

**Mayor:**  
Dan Roe



**Address:**  
2660 Civic Center Dr.  
Roseville, MN 55113

**Councilmembers:**  
Jason Etten  
Lisa Laliberte  
Tammy McGehee  
Robert Willmus

**City Council Agenda  
Monday, September 17, 2018  
City Council Chambers**

**Phone:**  
651-792-7000

**Website:**  
[www.cityofroseville.com](http://www.cityofroseville.com)

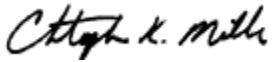
1. 6:00 P.M. Roll Call  
Voting & Seating Order: Laliberte, McGehee, Willmus, Etten and Roe
2. 6:01 P.M. Pledge of Allegiance
3. 6:02 P.M. Approve Agenda
4. 6:05 P.M. Public Comment
5. Recognition, Donations and Communications
6. 6:10 P.M. Items Removed from Consent Agenda
7. Business Items
  - 7.A. 6:15 P.M. Joint Meeting with Finance Commission  
Documents:  
[REQUEST FOR CITY COUNCIL ACTION AND ATTACHMENTS.PDF](#)
  - 7.B. 7:00 P.M. Discuss Amendments or Improvements to Code Enforcement practices to better address properties with repeat code violations  
Documents:  
[REQUEST FOR CITY COUNCIL ACTION AND ATTACHMENTS.PDF](#)
  - 7.C. 8:00 P.M. Discuss City Campus Solar Proposals  
Documents:  
[REQUEST FOR CITY COUNCIL ACTION AND ATTACHMENTS.PDF](#)
8. Approve Minutes
9. Approve Consent Agenda
10. 8:30 P.M. Council and City Manager Communications, Reports and Announcements
11. 8:35 P.M. Councilmember Initiated Future Agenda Items and Future Agenda Review
12. 8:40 P.M. Adjourn



  
**REQUEST FOR COUNCIL ACTION**

Date: **9/17/2018**  
Item No.: **7.a**

Department Approval



City Manager Approval



Item Description: Joint Meeting with the Finance Commission

**BACKGROUND**

Earlier this year, the City established a joint meeting between the City Council and Finance Commission to review the Commission's activities during the past year, to receive any Commission guidance or recommendations, and to identify potential topics for future discussion.

Since the last joint meeting on March 26, 2018 the Finance Commission has received presentations and held discussions on the following topics:

- The establishment of a Cash Reserve (Cash Carry-Forward) Fund \*\*
- CIP categorizations & review process \*\*
- Changes in funding strategies for the CIP \*\*
- 2019 City Manager Recommended Budget & Tax Levy \*\*
- 2017 Investment Portfolio performance
- 2017 year-end cash reserve levels.
- 2017 Audit and Annual Financial Report
- Fire Department Phase II Staffing Plan

\*\* The Finance Commission has developed specific recommendations for Council consideration on the first four items noted above. Those recommendations are detailed below.

**RECOMMENDATION on Establishing a Cash Reserve (Cash Carry-Forward) Fund**

The discussion on establishing a Cash Reserve Fund has been an on-going dialogue at the Finance Commission since December of 2016. At the March, 2018 Joint Meeting, the Commission did present a formal recommendation to establish a Cash Reserve (Cash Carryforward) Fund. After some discussion, the Council asked the Commission to review the matter further.

The Finance Commission now offers these revised recommendations:

- Establish a Cash Reserve Account comprised of excess cash from the following Funds:
  - 1) General Fund
  - 2) Parks & Recreation Fund
  - 3) Communications
  - 4) Information Technology
  - 5) License Center
- Define excess cash reserves as cash amounts greater than the targeted *high* reserve

level amounts as specified in the Operating Fund Cash Reserve Policy.

- Modify the Operating Fund Cash Reserve Policy to increase the targeted *high* reserve amount in the Communications Fund from 25% to 30%; and decrease the targeted high reserve levels in the Information Technology and License Center funds from 25% to 15% to more accurately reflect cash-flow needs throughout the year.
- Consistent with governmental accounting practices, the newly-established cash reserve is to be held in the General Fund for financial reporting purposes until it is designated for a defined purpose. The money is to be tracked separately from all other General Fund activities.

The following table provides a summary of the amounts that would have been considered ‘excess’ based on these recommendations.

<b>City of Roseville</b>							
2015-2017 Excess Cash Reserve Calculation							
	Op. Cash				12/31/2015	12/31/2016	12/31/2017
	Resrve Policy		REVISED		Amount	Amount	Amount
	Target	Target	Target	Target	Above High	Above High	Above High
Operating Funds	Low	High	Low	High	Target %	Target %	Target %
General (unrestricted portion)	35%	45%	35%	45%	\$ -	\$ 30,935	\$ -
Parks & Recreation	25%	25%	25%	25%	-	174,675	443,190
Communications	10%	25%	10%	30%	217,471	154,694	-
Information Technology	10%	25%	10%	15%	306,799	186,562	267,454
License Center	10%	25%	10%	15%	712,259	206,863	184,262
					\$ 1,236,529	\$ 753,730	\$ 894,906

It should be noted that the reserve amounts denoted in the table exclude monies that have been set aside for capital replacements as well as donations. The far-right column of the table depicts the amount that would have been swept into the Cash Reserve Account had this policy been in place in 2017.

**RECOMMENDATION on Capital Improvement Plan (CIP) Categorizations & Revised Process**

Similar to the discussion on the Cash Reserve Fund, this dialogue has also been on-going for an extended period with the Council asking the Commission to again review the matter following the Joint Meeting in March. The Finance Commission recommends that the Council establish new CIP categories accompanied by separate review processes based on the following:

- Category 1: CIP items that are generally routine and can be incorporated into various replacement policies. It would include day-to-day items such as vehicles & equipment that have a fairly consistent useful life.
- Category 2: CIP items that are incorporated into a broader strategic plan or replacement policy. It would include infrastructure identified in the City’s Pavement Management Program, Park Improvement Program, or similar long-term planning initiatives.
- Category 3: CIP items that would be considered non-routine or occur on a highly infrequent basis and have a significant budgetary impact. This could include items such as the OVAL refrigeration system replacement or new facilities.

A revised Capital Investment Policy with these proposed revisions is highlighted in yellow in *Attachment*



75 A. An accompanying PowerPoint presentation depicting the reasons behind the recommended change is  
76 included in *Attachment B*.

77  
78 **RECOMMENDATION on Changes in Funding Strategies for the CIP**

79 The Commission is recommending the following CIP funding strategies:

80

81 Pavement Management Program

- 82     ▪ For 2020, re-purpose \$390,000 (*out of \$765,000 total*) in annual debt levy previously  
83 earmarked for the City Hall/PW Building debt service to the Pavement Management  
84 Program (*Attachment C*)

85

86 General Facilities Program

- 87     ▪ For 2019, re-purpose the \$355,000 in annual debt levy previously earmarked for the  
88 Ice Arena debt service to the General Facilities CIP (*Attachment D*)  
89     ▪ Pursue special legislation for State funding for the planned OVAL improvements

90

91 Park Improvement Program

- 92     ▪ Beginning in 2020, re-purpose \$375,000 (*out of \$765,000 total*) in annual debt levy  
93 previously earmarked for the City Hall/PW Building debt service to the Park  
94 Improvement Program CIP (*Attachment E*)

95

96 Pathway & Parking Lots

- 97     ▪ For 2019, consistent with the Policy of Maintaining the Pavement Management Fund as an  
98 endowment for street repair, do not transfer funds from the PMP to the Pathways and Parking  
99 Lot Fund to pay for unfunded needs

100

101 **RECOMMENDATION on the 2019 City Manager Recommended Budget & Tax Levy**

102 After reviewing the 2019 City Manager Recommended Budget & Tax Levy at their August and  
103 September meetings. While the Commission has not prepared any specific recommendations, it did  
104 author the following statement:

105

106     “Due to the total impact of all governmental units’ spending and tax levy decisions,  
107 as well as general increasing budgets, the Commission is sensitive to the increased  
108 financial stress on residents”.

109

110 Finally, consistent with the previous Joint Meeting, the Commission has also submitted their  
111 Recommendations Tracking Report which details previous recommendations (thru August) adopted by  
112 the Commission that have not yet been fully resolved. The Report is included in *Attachment F*.

113 **POLICY OBJECTIVE**

114 Not applicable.

115 **FINANCIAL IMPACTS**

116 Not applicable.

117 **STAFF RECOMMENDATION**

118 Not applicable.

119

120  
121  
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123  
124

**REQUESTED COUNCIL ACTION**

For information purposes only. No formal Council action is required, however the Finance Commission is appreciative of any guidance the City Council provides.

- Prepared by: Chris Miller, Finance Director
- Attachments: A: Capital Investment Policy with Proposed Revisions (See yellow-highlighted items)
- B: Communication PowerPoint to the City Council
- C: Recommended CIP Funding Strategy: Pavement Management Program
- D: Recommended CIP Funding Strategy: General Facilities Program
- E: Recommended CIP Funding Strategy: Park Improvement Program
- F: Finance Commission Tracking Report

**Capital Investment Policy****(September 11, 2018 Proposed Revisions)**

The purpose of the City's Capital Investment Policy is to ensure future capital improvements, maintenance, and replacements are made when needed, in a manner which is both fiscally and operationally prudent. The goal of this policy is to provide a stable funding mechanism for the City's infrastructure by setting aside specific resources on a periodic basis. This will ease the burden on present and future taxpayers, without significant fluctuations in annual property tax levies.

It is not the intent of the City Council to fund major new facilities, which have not had the original funding established either through tax increment, general taxes, bonding or other such sources. The replacement funds and corresponding fund interest earnings are expected to be only for replacement purposes.

Scope

All departments and City funds are included in the 20-Year Capital Improvement Plan (CIP). The CIP identifies the timing and financing of all capital items.

Policy

- The City will develop a 20-year Plan for capital investments and update it at least every 2 years.
- All capital investments shall be made in accordance with an adopted Capital Improvement Plan.
- The City will coordinate development of the capital improvement budget with development of the operating budget. Future operational costs associated with new capital improvements will be projected and included in operating budget forecasts.
- The City will provide ongoing preventative maintenance and upkeep on all its assets at a level adequate to protect the City's capital investment and to minimize future maintenance and replacement costs. The City should periodically review and follow industry-recommended replacement schedules for all City capital assets.
- The City will identify the estimated costs and potential funding sources for each capital project proposal before it is submitted to Council for approval.
- The City will determine the least costly financing and acquisition method for all new projects.

- For future development or redevelopment proposals that require public infrastructure and/or public financing assistance and/or City support services, a fiscal analysis shall be prepared identifying the project sources and uses. The analysis should also demonstrate the costs and benefits of the project. The cost of this analysis shall be borne by the developer.
- The City will establish departmental Vehicle and Equipment Replacement Funds. The City will appropriate monies to them annually to provide for timely replacement of vehicles and equipment. The amount will be maintained at an amount equal to the proportion of useful life expired multiplied by estimated replacement cost.
- The City will establish a Building Capital Maintenance Fund, and will appropriate funds to it annually to provide for timely maintenance of all buildings supported by general governmental funding. Only maintenance which meets the capitalization threshold shall be paid for out of this fund. Maintenance includes major items such as roof repair and HVAC replacement.
- The City shall establish a Street Infrastructure Replacement Fund to provide for the general replacement of streets and related infrastructure throughout the community. The annual MSA capital allocation, will be included as a part of the source of funds for computing the adequacy of this fund. This fund has been formally categorized by the Council as a permanent fund, whereby the interest proceeds are only used for the stated purpose. The cash reserve amount should remain between \$8-12 million.
- The City shall establish a Park Capital Maintenance Fund to provide for the general replacement of parks and related infrastructure throughout the community. The funding should equal the proportion of useful life expired multiplied by estimated replacement cost for all park system assets.
- Within each enterprise fund, the City shall establish a funding mechanism to provide for the general replacement of related infrastructure throughout the community. The funding should equal the proportion of useful life expired multiplied by estimated replacement cost for all enterprise fund system assets.
- From time to time the City Council shall establish additional replacement funds as the need becomes apparent.
- The Finance Commission will annually oversee and report to the City Council a review and analysis of planned capital investments and related reserve balances. The purpose of such analysis will be to gauge the health and sustainability of City reserves related to capital

investments for the short (1-3 year), medium (4-9 years), and long term (10+ years). It will also take into account related borrowing and repayment costs.

