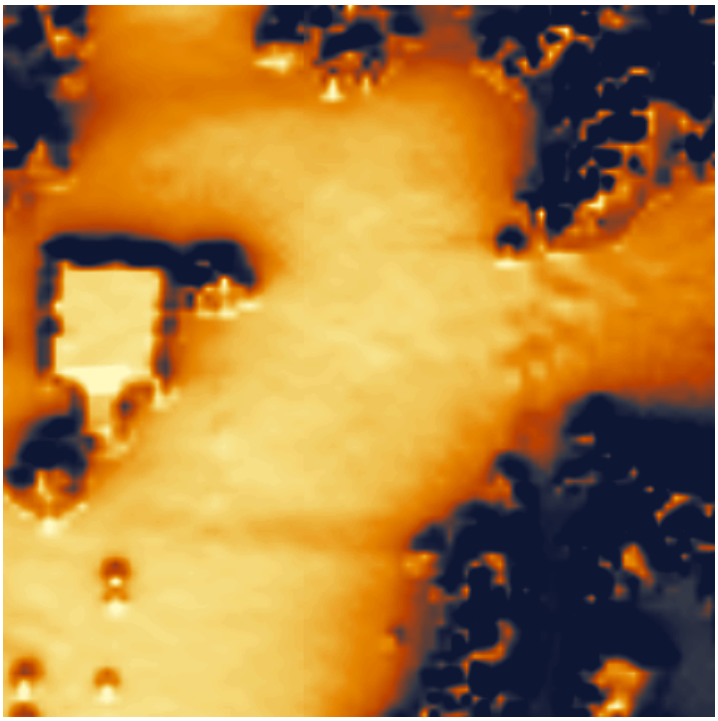
mn.gov/solarapp

Wed Jul 17, 2024

Site Name: Minnetonka Well 3

Site Address 17000 Lake St Extension

Site Notes: Proposed Ground Arrays will need to seperate vehicle access and existing utility route on site

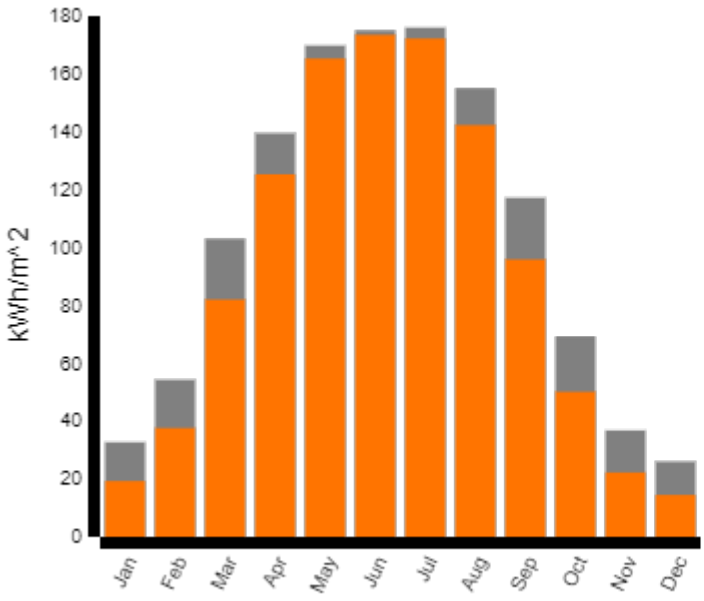


This site is **Good**. It would need a **5.13 kW** system to generate **50%** of average household use. This system would cost approximately **$19,221**. With *Xcel Solar Rewards* and other incentives estimated system payback is **8.3 years**.

Utility Service Provider:
Xcel Energy
414 Nicollet Mall
Minneapolis, MN 55401
(612) 330-5500
www.xcelenergy.com

Site Details:
Total Annual Insolation: 1091.12 kWh/m^2
Avg Insolation per Day: 2.99 kWh/m^2
Source Data: Spring and Fall 2011