- Capital Replacements should be considered using the following priority guidelines rankings (in order):
  1. Projects necessary for public health and safety, or to meet legal mandates.
  2. Projects that responsibly maintain existing assets to either extend remaining service life or to create efficiency.
  3. Projects that expand existing assets or services in order to benefit the Public Good.
  4. Projects that purchase new assets or services in order to benefit the Public Good.

▪ For purposes of added transparency associated with capital spending decisions, the Capital Improvement Plan (CIP) should include the following designations and review:

	<u>Category 1</u>	<u>Category 2</u>	<u>Category 3</u>
Definition	Items that are incorporated into a <u>replacement policy</u> , and have a fairly consistent useful life	Items that are incorporated into a <u>strategic plan</u> or similar <u>long-term planning initiative</u>	Items that are considered <u>non-routine</u> or purchased on a <u>highly infrequent basis</u> and have a significant financial impact
Policy/Plan Review	City Manager & City Council	City Council or Advisory Commissions	City Council
Purchasing Approval (see comments below)	City Manager up to \$20,000; City Council \$20,000 or greater	City Manager up to \$20,000; City Council \$20,000 or greater	City Manager up to \$20,000; City Council \$20,000 or greater
City Council Responsibility	Review replacement policies annually or as needed	Review Plans or initiatives annually or delegate to Advisory Commissions	Review as needed in conjunction with a standard form providing justification, funding source, and supporting narrative

<u>Purchasing Approval Comments:</u>	
(a) MN Statute 412.691 limits the City Manager purchasing authority to \$20,000 or less	
(b) MN Statute 471.345 establishes the following rules for entering into contracts:	
<u>Amount</u>	<u>Requirement</u>
\$25,000 or less	Purchase on open market or obtain at least two quotes
\$25,000 - \$175,000	Direct negotiation (two quotes if possible) or competitive bidding process
\$175,000 or more	Competitive bidding proces required

### Definitions

Capital assets – Assets which cost \$5,000 or more and have a useful life of two or more years.

Capital Improvement Plan – A comprehensive 20 year outlook itemizing all capital assets and their replacement funding requirements. The plan will take into account useful asset lives and salvage values.

Replacement Cost– In today’s dollars, the cost to replace the asset. If it is expected the retired asset will have a salvage value, the estimated salvage value should be deducted from the expected replacement cost.

Asset Life – The number of years which is the asset is in use, also known as the useful life of a capital asset.

Bonding – The amount of debt incurred to obtain capital assets.

Capital Asset Maintenance – Expenditures which protect the City’s investment in capital assets and provide for ongoing upkeep.

Equipment – A tangible capital asset which does not qualify as a vehicle, building, street, or park asset. Examples are mowers, tools, etc.

MSA Capital Allocation – Municipal State Aid is money the City receives from the State to help pay for maintenance of MSA-designated streets. MSA streets are collector or arterial streets that interconnect to other cities or major thoroughfares.

Enterprise Fund – A separate accounting and financial reporting mechanism for municipal services for which is 100% fee supported. Examples are Water, Sewer, and Golf Course.

General Governmental Fund – A separate accounting and financial reporting mechanism for spending in which a property tax is generally levied. Examples are police, fire, streets, parks and recreation.

Enterprise Fund System Asset – Assets which support enterprise services such as water, sewer, and golf course.

Park System Asset – All assets within city parks excluding buildings. Examples would be trails, equipment, and courts.

Implementation

The City shall use replacement funds to assist in the replacement of equipment, vehicles, and capital building maintenance. New equipment or buildings are to be funded from new dollars, unless they are designated to replace currently owned assets. Funds may be used up to the amount of the replacement funds set aside for that particular asset. Any additional funding shall be from new sources.

# Roseville CIP

Approval Process review Aug 2018



# Current Policy / Process - Observations

- Policy is defined such that all CIP transactions should be approved by the council, irrespective of size or nature of expenditure
- Policy stipulates the use of a categorization / prioritization 'scale' that is viewed to be of limited value and is therefore not implemented consistently
- Varying levels of information / justification / business case are applied across different CIP projects and spend areas

# Objective For Review / Change

## Objectives –

- Adapt the current process such that it allow the council to focus their time and involvement where it add most value by extending the management process around CIP approvals
- Drive consistency of process and documentation across different CIP projects and spend areas to facilitate more effective and visible decision making
- Codify variations within governance process to reflect the differing nature or size of expenditure on a specific CIP project

# Proposed framework – NOT ALL SPEND is equal

ONE OFF STRATEGIC INVESTMENTS

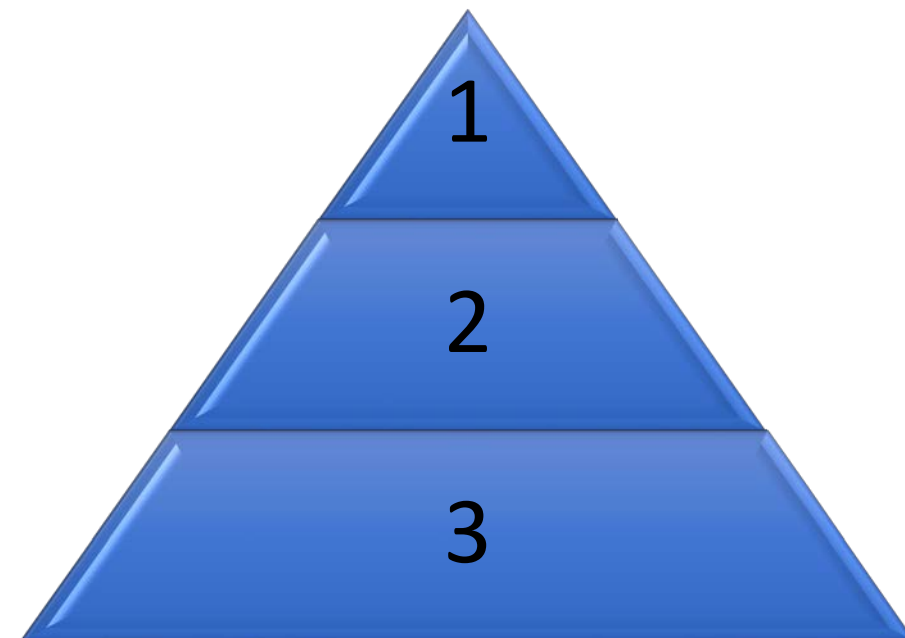
EG GOLF CLUB, STRIP MALL

PROGRAMMATIC / ONGOING STRATEGIC INVESTMENTS

EG IT INFR / APPS, ROADWAY, PARKS

PROGRAMMATIC / ONGOING TACTICAL INVESTMENTS

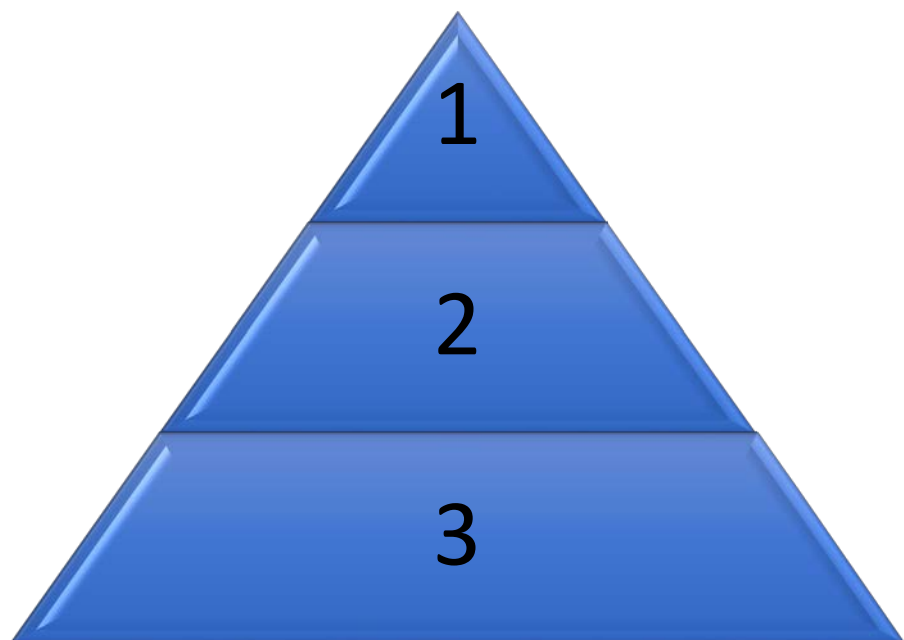
EG IT DESKTOP, POLICE VEHICLES



# Proposed framework

Transaction Volume

GOVERNANCE



LOW

EVENT

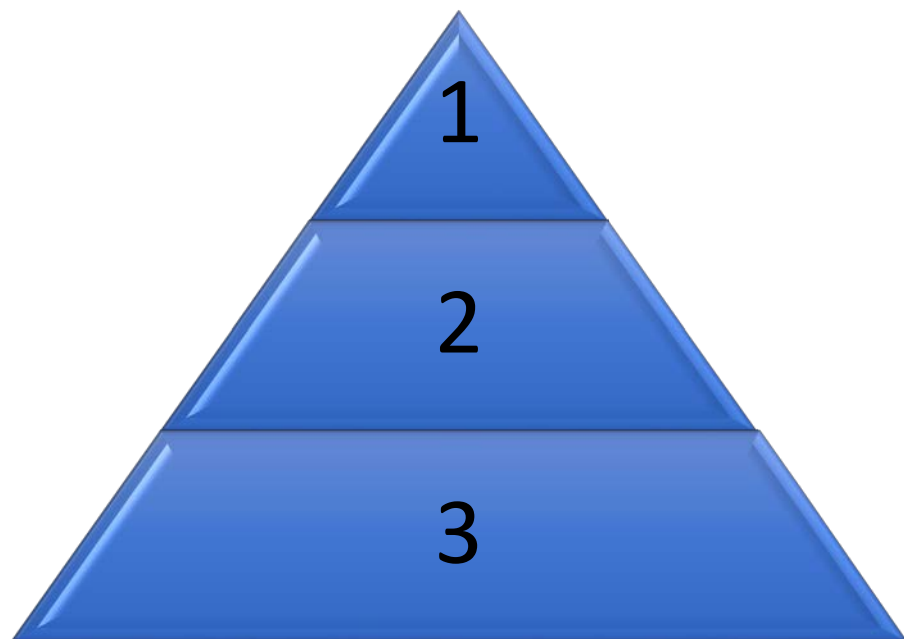
MEDIUM

STRATEGY

HIGH

POLICY

# Proposed role of council



## **APPROVE THE EVENT.**

FULL BUSINESS CASE REVIEW USING STANDARDIZED FORMAT, INCLUDING FULL OPERATING COST MODEL FOR AT LEAST 10 YEARS. TRANSACTION SPECIFICALLY APPROVED

## **APPROVE THE STRATEGY.**

FULL REVIEW AND APPROVAL OF AREA(S) STRATEGIC PLAN(S) – POTENTIALLY IN CONJUNCTION WITH RELEVANT COMMITTEE. QUARTERLY / SEMI-ANNUAL REVIEW OF SPEND. TRANSACTION APPROVAL DELEGATED TO MANAGEMENT (POTENTIAL \$\$\$ LIMIT SET WHICH WOULD REQUIRE ESCALATION TO COUNCIL)

## **APPROVE THE POLICY.**

FULL REVIEW AND APPROVAL OF SPECIFIC REPLACEMENT POLICY(IES). ANNUAL REVIEW OF SPEND. TRANSACTION APPROVAL DELEGATED TO MANAGEMENT (POTENTIAL \$\$\$ LIMIT SET WHICH WOULD REQUIRE ESCALATION TO COUNCIL)

# Category 1 – business case format

## Fiscal Note Example (to be used for major projects/initiatives)

Department/Division:	<b>Water Services</b>
Project/Initiative Title:	Booster Station Rehabilitation and Improvements
Total Estimated Cost:	\$900,000
Funding Source:	Water Fund ( <i>Fees</i> )
Annual Operating Budget Impact:	N/A
20-Year CIP Cost Impact:	[List \$ Impact Here]

### Project / Initiative Description:

[Enter information here]

### Budget Impacts & Assumptions:

[List impact on revenues, expenditures, staffing levels, etc.; as well as the assumptions behind those impacts]

### Location:

[Enter location information here]

# Proposed next steps

**GAIN COUNCIL AGREEMENT TO PROPOSED APPROACH**

**CODIFY RESULTANT POLICY FOR APPROVAL (INCLUDING POTENTIAL \$\$ LIMITS THAT FIT OUTSIDE OF DELEGATED AUTHORITIES)**

**DEFINE DETAILED AREAS OF SPEND THAT FIT INTO CATEGORIES 1/2/3**

**DEFINE POLICIES FOR CATEGORY 1**

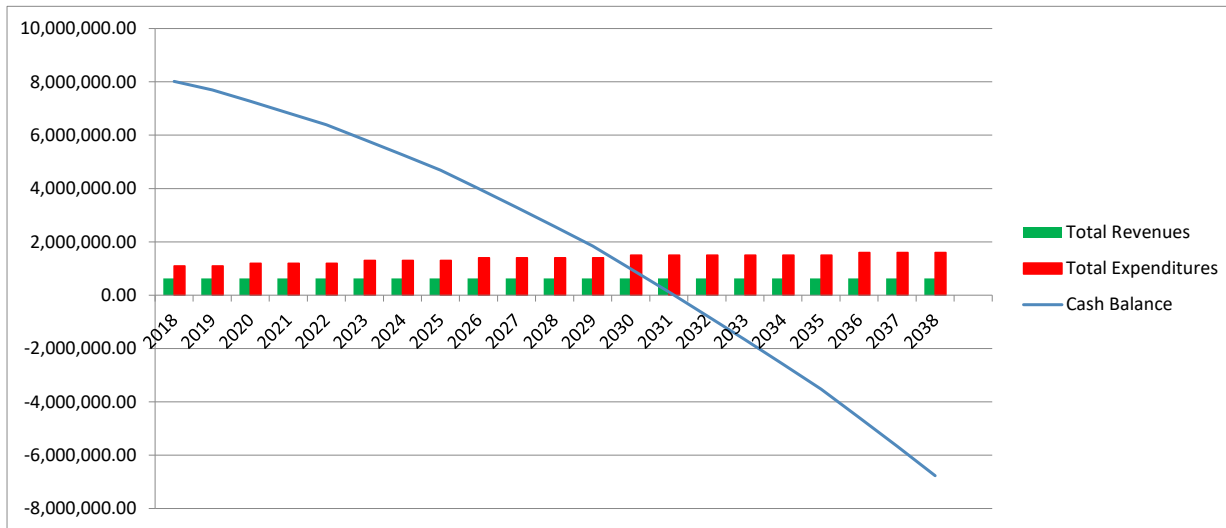
**ARTICULATE AND STRATEGIES (AS PART OF ANNUAL BUDGET PROCESS) FOR CATEGORY 2**

**FINALIZE FORMAT AND PROCESS FOR REVIEW OF 'FISCAL NOTE' FOR CATEGORY 3**

Pavement Management Program

Scenario 0 - No action

Year	Add'l Tax Levy	Total Levy	Total Revenues	Total Expenditures	Use of (Add'n to) Reserves	Earnings	Cash Balance	% Funded by Tax Levy
2018	\$ -	\$ 630,000	\$ 630,000	1,100,000.00	\$ 279,120	\$ 190,880	\$ 8,017,753	
2019	\$ -	\$ 630,000	\$ 630,000	1,100,000.00	\$ 470,000	\$ 150,955	\$ 7,698,708	57.3%
2020	\$ -	\$ 630,000	\$ 630,000	1,200,000.00	\$ 570,000	\$ 142,574	\$ 7,271,282	52.5%
2021	\$ -	\$ 630,000	\$ 630,000	1,200,000.00	\$ 570,000	\$ 134,026	\$ 6,835,308	52.5%
2022	\$ -	\$ 630,000	\$ 630,000	1,200,000.00	\$ 570,000	\$ 125,306	\$ 6,390,614	52.5%
2023	\$ -	\$ 630,000	\$ 630,000	1,300,000.00	\$ 670,000	\$ 114,412	\$ 5,835,026	48.5%
2024	\$ -	\$ 630,000	\$ 630,000	1,300,000.00	\$ 670,000	\$ 103,301	\$ 5,268,327	48.5%
2025	\$ -	\$ 630,000	\$ 630,000	1,300,000.00	\$ 670,000	\$ 91,967	\$ 4,690,293	48.5%
2026	\$ -	\$ 630,000	\$ 630,000	1,400,000.00	\$ 770,000	\$ 78,406	\$ 3,998,699	45.0%
2027	\$ -	\$ 630,000	\$ 630,000	1,400,000.00	\$ 770,000	\$ 64,574	\$ 3,293,273	45.0%
2028	\$ -	\$ 630,000	\$ 630,000	1,400,000.00	\$ 770,000	\$ 50,465	\$ 2,573,739	45.0%
2029	\$ -	\$ 630,000	\$ 630,000	1,400,000.00	\$ 770,000	\$ 36,075	\$ 1,839,813	45.0%
2030	\$ -	\$ 630,000	\$ 630,000	1,500,000.00	\$ 870,000	\$ 19,396	\$ 989,210	42.0%
2031	\$ -	\$ 630,000	\$ 630,000	1,500,000.00	\$ 870,000	\$ 2,384	\$ 121,594	42.0%
2032	\$ -	\$ 630,000	\$ 630,000	1,500,000.00	\$ 870,000	\$ (14,968)	\$ (763,374)	42.0%
2033	\$ -	\$ 630,000	\$ 630,000	1,500,000.00	\$ 870,000	\$ (32,667)	\$ (1,666,042)	42.0%
2034	\$ -	\$ 630,000	\$ 630,000	1,500,000.00	\$ 870,000	\$ (50,721)	\$ (2,586,763)	42.0%
2035	\$ -	\$ 630,000	\$ 630,000	1,500,000.00	\$ 870,000	\$ (69,135)	\$ (3,525,898)	42.0%
2036	\$ -	\$ 630,000	\$ 630,000	1,600,000.00	\$ 970,000	\$ (89,918)	\$ (4,585,816)	39.4%
2037	\$ -	\$ 630,000	\$ 630,000	1,600,000.00	\$ 970,000	\$ (111,116)	\$ (5,666,932)	39.4%
2038	\$ -	\$ 630,000	\$ 630,000	1,600,000.00	\$ 970,000	\$ (132,739)	\$ (6,769,671)	39.4%



Assumptions:

- MSA Street improvements have been moved to a separate asset category funded 100% by State-aid dollars
- Expenditures per Capital Improvement Plan Spreadsheet for Finance Commission Review
- Reserve Earnings of 2%
- No additional tax levy

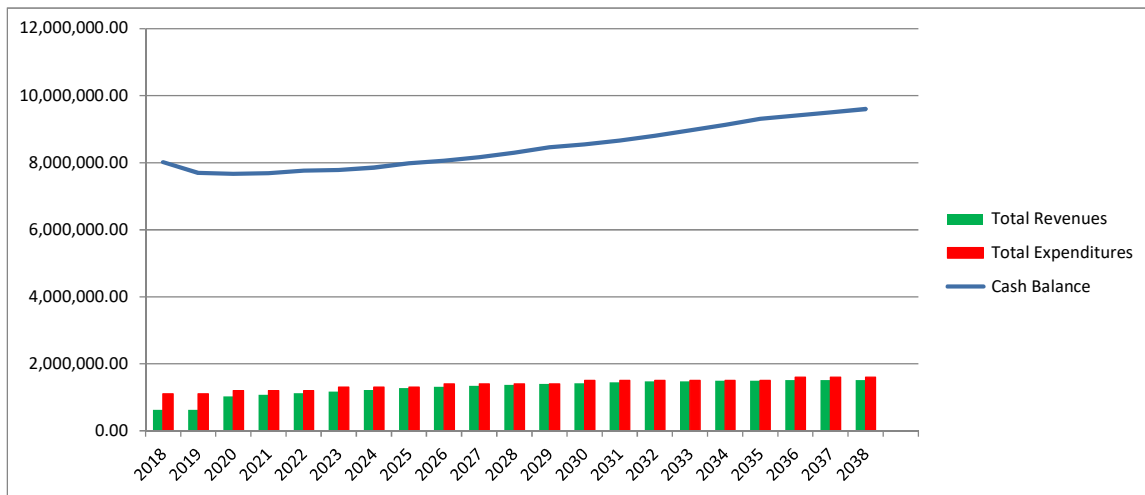
Results: Will need a 970,000.00 levy increase plus inflation starting in 2036 to continue Pavement Mgmt Program  
 20 year interest earnings of: 803,456.32



**Pavement Management Program**

Staff Recommendation 2 + continue funding-by-endowment approach

Year	Add'l Tax Levy	Total Levy	Total Revenues	Total Expenditures	Use of (Add'n to) Reserves	Earnings	Cash Balance	% Funded by Tax Levy
2018	\$ -	\$ 630,000	\$ 630,000	1,100,000.00	\$ 279,120	\$ 190,880	\$ 8,017,753	
2019	\$ -	\$ 630,000	\$ 630,000	1,100,000.00	\$ 470,000	\$ 150,955	\$ 7,698,708	57.3%
2020	\$ 390,000	\$ 1,020,000	\$ 1,020,000	1,200,000.00	\$ 180,000	\$ 150,374	\$ 7,669,082	85.0%
2021	\$ 50,000	\$ 1,070,000	\$ 1,070,000	1,200,000.00	\$ 130,000	\$ 150,782	\$ 7,689,864	89.2%
2022	\$ 50,000	\$ 1,120,000	\$ 1,120,000	1,200,000.00	\$ 80,000	\$ 152,197	\$ 7,762,061	93.3%
2023	\$ 50,000	\$ 1,170,000	\$ 1,170,000	1,300,000.00	\$ 130,000	\$ 152,641	\$ 7,784,702	90.0%
2024	\$ 50,000	\$ 1,220,000	\$ 1,220,000	1,300,000.00	\$ 80,000	\$ 154,094	\$ 7,858,796	93.8%
2025	\$ 50,000	\$ 1,270,000	\$ 1,270,000	1,300,000.00	\$ 30,000	\$ 156,576	\$ 7,985,372	97.7%
2026	\$ 50,000	\$ 1,320,000	\$ 1,320,000	1,400,000.00	\$ 80,000	\$ 158,107	\$ 8,063,480	94.3%
2027	\$ 25,000	\$ 1,345,000	\$ 1,345,000	1,400,000.00	\$ 55,000	\$ 160,170	\$ 8,168,649	96.1%
2028	\$ 25,000	\$ 1,370,000	\$ 1,370,000	1,400,000.00	\$ 30,000	\$ 162,773	\$ 8,301,422	97.9%
2029	\$ 25,000	\$ 1,395,000	\$ 1,395,000	1,400,000.00	\$ 5,000	\$ 165,928	\$ 8,462,351	99.6%
2030	\$ 25,000	\$ 1,420,000	\$ 1,420,000	1,500,000.00	\$ 80,000	\$ 167,647	\$ 8,549,998	94.7%
2031	\$ 25,000	\$ 1,445,000	\$ 1,445,000	1,500,000.00	\$ 55,000	\$ 169,900	\$ 8,664,898	96.3%
2032	\$ 25,000	\$ 1,470,000	\$ 1,470,000	1,500,000.00	\$ 30,000	\$ 172,698	\$ 8,807,596	98.0%
2033	\$ 10,000	\$ 1,480,000	\$ 1,480,000	1,500,000.00	\$ 20,000	\$ 175,752	\$ 8,963,348	98.7%
2034	\$ 10,000	\$ 1,490,000	\$ 1,490,000	1,500,000.00	\$ 10,000	\$ 179,067	\$ 9,132,415	99.3%
2035	\$ 10,000	\$ 1,500,000	\$ 1,500,000	1,500,000.00	\$ -	\$ 182,648	\$ 9,315,063	100.0%
2036	\$ 10,000	\$ 1,510,000	\$ 1,510,000	1,600,000.00	\$ 90,000	\$ 184,501	\$ 9,409,564	94.4%
2037	\$ -	\$ 1,510,000	\$ 1,510,000	1,600,000.00	\$ 90,000	\$ 186,391	\$ 9,505,955	94.4%
2038	\$ -	\$ 1,510,000	\$ 1,510,000	1,600,000.00	\$ 90,000	\$ 188,319	\$ 9,604,275	94.4%