Amount Actual Sun



Solar Calculator

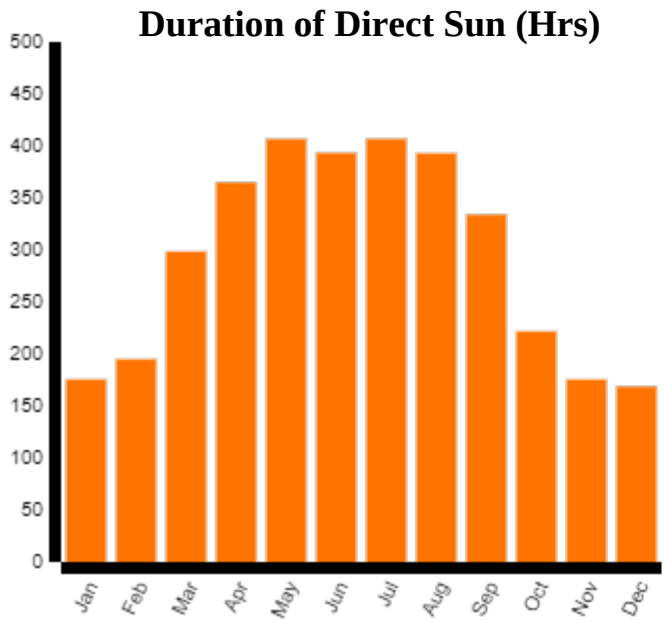
User Input	Value	Tips and Notes
Average utility use (per month)	800 kWh	The average residential household uses 800 kWh/month. If you know your monthly usage, fill it in here.
Cost / kWh	$0.12/kWh	Minnesota's average residential cost of electricity is $0.12/kWh. If you know your cost of electricity enter it here.
Percent of electricity provided by solar	50%	Experiment with different percentages here to see how system cost varies. Think about how energy efficiency improvements bring down the cost of your solar system.

Outputs	Value	Tips and Notes
Size of system needed	5.13 kW	Result is based on values provided for monthly electricity use and desired percentage covered by solar. It also includes a derate of 0.87. A factor accounting for conversion of the array's DC nameplate capacity to the system's AC power rating at Standard Test Condition.
System cost estimate	$19,221	Result is based on an average 2020 Minnesota residential system cost of $3,750 per kW. Costs will vary depending on the specifics of your system.
Payback without incentives	18.89 years	Result assumes that electricity costs will rise 3.5% each year over 25 years.
Payback with Tax Credit	13.98 years	Your system may be eligible for a federal tax credit. This result shows the payback of your system with the 26% tax credit applied.

Outputs	Value	Tips and Notes
Payback with Tax Credit and Solar*Rewards incentive	8.31 years	The Xcel Solar*Rewards Incentive Program utilizes a performance-based incentive (PBI). A PBI pays an incentive based on the amount of annual energy (kWh) generated by the system. Therefore, the more shading a system has the lower the PBI will be. Applications are accepted by Xcel Energy on a first come first serve basis through 2021.Read More »

Month	Actual % Sun**	Total kWh/m2	Duration (Hrs)
January	59%	19.29	175.5
February	69%	37.60	194.9
March	80%	82.01	298.5
April	90%	125.30	364.9
May	97%	165.31	406.7
June	99%	173.51	393.4
July	98%	172.23	406.8
August	92%	142.30	393.0
September	82%	95.87	333.9
October	72%	50.13	221.7
November	60%	22.26	175.5
December	56%	14.48	168.6

**These percentages should be used as the monthly shading derate factors % on the Xcel Solar Rewards application



This service made possible by:

COMMERCE DEPARTMENT
ENERGY RESOURCES

0 50 100 Feet

Dynasty Drive

Lake Street Extension

Current utility locations with proposed solar hookup routes

City of Minnetonka - Well #3
17000 Lake St Extension Minnetonka, MN 55345
Solar on Public Buildings - 5/31/2024

Xcel Energy®

MAILING ADDRESS	ACCOUNT NUMBER		DUE DATE
CITY OF MINNETONKA ATTN: FINANCE DEPARTMENT 14600 MINNETONKA BLVD MINNETONKA MN 55345-1597	51-6869491-9		05/21/2024
	STATEMENT NUMBER	STATEMENT DATE	AMOUNT DUE
	876208978	05/06/2024	$10,957.02

SERVICE ADDRESS: **17000 LAKE STREET EXT MINNETONKA, MN 55345-2530**
NEXT READ DATE: 05/17/24

ELECTRICITY SERVICE DETAILS

PREMISES NUMBER: 303573284
INVOICE NUMBER: 1104954682

METER READING INFORMATION

METER 28689299 - Multiplier x 120 Read Dates: 03/18/24 - 04/16/24 (29 Days)

DESCRIPTION	CURRENT READING	PREVIOUS READING	MEASURED USAGE	BILLED USAGE
Total Energy	17361 Actual	17024 Actual	337	40440 kWh
Reactive Energy	6672 Actual	6563 Actual	109	13080 kVArh
Demand	Actual			122.4 kW
Billable Demand				122 kW
Power Factor Demand	**95.15%**			

ELECTRICITY CHARGES

RATE: General Service

DESCRIPTION	USAGE UNITS	RATE	CHARGE
Basic Service Chg			$25.98
Energy Charge	40440 kWh	$0.047650	$1,926.97
Fuel Cost Charge	40440 kWh	$0.035491	$1,435.27
Demand Charge Winter	122 kW	$11.900000	$1,451.80
Affordability Chrg			$8.00
Resource Adjustment			$219.09
Subtotal			**$5,067.11**
City Fees			$45.00
Total			**$5,112.11**