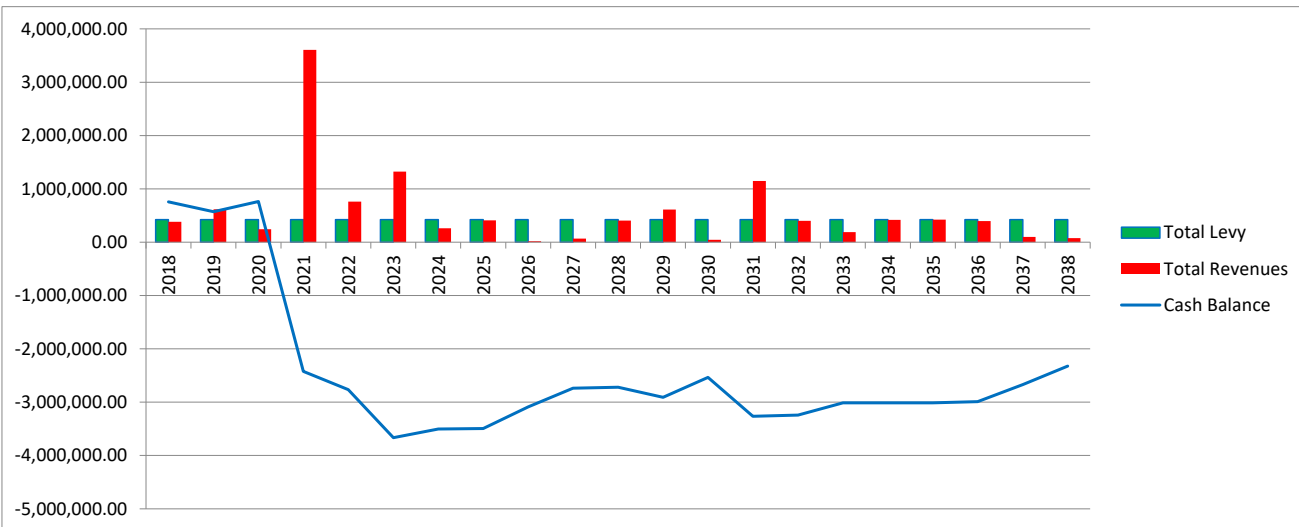
**Assumptions:**

- MSA Street improvements have been moved to a separate asset category funded 100% by State-aid dollars
- Expenditures per Capital Improvement Plan Spreadsheet for Finance Commission Review
- Reserve Earnings of 2%
- Additional Tax Levy increases to continue funding-by-endowment approach

**Results:** Will need a 90,000.00 levy increase plus inflation starting in 2036 to continue Pavement Mgmt Program  
 20 year interest earnings of: 3,512,401.56

**General Facilities Fund**  
Scenario 0 - No Action Taken

Year	Add'l Tax Levy	Total Levy	Total Revenues	Total Expenditures	Use of (Add'n to) Reserves	Earnings	Cash Balance	% Funded by Tax Levy
2018	\$ -	\$ 421,000	421,000	\$ 384,000	(51,885.00)	\$ 14,885	\$ 756,078	
2019	\$ -	\$ 421,000	421,000	\$ 618,400	197,400.00	\$ 11,174	\$ 569,852	68.1%
2020	\$ -	\$ 421,000	421,000	\$ 243,000	(178,000.00)	\$ 14,957	\$ 762,809	173.3%
2021	\$ -	\$ 421,000	421,000	\$ 3,608,000	3,187,000.00	\$ -	\$ (2,424,191)	11.7%
2022	\$ -	\$ 421,000	421,000	\$ 760,000	339,000.00	\$ -	\$ (2,763,191)	55.4%
2023	\$ -	\$ 421,000	421,000	\$ 1,323,300	902,300.00	\$ -	\$ (3,665,491)	31.8%
2024	\$ -	\$ 421,000	421,000	\$ 259,000	(162,000.00)	\$ -	\$ (3,503,491)	162.5%
2025	\$ -	\$ 421,000	421,000	\$ 409,500	(11,500.00)	\$ -	\$ (3,491,991)	102.8%
2026	\$ -	\$ 421,000	421,000	\$ 17,000	(404,000.00)	\$ -	\$ (3,087,991)	2476.5%
2027	\$ -	\$ 421,000	421,000	\$ 69,400	(351,600.00)	\$ -	\$ (2,736,391)	606.6%
2028	\$ -	\$ 421,000	421,000	\$ 405,500	(15,500.00)	\$ -	\$ (2,720,891)	103.8%
2029	\$ -	\$ 421,000	421,000	\$ 610,000	189,000.00	\$ -	\$ (2,909,891)	69.0%
2030	\$ -	\$ 421,000	421,000	\$ 45,000	(376,000.00)	\$ -	\$ (2,533,891)	935.6%
2031	\$ -	\$ 421,000	421,000	\$ 1,149,900	728,900.00	\$ -	\$ (3,262,791)	36.6%
2032	\$ -	\$ 421,000	421,000	\$ 401,000	(20,000.00)	\$ -	\$ (3,242,791)	105.0%
2033	\$ -	\$ 421,000	421,000	\$ 190,800	(230,200.00)	\$ -	\$ (3,012,591)	220.6%
2034	\$ -	\$ 421,000	421,000	\$ 419,000	(2,000.00)	\$ -	\$ (3,010,591)	100.5%
2035	\$ -	\$ 421,000	421,000	\$ 424,500	3,500.00	\$ -	\$ (3,014,091)	99.2%
2036	\$ -	\$ 421,000	421,000	\$ 398,000	(23,000.00)	\$ -	\$ (2,991,091)	105.8%
2037	\$ -	\$ 421,000	421,000	\$ 101,000	(320,000.00)	\$ -	\$ (2,671,091)	416.8%
2038	\$ -	\$ 421,000	421,000	\$ 75,000	(346,000.00)	\$ -	\$ (2,325,091)	561.3%

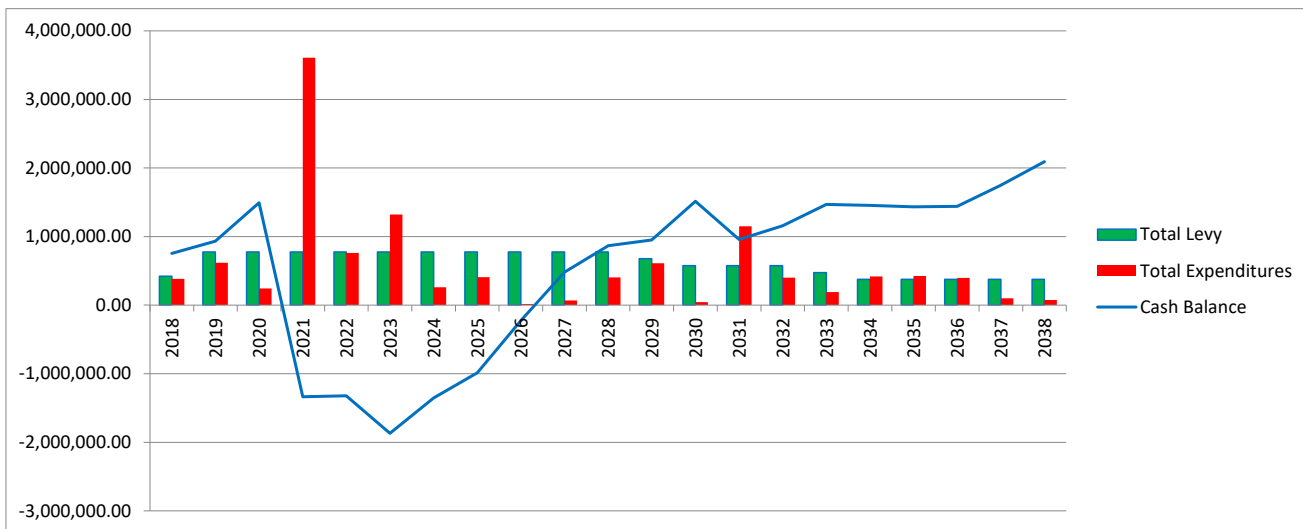


Assumptions:  
Reserve Earnings of 2%  
No Levy increase

General Facilities Fund

Recommendation - Repurpose debt levy

Year	Add'l Tax Levy	Total Levy	Total Revenues	Total Expenditures	Use of (Add'n to) Reserves	Earnings	Cash Balance	% Funded by Tax Levy
2018	\$ -	\$ 421,000	421,000	\$ 384,000	(51,885.00)	\$ 14,885	\$ 756,078	
2019	\$ 355,000	\$ 776,000	776,000	\$ 618,400	(157,600.00)	\$ 18,274	\$ 931,952	125.5%
2020	\$ -	\$ 776,000	776,000	\$ 243,000	(533,000.00)	\$ 29,299	\$ 1,494,251	319.3%
2021	\$ -	\$ 776,000	776,000	\$ 3,608,000	2,832,000.00	\$ -	\$ (1,337,749)	21.5%
2022	\$ -	\$ 776,000	776,000	\$ 760,000	(16,000.00)	\$ -	\$ (1,321,749)	102.1%
2023	\$ -	\$ 776,000	776,000	\$ 1,323,300	547,300.00	\$ -	\$ (1,869,049)	58.6%
2024	\$ -	\$ 776,000	776,000	\$ 259,000	(517,000.00)	\$ -	\$ (1,352,049)	299.6%
2025	\$ -	\$ 776,000	776,000	\$ 409,500	(366,500.00)	\$ -	\$ (985,549)	189.5%
2026	\$ -	\$ 776,000	776,000	\$ 17,000	(759,000.00)	\$ -	\$ (226,549)	4564.7%
2027	\$ -	\$ 776,000	776,000	\$ 69,400	(706,600.00)	\$ -	\$ 480,051	1118.2%
2028	\$ -	\$ 776,000	776,000	\$ 405,500	(370,500.00)	\$ 17,011	\$ 867,562	191.4%
2029	\$ (100,000)	\$ 676,000	676,000	\$ 610,000	(66,000.00)	\$ 18,671	\$ 952,233	110.8%
2030	\$ (100,000)	\$ 576,000	576,000	\$ 45,000	(531,000.00)	\$ 29,665	\$ 1,512,897	1280.0%
2031	\$ -	\$ 576,000	576,000	\$ 1,149,900	573,900.00	\$ 18,780	\$ 957,777	50.1%
2032	\$ -	\$ 576,000	576,000	\$ 401,000	(175,000.00)	\$ 22,656	\$ 1,155,433	143.6%
2033	\$ (100,000)	\$ 476,000	476,000	\$ 190,800	(285,200.00)	\$ 28,813	\$ 1,469,446	249.5%
2034	\$ (100,000)	\$ 376,000	376,000	\$ 419,000	43,000.00	\$ 28,529	\$ 1,454,975	89.7%
2035	\$ -	\$ 376,000	376,000	\$ 424,500	48,500.00	\$ 28,129	\$ 1,434,604	88.6%
2036	\$ -	\$ 376,000	376,000	\$ 398,000	22,000.00	\$ 28,252	\$ 1,440,856	94.5%
2037	\$ -	\$ 376,000	376,000	\$ 101,000	(275,000.00)	\$ 34,317	\$ 1,750,173	372.3%
2038	\$ -	\$ 376,000	376,000	\$ 75,000	(301,000.00)	\$ 41,023	\$ 2,092,197	501.3%



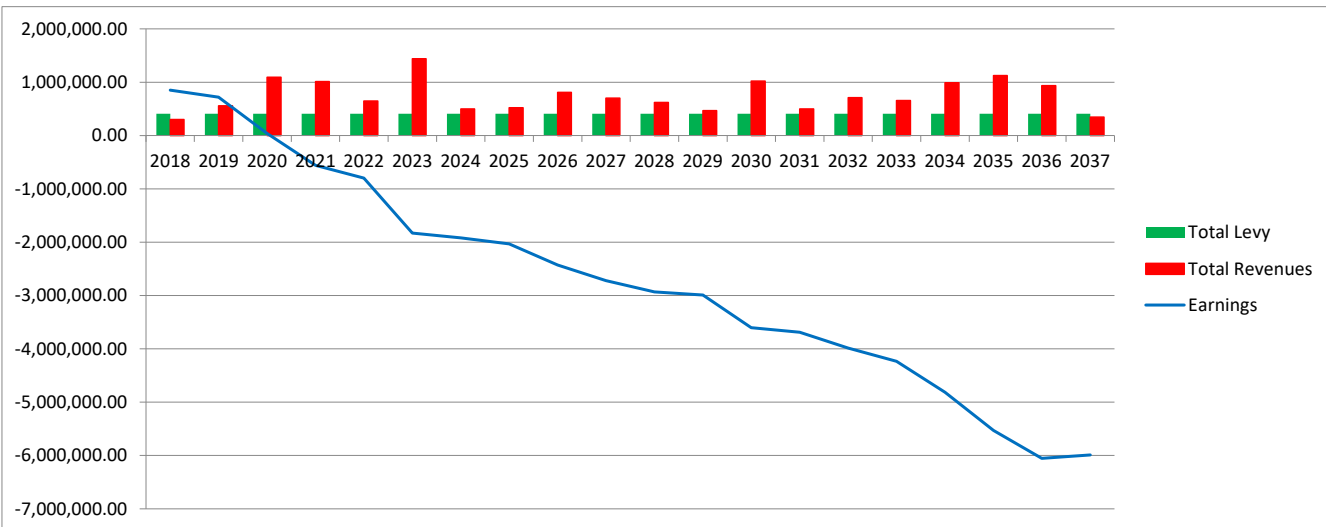
Assumptions:

- Reserve Earnings of 2%
- Repurpose debt levy in 2019
- Redirect money in future years as fund stabilizes

**Parks Improvement Program**

Scenario 0 - No action taken

Year	Add'l Tax Levy	Total Levy	Total Revenues	Total Expenditures	Use of (Add'n to) Reserves	Earnings	Cash Balance	% Funded by Tax Levy
2018	\$ -	\$ 410,000	\$ 410,000	\$ 300,000	(110,000.00)	\$ 880	\$ 851,050	
2019	\$ -	\$ 410,000	\$ 410,000	\$ 556,500	146,500.00	\$ 14,091	\$ 718,641	73.7%
2020	\$ -	\$ 410,000	\$ 410,000	\$ 1,090,880	680,880.00	\$ 755	\$ 38,516	37.6%
2021	\$ -	\$ 410,000	\$ 410,000	\$ 1,010,000	600,000.00	\$ -	\$ (561,484)	40.6%
2022	\$ -	\$ 410,000	\$ 410,000	\$ 648,000	238,000.00	\$ -	\$ (799,484)	63.3%
2023	\$ -	\$ 410,000	\$ 410,000	\$ 1,441,500	1,031,500.00	\$ -	\$ (1,830,984)	28.4%
2024	\$ -	\$ 410,000	\$ 410,000	\$ 500,000	90,000.00	\$ -	\$ (1,920,984)	82.0%
2025	\$ -	\$ 410,000	\$ 410,000	\$ 519,070	109,070.00	\$ -	\$ (2,030,054)	79.0%
2026	\$ -	\$ 410,000	\$ 410,000	\$ 810,000	400,000.00	\$ -	\$ (2,430,054)	50.6%
2027	\$ -	\$ 410,000	\$ 410,000	\$ 700,000	290,000.00	\$ -	\$ (2,720,054)	58.6%
2028	\$ -	\$ 410,000	\$ 410,000	\$ 620,000	210,000.00	\$ -	\$ (2,930,054)	66.1%
2029	\$ -	\$ 410,000	\$ 410,000	\$ 468,500	58,500.00	\$ -	\$ (2,988,554)	87.5%
2030	\$ -	\$ 410,000	\$ 410,000	\$ 1,022,500	612,500.00	\$ -	\$ (3,601,054)	40.1%
2031	\$ -	\$ 410,000	\$ 410,000	\$ 496,670	86,670.00	\$ -	\$ (3,687,724)	82.5%
2032	\$ -	\$ 410,000	\$ 410,000	\$ 708,000	298,000.00	\$ -	\$ (3,985,724)	57.9%
2033	\$ -	\$ 410,000	\$ 410,000	\$ 657,500	247,500.00	\$ -	\$ (4,233,224)	62.4%
2034	\$ -	\$ 410,000	\$ 410,000	\$ 990,000	580,000.00	\$ -	\$ (4,813,224)	41.4%
2035	\$ -	\$ 410,000	\$ 410,000	\$ 1,125,000	715,000.00	\$ -	\$ (5,528,224)	36.4%
2036	\$ -	\$ 410,000	\$ 410,000	\$ 935,000	525,000.00	\$ -	\$ (6,053,224)	43.9%
2037	\$ -	\$ 410,000	\$ 410,000	\$ 345,000	-	\$ -	\$ (5,988,224)	118.8%
2038	\$ -	\$ 410,000	\$ 410,000	\$ 345,000	-	\$ -	\$ (5,923,224)	118.8%



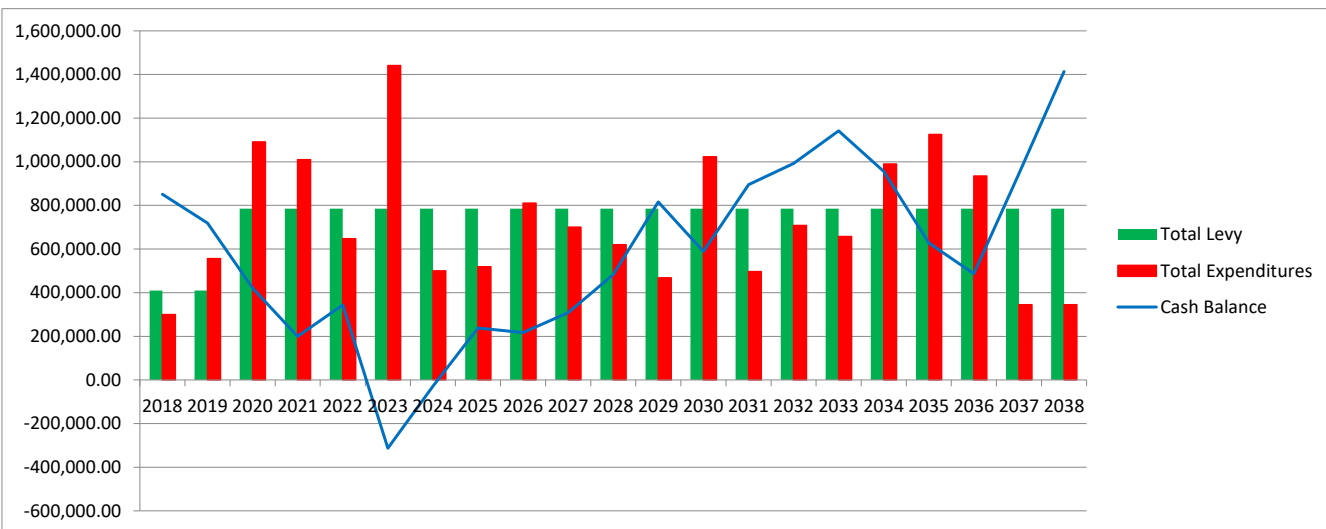
**Assumptions:**

- Reserve Earnings of 2%
- No Levy increase

**Parks Improvement Program**

Recommendation - Repurpose debt in 2020

Year	Add'l Tax Levy	Total Levy	Total Revenues	Total Expenditures	Use of (Add'n to) Reserves	Earnings	Cash Balance	% Funded by Tax Levy
2018	\$ -	\$ 410,000	\$ 410,000	\$ 300,000	(110,000.00)	\$ 880	\$ 851,050	
2019	\$ -	\$ 410,000	\$ 410,000	\$ 556,500	146,500.00	\$ 14,091	\$ 718,641	73.7%
2020	\$ 375,000	\$ 785,000	\$ 785,000	\$ 1,090,880	305,880.00	\$ 8,255	\$ 421,016	72.0%
2021	\$ -	\$ 785,000	\$ 785,000	\$ 1,010,000	225,000.00	\$ 3,920	\$ 199,937	77.7%
2022	\$ -	\$ 785,000	\$ 785,000	\$ 648,000	-	\$ 6,739	\$ 343,675	121.1%
2023	\$ -	\$ 785,000	\$ 785,000	\$ 1,441,500	656,500.00	\$ -	\$ (312,825)	54.5%
2024	\$ -	\$ 785,000	\$ 785,000	\$ 500,000	-	\$ -	\$ (27,825)	157.0%
2025	\$ -	\$ 785,000	\$ 785,000	\$ 519,070	-	\$ -	\$ 238,105	151.2%
2026	\$ -	\$ 785,000	\$ 785,000	\$ 810,000	25,000.00	\$ 4,262	\$ 217,367	96.9%
2027	\$ -	\$ 785,000	\$ 785,000	\$ 700,000	-	\$ 6,047	\$ 308,415	112.1%
2028	\$ -	\$ 785,000	\$ 785,000	\$ 620,000	-	\$ 9,468	\$ 482,883	126.6%
2029	\$ -	\$ 785,000	\$ 785,000	\$ 468,500	-	\$ 15,988	\$ 815,371	167.6%
2030	\$ -	\$ 785,000	\$ 785,000	\$ 1,022,500	237,500.00	\$ 11,557	\$ 589,428	76.8%
2031	\$ -	\$ 785,000	\$ 785,000	\$ 496,670	-	\$ 17,555	\$ 895,313	158.1%
2032	\$ -	\$ 785,000	\$ 785,000	\$ 708,000	-	\$ 19,446	\$ 991,760	110.9%
2033	\$ -	\$ 785,000	\$ 785,000	\$ 657,500	-	\$ 22,385	\$ 1,141,645	119.4%
2034	\$ -	\$ 785,000	\$ 785,000	\$ 990,000	205,000.00	\$ 18,733	\$ 955,378	79.3%
2035	\$ -	\$ 785,000	\$ 785,000	\$ 1,125,000	340,000.00	\$ 12,308	\$ 627,685	69.8%
2036	\$ -	\$ 785,000	\$ 785,000	\$ 935,000	150,000.00	\$ 9,554	\$ 487,239	84.0%
2037	\$ -	\$ 785,000	\$ 785,000	\$ 345,000	-	\$ 18,545	\$ 945,784	227.5%
2038	\$ -	\$ 785,000	\$ 785,000	\$ 345,000	-	\$ 27,716	\$ 1,413,499	227.5%