OTHER RECURRING CHARGES DETAILS

DESCRIPTION			CHARGE
Solar*Rewards Community Solar Production Credit			
Solar Production Period		March 2024	
SRC041233 REC credit >250kW	23069.55 kWh x -0.151860		- $3,503.34 **CR**
SRC041234 REC credit >250kW	6423.85 kWh x -0.151860		- $975.53 **CR**
SRC068266 Production Credit	5937.15 kWh x -0.106700		- $633.49 **CR**
Total			**- $5,112.36 CR**

Premises Total **- $0.25 CR**

DAILY AVERAGES	Last Year	This Year
Temperature	41° F	41° F
Electricity kWh	1303.4	1394.5
Electricity Cost	$34.21	- $0.01

INFORMATION ABOUT YOUR BILL

For an average non-demand customer, 68% of your bill refers to power plant costs, 14% to high voltage line costs, and 18% to the cost of local wires connected to your business. For an average demand-billed customer, 78% of your total bill refers to power plant costs, 14% to high voltage lines, and 8% to the cost of local wires connected to your business.

Well 3		
Premise Number	303573284	
Meter Number	28689299	
12/10/20-1/13/21	38880 kWh	
1/14/21- 2/13/21	43080 kWh	
2/13/21- 3/16/21	41040 kWh	
3/16/21- 4/14/21	33120 kWh	
4/14/21 - 5/17/21	36600 kWh	
5/17/21- 6/13/21	52200 kWh	
6/13/21 -7/13/21	60240 kWh	
7/13/21 - 8/11/21	53280 kWh	
8/11/21 - 9/09/21	51360 kWh	
9/9/21-10/11/21	45360 kWh	
10/12/21 - 11/10/21	39600 kWh	
11/10/21 - 12/13/21	42600 kWh	
2021 Year	**507,360 kWh**	
12/1/21-1/16/22	50760 kWh	
1/16/22-2/14/22	42480 kWh	
2/14/22-3/16/22	41160 kWh	
3/16/22-4/14/22	36120 kWh	
4/14/22-5/15/22	40920 kWh	
5/15/22-6/14/22	47040 kWh	
6/14/22-7/13/22	59160 kWh	
7/14/22-8/14/22	36240 kWh	
8/14/22-9/13/22	31080 kWh	
9/13/22-10/12/22	45480 kWh	
10/12/22-11/10/22	31920 kWh	
11/10/22-12/13/22	41160 kWh	
2022 Year	**503,520 kWh**	
12/13/22-1/17/23	47760 kWh	
1/17/23-2/15/23	41040 kWh	
2/15/23-3/19/23	43200 kWh	
3/19/23-4/17/23	37800 kWh	
4/17/23-5/16/23	37200 kWh	
5/16/23-6/15/23	46560 kWh	
6/15/23-7/17/23	54720 kWh	
7/17/23-8/14/23	46080 kWh	
8/14/23-9/14/23	52080 kWh	
9/14/23-10/15/23	43320 kWh	
10/15/23-11/13/23	38280 kWh	
11/13/23-12/14/23	38640 kWh	
2023 Year	**478,920 kWh**	
12/14/23-1/17/24	48840 kWh	
1/17/24-2/15/24	42840 kWh	
2/15/24-03/18/24	44280 kWh	

3/18/24-4/16/24	40440 kWh	
2024 To Date	**176,400 kWh**	

City of Minnetonka – Solar on Public Buildings – Exhibit E

1 page w/links

City of Minnetonka Solar Permit Links

- Electrical and Building Permit
- Forms: Solar Electric System (it says residential, but we use it for commercial also) and Solar PV Inspection Checklist
- Fees: These are based on the valuation of the project. See linked for building and electrical permit values and corresponding fees.
- Height: A building/solar panel elevation drawing needed to confirm height. I believe both the Central Fire Station and Lake St. Ext. sites would have a 35-foot height maximum. Let me know if this height is a problem, as it may require special approval (variance).
- Contact Dale Gronberg and Scott Kessler for technical permit questions (electrical or building)
- Timeline:
    - No special review needed if solar panels are under 35 feet tall (building height + panel)
    - Submit electrical permit with needed drawings from checklist
    - Staff Review: 15 businesses day maximum

City of Minnetonka Staff Planning Contact:

Drew Ingvalson | He, Him, His
Senior Planner
City of Minnetonka | minnetonkamn.gov
14600 Minnetonka Blvd. | Minnetonka, MN 55345
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City of Minnetonka Summer Office Hours
Monday-Thursday: 8am-4:30pm
Friday: 8am-12pm