**Assumptions:**

- Reserve Earnings of 2%
- 2020 levy increase is a repurpose of bond issuance #27

**Roseville Finance Commission  
Recommendation Tracking Tool**

No.	Recommendation	Date Recommended	Date Presented	Status	Discussion and Next Steps
2017-8	Priority Ranking Implementation	12/12/2017	3/26/2018	Received - Further Development	Council received recommendation and directed Commission to further refine the ranking list with special consideration on how to handle new vs. existing items.
2018-1	Utility Base Rates	1/9/2018	3/26/2018	Received	No further action at this time. Public Works Commission also reviewing issue and Council will formally decide at that time.
2018-2	Cash Reserve Fund	2/13/2018	3/26/2018	Received - Further Development	Council received recommendation and directed Commission to further refine the logistics of separating Capital expenses from funds and resetting reserve balances. Will reassess remaining aspects of recommendation after this step is completed.
2018-4	2019 CIP Recommendation	6/12/2018	Planned 9/17/2018		

## Roseville Finance Commission Recommendation Tracking Tool

No.	Recommendation	Description
2017-8	Priority Ranking Implementation	Recommend the City Council direct staff to begin using the priority rankings as adopted in the Capital Investment Policy for future budgeting cycles.
2018-1	Utility Base Rates	Recommend no change to utility base rates, specifically moving infrastructure spending to property tax.
2018-2	Cash Reserve Fund	Recommend establishing a Cash Reserve Fund to consolidate all unrestricted funds that are not derived from donations or earmarked for capital replacements.
2018-4	2019 CIP Recommendation	<ul style="list-style-type: none"> <li>•General Facilities - Repurpose \$335k of expiring debt in 2019. Lobby Legislature for State funds for OVAL.</li> <li>•Park Improvement - No action in 2019. Plan on repurposing \$375k of expiring debt in 2020</li> <li>•Pavement Management - No Action in 2019. Repurpose remaining debt (\$390k) in 2020. Additional funds as needed in future to ensure health of endowment per the Capital Investment Policy.</li> <li>•Pathways and Parking Lot - Pursuant to the policy of the Pavement Management fund as an endowment for street repair, do not transfer from PMP to the Pathways program.</li> </ul>

## Roseville Finance Commission Recommendation Tracking Tool

Status	Definition
Pending	Recommendation has not yet been presented to the City Council
Received	Recommendation has been received by the City Council but has not received a formal reply or action
Accepted	Recommendation has been accepted by the City Council but action has not yet been taken
Rejected	Recommendation has been rejected by the City Council and will not move further
Implemented	Recommendation has been accepted by the City Council and action has been implemented
Rescinded	Recommendation has been rescinded by the Finance Commission
Received - Closed	Recommendation has been received by the City Council but has not received a formal reply or action and will be considered closed from future updates tracking.
Received - Further Development	Recommendation has been received by the City Council and returned to the Commission for modifications or further development.





# REQUEST FOR COUNCIL ACTION

Date: 9/17/2018  
Item No.: 7.b

Department Approval

City Manager Approval

Kari Collins, Community Development Director

Item Description: Discuss Amendments or Improvements to Code Enforcement Practices to Better Address Properties with Repeat City Code Violations

## BACKGROUND

The City Council recently requested staff to research options for increased proactive code enforcement to reduce the number of properties with a history of City Code violations from causing concerns within neighborhoods. Current enforcement policy is to be reactive to complaints regarding properties. Proactive code enforcement is conducted through the Neighborhood Enhancement Program and funded by the Economic Development Authority.

The following are options to reduce repeat problem properties with Code violations and include:

### 1. Enhancements to 2018 Neighborhood Enhancement Program (NEP)

Staff began utilizing door hangers in the 2018 NEP cycle. This tool captured any concerns about property maintenance in real time during the inspection. The addition of the door hanger has been well received and yielded a compliance rate of over 80%. This has greatly reduced staff time in letter creation, mailing and follow up inspections. Staff inspected 2,700 properties this year and placed door hangers at 180 residential properties. In 2018, staff began hand delivering a door hanger to business properties in an attempt to discuss issues with the tenant or owner at the moment they were noticed. Staff observed items of concern at 12 business properties. This strategy has been very well received by businesses and resulted in a reduction of staff time in creating, sending and following up with business properties.

### 2. Proactive Code Enforcement

Neighborhood Enhancement Program inspections staff cover approximately one-third of the City annually. If there is a desire to move to proactive code enforcement rather than the current policy of reactive enforcement, a pilot program to inspect the entire City could be implemented in 2019. Staff would suggest increasing the Neighborhood Enhancement Program inspection staffing if Council would like to explore this option.

Currently, the NEP program is implemented each summer utilizing a seasonal inspector for six months. This inspector divides their time 50% in NEP and 50% in building/zoning code inspections. Recent efficiency improvements to the program may allow for the increase in coverage to occur with the continued use of a seasonal inspector. However, the availability of the seasonal inspector may be reduced for building/zoning code inspections and might necessitate an additional seasonal building/zoning code inspector if current inspection volume should continue. For long-term uniformity and consistency of inspections, a full time inspector position may be suggested if a pilot program is successful in 2019.

An alternate incentive to maintain compliance to City Code, could be to increase the time frame

38 for action under the Repeat Nuisance Ordinance. Currently, when three or more violations are  
39 placed on a property within a period of 365 days, a fine can be imposed on the property owner.  
40 An increase to three or more violations within a period of 730 days (two years), might help in  
41 reducing the habitual and chronic problem properties.

### 42 **3. Limit Outside Storage of Vehicles on Residential Property**

43 Council recently requested staff to research possible limits to the number of vehicles stored on  
44 residential property. Staff researched other cities with current vehicle storage limits and found  
45 nine cities with various limits on storage of vehicles (Attachment B).

46

47 Staff reviewed enforcement of specific numbers of vehicles on residential property from other  
48 communities and have found identifying a vehicle threshold challenging. The programs used by  
49 Coon Rapids and Shoreview might provide a framework for limits in Roseville. Staff believes  
50 that the specific number tied to a licensed driver residing at the property along with an allowance  
51 for additional vehicles might accomplish the goal of reducing the large number of vehicles stored  
52 on a property.

53

54 Staff, however, has reservations regarding how enforcement would occur and what mechanism  
55 would be put in place for compliance.

- 56 • Would residents be required to supply information on residency on the property?
- 57 • Would vehicles be abated and removed from the property?
- 58 • Current code limits outside storage of vehicles by licensing, location and operability.
- 59 • Is the number of vehicles a public nuisance?

60

61 An ordinance amendment with similar language to existing code that allows for a possible  
62 variance (with neighborhood support) might allow for those situations where storage options are  
63 limited. If City Council would like to pursue limiting number of vehicles stored on residential  
64 property, staff could prepare draft ordinance language and return for additional discussion.

65

### 66 **4. Create Vacant Property Registry**

67 Staff has reviewed the programs of other cities and suggests including vacant properties to the  
68 current Rental Registration Ordinance. Information on where vacant properties are within the  
69 community will help the City have a point of contact if there are code violations, or public safety  
70 concerns. Residential and Commercial properties that are anticipated to be vacant in excess of  
71 180 days would be required to be registered as vacant. Commercial properties would only be  
72 considered if the entire building was vacant, not just a tenant space. This requirement for  
73 Commercial properties might provide a clear timeframe for a previous use to no longer be  
74 allowed if the vacancy remains in excess of one year. Staff would suggest keeping the  
75 registration fee similar to existing fees, which are \$35.00. If City Council would like to pursue  
76 adding vacant properties to the Rental Registration Ordinance, staff could prepare draft  
77 ordinance language and return for additional discussion.

78

79

### 80 **REQUESTED COUNCIL ACTION**

81 Staff requests that City Council review and provide input to staff with direction on possible  
82 procedure and ordinance changes related to the discussion topics.

83

84 Prepared by: Dave Englund, Building Official (651) 792-7087

85 Attachments: A: Draft 2018 NEP Year End Report

86 B: Cities with limits on storage of vehicles



## Neighborhood Enhancement Program 2018 Year End Report



**Background:**

Roseville’s City Council and Roseville’s Economic Development Authority (EDA) have been exploring ways to maintain the prosperity, livability, and property values of our residential and business properties. To help achieve this goal the Council instituted the Neighborhood Enhancement Program in 2008, and the Business Property Enhancement Program in 2013 which are funded by the Roseville EDA. This program raises awareness of the importance of keeping properties in good repair, which helps maintain the prosperity of our businesses, maintains our quality neighborhoods, and protects property values throughout our community.

This program involves exterior only inspections which are intended to identify if there are any exterior maintenance or public nuisance violations of City Code. Staff then works with property owners to remedy any violations that exist. The program encourages property owners to perform routine maintenance on their property, before a problem becomes severe and more costly to fix.

**Goals of the Program:**

- Greater public awareness and compliance with City Codes through education, cooperation and enforcement.
- Enhanced property values and livability of neighborhoods.
- Maintenance of the city’s tax base.
- Educate property owners of the benefits realized by eliminating visual nuisances.

<b>Neighborhood Enhancement Program &amp; Business Property Enhancement Program – 2008-2017</b>				
Program Year	Program Type	Number of Properties Inspected	Number of Violations	Percent Violation Rate
2008	NEP	1,900	144	7.6%
2009	NEP	3,159	195	6.2%
2010	NEP	4,232	157	3.7%
2011	NEP	4,388	177	4.0%
2012	NEP	5,028	177	3.5%
2013	BPEP	534	343	66%
2014	Program not conducted due to Initial Inspections for new Rental License Program			
2015	BPEP	180	74	32%
2015	NEP	3,221	326	8%
2016	NEP	3,427	372	10.85%
2017	NEP	3,328	140	2.81%
2018	NEP	2,782	204	6.90%

**Types of violations observed in 2018:**

- 49% - Vehicle
- 3% - Property Maintenance
- 11% - Debris
- 17% - Outside Storage
- 2% - Miscellaneous
- 15% - Grass

**2018 Accomplishments:**

- Implementation of door hanger notifications at time of inspection.

- Staff performed 2,782 residential and commercial property inspections.
  - Public cooperation on correcting public nuisances has been exceptional.
  - Majority of owners complied with only door hanger notification requests for compliance, and the remainder were resolved during staff conversations at site visits.
- Combined BPEP into the NEP program to achieve greater coverage of entire neighborhoods.
- Businesses had a violation rate of 3%, a one-half percent increase in violations from 2017 rate of 2.42%.
- Residential properties had a 7.28% violation rate, a one percent decrease in violations from 2017 rate of 8.12%.
- The 2018 Program was operated utilizing a seasonal inspector, which allowed all other divisional programs to operate more efficiently during a very busy year.
- Communication materials continue to educate property owners about common public nuisance violations.
  - Our initial letter includes brochures for Property Maintenance Guidelines for Residential and Commercial Properties.
- Generate goodwill:
  - The programs have received many supportive comments from the public about the need and effectiveness of the program.
  - Positive support from business owners and residents.

**Trends:**

- With the recurring three year cycle, we are seeing fewer violations in the same neighborhoods.
- The violations we are seeing are smaller, fewer instances of multiple violations, and easier for the property owners to address.
- We are observing more violations in neighborhoods of older homes; this is to be expected due to typically smaller lots, smaller garages and older construction.
- Businesses are more engaged and proactive in resolving violations in a timely manner, and very cooperative and understanding of the need of the program.
- Identifying more issues of litter, outside storage, and inoperable or improperly parked/stored vehicles.
- Outside storage issues are showing a cluster effect.
- Residents understand the program and appreciate it.
- Building maintenance and public nuisance conditions visually detracting from our residential and business areas were eliminated. The majority were basic building maintenance and outside storage/debris removal, which are easily resolved at minimal cost.
- Staff was able to implement the program without alienating the business community.
- Overwhelmingly, property owners have voluntarily corrected noted violations on a timely basis, and many voiced support for the program.

**Future Program Schedule:**

- Proposing to conduct full City NEP inspections in 2019.
- Efficiencies gained with consistent inspection season and door hanger effectiveness may allow for full city inspection.
- Discontinue paper mailings and rely on newsletter and electronic delivery of program updates and schedules.
- Utilize a Seasonal Inspector to carry out the program
- Continue to implement division of geographic areas to provide consistent inspection areas.
- Reduce paper waste in mailing materials.
- Streamline inspection timeline to maximize efficiency of program.

## **Cities with limitations on number of vehicles stored outside on Residential property**

- 1. Arden Hills – 4**
- 2. Bloomington – 4**
- 3. Chaska – 4**
- 4. Coon Rapids – 2 (plus one for each licensed driver residing at the dwelling)**
- 5. Minneapolis – 2**
- 6. Oakdale – 4**
- 7. Richfield – 4**
- 8. St. Louis Park – 3**
- 9. Shoreview – 4 or one per licensed driver residing on premises (whichever is more)**



# REQUEST FOR COUNCIL ACTION

Date: **9/17/2018**

Item No.: **7.c**

Department Approval

City Manager Approval

Item Description: Discuss City Campus Solar Proposals

1 **BACKGROUND**

2 Staff has been working for several years to install one or more solar arrays on the City Campus.  
3 A summary of those efforts can be found from the RCA of the May 14<sup>th</sup>, 2018 City Council  
4 meeting for the City Campus Solar Options item (see Attachment F). Since then, the City  
5 Council has approved a Community Solar Subscription Agreement for up to 2 Megawatts (MW)  
6 of Community Solar Power for the City Hall and Skating Center electric meters.

7  
8 In order to get actual solar arrays on the City Campus, staff has continued to work with  
9 developers for additional proposals. Attached are two proposals from iDEAL Energies for the  
10 installation of solar arrays on the Roseville City Campus. Both of these proposals could be  
11 applied to one or several of the following rooftops:

- 12 - City Hall
- 13 - Fire Station
- 14 - Maintenance Facility

15  
16 The Skating Center was also reviewed, and while the size of the roof coupled with the high  
17 energy use at this facility are attractive for a solar array, the roof is scheduled for replacement in  
18 2022. Installing a solar array on that roof would require the City to accelerate that replacement  
19 which is not compatible with the current budget and CIP schedule. Therefore, the Skating Center  
20 was removed from consideration of options at this time.

21  
22 The two types of installation include the 40kW Solar Rewards Program and PV Demand Credit  
23 Rider Program. The highlights of each program are listed below:

24  
25 Solar Rewards Program:

- 26 - Program created by the MN Legislature administered through Xcel Energy.
- 27 - Xcel Energy pays \$0.08 per kWh produced to the “owner” of the system for 10 years.  
28 This payment would go to the operator of the City’s installed solar arrays.
- 29 - City would pay an additional annual payment to the operator under a Power Purchase  
30 Agreement (PPA) at a starting rate of \$0.083/kWh increasing by 4.5% annually. Annual  
31 average cost of energy at City Hall is \$0.089/kWh (in the winter the cost has been as low  
32 as \$0.081/kWh, in the summer as high as \$0.101/kWh over the past 12 months).
- 33 - Annual savings in first year is estimated at \$979.
- 34 - Financing designed for mutual termination of PPA at Year 13 for \$4,784. After that the  
35 City realizes the full savings of the solar production (no power purchase costs).
- 36 - Estimated savings in Year 14 jump to approximately \$8,000.

- A Solar Rewards Program system could be installed on all three subject roofs (City Hall, Fire Station, Maintenance Facility)

PV Demand Credit Program:

- New program in 2018 where Xcel compensates customers for helping them control demand during peak energy use periods.
- City receives a \$0.07139 Credit per kWh produced from 1 PM to 7 PM. According to iDEAL Energies this normalizes to \$0.0343 per kWh generated from the solar array throughout the day.
- City purchases power from the solar array at \$0.1090/kWh in Year 1. PPA rate increases by 2.5% annually.
- Annual average cost of energy for Maintenance Facility is \$0.106/kWh (from actual energy bills over past 12 months). With Average Demand Credit averaged out at \$0.0343/kWh, savings are equivalent to \$0.1403/kWh averaged over the year. Net gain (Savings – PPA Expense) is equal to \$0.0313/kWh. Given actual energy bills from last 12 months, staff estimates savings as much as \$2,933 in Year 1. iDEAL Energies’ Cash flow analysis estimates a lower net gain of 0.0146 (assumes lower energy and demand expense savings) for an estimated Year 1 savings of \$1,366.
- Financing designed for mutual termination of PPA at year 18.
- Proposals were received for a PV Demand Credit array on City Hall and the Maintenance Facility. If the City Council is comfortable with this program, but only wants to proceed with one system, staff recommends installing the smaller (83.3 kW) system on top of the Maintenance Facility.

There are some unique components to iDEAL Energies’ proposals compared to previous proposals the City Council has seen. First and foremost, these proposals are setup such that the City owns the systems on day 1. That means we are responsible for insurance costs and some maintenance costs during the PPA portions of the agreement. Staff has consulted with the League of MN Cities Insurance Trust and we estimate additional insurance costs for a rooftop system would be approximately \$125 annually. A ground mount system is seen as having much more risk for vandalism and therefore the insurance costs are estimated at \$2,400 annually (assuming a \$600,000 value).

Secondly, the financing and Cash Flow analysis are setup to end the PPA Agreement as soon as possible. For the Solar Rewards program, the cash flow is setup for the PPA to be terminated at Year 13. Therefore, from Year 14 beyond the City would realize full benefit of the power produced by the PPA system. For the PV Demand Credit Program, the cash flow is setup for the PPA to be terminated at Year 18. For both systems, once the PPA Agreement is terminated, the City is responsible for all operation and maintenance (O&M) costs. We would likely contract with a third party to provide those services beyond that point. Staff suggests using a conservatively high estimate of \$1000 annually for each system for those O&M costs.

There has also been concern about the disposal costs of the solar arrays once they reach their end of life. As these are electronic components with heavy metals and other “hazardous” materials within them, they must be disposed of properly. However, there is a growing market for recycling the components of solar panels and that market will grow as the number of solar panels grows. Currently, iDEAL Energies estimates the disposal costs of about \$15-\$20 per panel. For a 40kW system that would be around \$10,000 to dispose of the entire solar array.

86 It should be noted that the solar panels will have a 25 year warranty and that the life cycle of the  
87 solar array is expected to be over 40 years. There are still systems which were installed in the  
88 early 90's producing power. Today's panels are a much higher quality and more efficient and  
89 therefore should produce more power for a longer period of time.

90

91 iDEAL Energies will be on hand to present the proposals and answer questions from the Council.  
92 Staff will work with iDEAL Energies to present the attached Cash Flow analysis for the  
93 proposed systems in more detail.

94 **POLICY OBJECTIVE**

95 Policy 6.2 of the Roseville 2030 Comprehensive Plan indicates the City should reduce negative  
96 human impacts on the environment through citywide energy conservation and reduction of  
97 pollution and waste.

98 **BUDGET IMPLICATIONS**

99 The proposals that are being presented to Council are essentially a financing method in order to  
100 pay for several solar arrays. Depending on the specific program, the City will realize a small  
101 annual benefit, i.e. positive cost savings compared to purchasing power directly from Xcel  
102 Energy, during the Power Purchase Agreement period. After the PPA period has expired or been  
103 terminated, the City will realize substantial savings in energy costs (as much as \$10,000 to  
104 \$20,000 annually depending on the size of the system). This would allow the City to reallocate  
105 those dollars in the operating budgets to other priorities or absorb cost increases in other areas of  
106 the operating budget.

107 There should be no budget increases necessary to support the installation of the proposed solar  
108 arrays.

109 **STAFF RECOMMENDATION**

110 Staff recommends Council consider installing a Solar Rewards Program System on each of the  
111 three subject buildings: City Hall, Fire Station and Maintenance Facility. If the Council is  
112 comfortable with the longer term of the PV Demand Credit program, staff would recommend  
113 installing a system on the Maintenance Facility roof (in addition to the Solar Rewards system on  
114 the same roof).

115 Given the additional insurance costs staff does not recommend installing a ground mounted solar  
116 array. Therefore, all proposed solar arrays would be installed on a City building rooftop.

117 If the Council agrees with the staff recommendations, staff recommends Council direct staff to  
118 bring forward the necessary agreements (draft agreements are attached) at a later Council  
119 meeting, likely September 24<sup>th</sup> or October 8<sup>th</sup>.

120 **REQUESTED COUNCIL ACTION**

121 Receive a presentation from staff and iDEAL Energies reviewing several proposed solar array  
122 installations for the City Campus and direct staff for future action.



Prepared by: Marc Culver, Public Works Director  
Attachments: A: iDEAL Energies Presentation  
B: Solar Rewards Cash Flow Analysis  
C: PV Demand Credit Cash Flow Analysis  
D: Consumption Data and Year 1 Summary Analysis  
E: Solar Rewards DRAFT Agreements  
F: PV Demand Credit DRAFT Agreements  
G: May 14, 2018 City Campus Solar Options RCA  
H: Excerpts from March 27, 2018 PWETC Meeting Minutes



**iDEAL ENERGIES**  
— A GREEN<sup>2</sup> COMPANY —



**iDEAL**



**Roseville  
Details**



**Economics**



**Your Benefits  
with iDEAL**

**City of Roseville**

**Presented by Rich Ragatz**





**iDEAL**

About us

**You  
OWN**

We  
maintain

**Physical  
Aspects**

# iDEAL Energies

---

**Extensively develops projects for both public and private institutions**

**250 + commercial solar arrays** installed and financed  
**100 + projects** currently under construction and development

We have partnered with multiple cities and counties including

- **Shoreview**
- **Ramsey County**
- **Richfield**
- **Mendota Heights**
- **Rogers**
- **+7 additional cities**



















# Benefits to the City

- The city of Roseville is the fee title owner of all systems day 1
- iDEAL Energies operates and maintains the systems for the life of the agreement
- Optional O&M agreement following agreement termination
- iDEAL helps monetize tax credits, rebates, and incentives to help pay for the array
- Roseville will receive energy savings starting Day 1

# Physical Aspects



- Arrays are self-ballasted (4-5 lbs. per square foot)
  - Zero penetrations
- Preservation of roof warranties





**Solar  
Rewards**

**PV Demand  
Credit**

**Project  
Summary**

# Solar Rewards Program

---

## Xcel Energy - 3 Projects

- Created by the MN legislature
- Smaller scale solar up to 40kW\*
- Production based incentive: **\$.08/kWh produced for 10 years**
- Limited Funds: \$15M available in 2018 (partially depleted)

\*approximately 47,000 kWh (array design specifics)



# PV Demand Credit Rider

---

Xcel Energy - 3 Projects

- Brand new Program (as of April 5th, 2018)
- For Projects 40 kW to 1000 kW (4000 - 10000 sf)
- Xcel compensates customers for helping them control demand
- PV Demand credit = **\$0.07139** per kWh produced by array from 1 - 7 PM

# City Hall



- (1) Ground Mounted 39.96 kW Solar Rewards Project**
- (1) Roof Mounted 124.95 kW PV Demand Credit Project**

# Fire Station



**(1) Roof Mounted 39.96 kW Solar Rewards Project**



# Public Works



- (1) Roof Mounted 39.96 kW Solar Rewards Project**
- (1) Roof Mounted 83.3 kW PV Demand Credit Project**



**Solar  
Rewards**

**PV  
Demand  
Credit**

**Total  
Economics**

# Solar Rewards Cashflow (Public Works)



## 40 Year Customer Cash Flow Example - Net Metering w/ Utility Bill Savings

Roanoke Public Works Area - 33.96 MWDC 68665 G270M Solar Panels @ 1.0 w/ 40-WAC SoA Figs

Net Metering  
General Service Rate Plan

Year	Customer's Utility Savings and Rem Income			Customer's Expenses			Annual Savings	
	Utility Bill Savings	Rem Income	Total Annual Customer Revenue	Energy Payment (100% Net Metering, Net of solar, \$/kWh)	Customer Expense % (Net Total)	Total Annual Expense	Total Annual Energy Expense Savings	Total Cumulative Annual Energy Expense Savings
Year 1	\$ 4,896	\$ 100	\$ 4,996	\$ (16,075)	100%	\$ (16,075)	\$ 11,179	\$ 11,179
Year 2	\$ 4,886	\$ 100	\$ 4,986	\$ (16,076)	100%	\$ (16,076)	\$ 11,189	\$ 22,368
Year 3	\$ 4,876	\$ 100	\$ 4,976	\$ (16,077)	100%	\$ (16,077)	\$ 11,199	\$ 33,567
Year 4	\$ 4,866	\$ 100	\$ 4,966	\$ (16,078)	100%	\$ (16,078)	\$ 11,209	\$ 44,766
Year 5	\$ 4,856	\$ 100	\$ 4,956	\$ (16,079)	100%	\$ (16,079)	\$ 11,219	\$ 55,965
Year 6	\$ 4,846	\$ 100	\$ 4,946	\$ (16,080)	100%	\$ (16,080)	\$ 11,229	\$ 67,164
Year 7	\$ 4,836	\$ 100	\$ 4,936	\$ (16,081)	100%	\$ (16,081)	\$ 11,239	\$ 78,363
Year 8	\$ 4,826	\$ 100	\$ 4,926	\$ (16,082)	100%	\$ (16,082)	\$ 11,249	\$ 89,562
Year 9	\$ 4,816	\$ 100	\$ 4,916	\$ (16,083)	100%	\$ (16,083)	\$ 11,259	\$ 100,761
Year 10	\$ 4,806	\$ 100	\$ 4,906	\$ (16,084)	100%	\$ (16,084)	\$ 11,269	\$ 111,960
Year 11	\$ 4,796	\$ 100	\$ 4,896	\$ (16,085)	100%	\$ (16,085)	\$ 11,279	\$ 123,159
Year 12	\$ 4,786	\$ 100	\$ 4,886	\$ (16,086)	100%	\$ (16,086)	\$ 11,289	\$ 134,358
Year 13	\$ 4,776	\$ 100	\$ 4,876	\$ (16,087)	100%	\$ (16,087)	\$ 11,299	\$ 145,557
Year 14	\$ 4,766	\$ 100	\$ 4,866	\$ (16,088)	100%	\$ (16,088)	\$ 11,309	\$ 156,756
Year 15	\$ 4,756	\$ 100	\$ 4,856	\$ (16,089)	100%	\$ (16,089)	\$ 11,319	\$ 167,955
Year 16	\$ 4,746	\$ 100	\$ 4,846	\$ (16,090)	100%	\$ (16,090)	\$ 11,329	\$ 179,154
Year 17	\$ 4,736	\$ 100	\$ 4,836	\$ (16,091)	100%	\$ (16,091)	\$ 11,339	\$ 190,353
Year 18	\$ 4,726	\$ 100	\$ 4,826	\$ (16,092)	100%	\$ (16,092)	\$ 11,349	\$ 201,552
Year 19	\$ 4,716	\$ 100	\$ 4,816	\$ (16,093)	100%	\$ (16,093)	\$ 11,359	\$ 212,751
Year 20	\$ 4,706	\$ 100	\$ 4,806	\$ (16,094)	100%	\$ (16,094)	\$ 11,369	\$ 223,950
Year 21	\$ 4,696	\$ 100	\$ 4,796	\$ (16,095)	100%	\$ (16,095)	\$ 11,379	\$ 235,149
Year 22	\$ 4,686	\$ 100	\$ 4,786	\$ (16,096)	100%	\$ (16,096)	\$ 11,389	\$ 246,348
Year 23	\$ 4,676	\$ 100	\$ 4,776	\$ (16,097)	100%	\$ (16,097)	\$ 11,399	\$ 257,547
Year 24	\$ 4,666	\$ 100	\$ 4,766	\$ (16,098)	100%	\$ (16,098)	\$ 11,409	\$ 268,746
Year 25	\$ 4,656	\$ 100	\$ 4,756	\$ (16,099)	100%	\$ (16,099)	\$ 11,419	\$ 279,945
Year 26	\$ 4,646	\$ 100	\$ 4,746	\$ (16,100)	100%	\$ (16,100)	\$ 11,429	\$ 291,144
Year 27	\$ 4,636	\$ 100	\$ 4,736	\$ (16,101)	100%	\$ (16,101)	\$ 11,439	\$ 302,343
Year 28	\$ 4,626	\$ 100	\$ 4,726	\$ (16,102)	100%	\$ (16,102)	\$ 11,449	\$ 313,542
Year 29	\$ 4,616	\$ 100	\$ 4,716	\$ (16,103)	100%	\$ (16,103)	\$ 11,459	\$ 324,741
Year 30	\$ 4,606	\$ 100	\$ 4,706	\$ (16,104)	100%	\$ (16,104)	\$ 11,469	\$ 335,940
Year 31	\$ 4,596	\$ 100	\$ 4,696	\$ (16,105)	100%	\$ (16,105)	\$ 11,479	\$ 347,139
Year 32	\$ 4,586	\$ 100	\$ 4,686	\$ (16,106)	100%	\$ (16,106)	\$ 11,489	\$ 358,338
Year 33	\$ 4,576	\$ 100	\$ 4,676	\$ (16,107)	100%	\$ (16,107)	\$ 11,499	\$ 369,537
Year 34	\$ 4,566	\$ 100	\$ 4,666	\$ (16,108)	100%	\$ (16,108)	\$ 11,509	\$ 380,736
Year 35	\$ 4,556	\$ 100	\$ 4,656	\$ (16,109)	100%	\$ (16,109)	\$ 11,519	\$ 391,935
Year 36	\$ 4,546	\$ 100	\$ 4,646	\$ (16,110)	100%	\$ (16,110)	\$ 11,529	\$ 403,134
Year 37	\$ 4,536	\$ 100	\$ 4,636	\$ (16,111)	100%	\$ (16,111)	\$ 11,539	\$ 414,333
Year 38	\$ 4,526	\$ 100	\$ 4,626	\$ (16,112)	100%	\$ (16,112)	\$ 11,549	\$ 425,532
Year 39	\$ 4,516	\$ 100	\$ 4,616	\$ (16,113)	100%	\$ (16,113)	\$ 11,559	\$ 436,731
Year 40	\$ 4,506	\$ 100	\$ 4,606	\$ (16,114)	100%	\$ (16,114)	\$ 11,569	\$ 447,930
<b>TOTAL</b>	<b>\$ 453,584</b>	<b>\$ 4,000</b>	<b>\$ 457,584</b>	<b>\$ (613,483)</b>	<b>100%</b>	<b>\$ (613,483)</b>	<b>\$ 1,044,502</b>	

Assumes Cal is assumed on the transaction occurrence. The Cashflow summary is intended only as an example.





# PV Demand Credit Cashflow (Public Works)



## 40 Year Customer Cash Flow Example - Net Metering w/ Utility Bill Savings

Florida-Delisted Solar Array - 03.0 MWDC Monocrystalline-Si Solar Panels @ 12" w- 03.8 MWAC Solar Edge

Local Photovoltaic Credit Rider Tariff  
General Service Rate Plan

Year	Customer's Utility Savings and Revenue			Customer's Expenses			Annual Savings	
	\$/yr to Bill Savings	Dist. Revenue	Total Annual Customer Revenue	Energy Pay-into 10 GreenDays (at current utility rate)	Insurance Expense & Utility Taxes	Total Annual Expenses	Total Annual Energy Expense Savings	Total Cumulative Annual Energy Expense Savings
Year 1	1,534	110	11,881	181,570	1421	183,391	5,848	5,848
Year 2	1,534	110	11,881	181,500	1420	183,380	5,847	11,695
Year 3	1,719	110	11,898	181,000	1420	183,790	5,894	17,589
Year 4	1,794	110	12,004	180,500	1420	183,880	5,894	23,483
Year 5	1812	110	12,079	180,140	1420	183,820	5,841	29,324
Year 6	1841	110	12,318	180,000	1424	183,894	5,880	35,204
Year 7	1928	110	12,708	180,000	1417	183,277	5,876	41,080
Year 8	1971	110	13,071	180,000	1407	183,217	5,788	46,868
Year 9	1917	110	13,071	180,000	1407	183,217	5,788	52,656
Year 10	1949	110	13,309	180,000	1397	183,290	5,740	58,444
Year 11	2013	110	13,673	180,000	1387	183,230	5,770	64,232
Year 12	2080	110	14,088	180,000	1377	183,201	5,710	70,020
Year 13	2150	110	14,558	180,000	1367	183,201	5,650	75,810
Year 14	2223	110	15,083	180,000	1357	183,201	5,590	81,600
Year 15	2300	110	15,663	180,000	1347	183,201	5,530	87,390
Year 16	2381	110	16,298	180,000	1337	183,201	5,470	93,180
Year 17	2467	110	16,988	180,000	1327	183,201	5,410	98,970
Year 18	2558	110	17,733	180,000	1317	183,201	5,350	104,760
Year 19	2654	110	18,533	180,000	1307	183,201	5,290	110,550
Year 20	2756	110	19,388	180,000	1297	183,201	5,230	116,340
Year 21	2864	110	20,298	180,000	1287	183,201	5,170	122,130
Year 22	2978	110	21,263	180,000	1277	183,201	5,110	127,920
Year 23	3099	110	22,283	180,000	1267	183,201	5,050	133,710
Year 24	3227	110	23,358	180,000	1257	183,201	5,000	139,500
Year 25	3363	110	24,488	180,000	1247	183,201	4,940	145,290
Year 26	3507	110	25,663	180,000	1237	183,201	4,880	151,080
Year 27	3659	110	26,883	180,000	1227	183,201	4,820	156,870
Year 28	3820	110	28,153	180,000	1217	183,201	4,760	162,660
Year 29	3989	110	29,473	180,000	1207	183,201	4,700	168,450
Year 30	4167	110	30,843	180,000	1197	183,201	4,640	174,240
Year 31	4354	110	32,263	180,000	1187	183,201	4,580	180,030
Year 32	4550	110	33,733	180,000	1177	183,201	4,520	185,820
Year 33	4756	110	35,253	180,000	1167	183,201	4,460	191,610
Year 34	4973	110	36,823	180,000	1157	183,201	4,400	197,400
Year 35	5201	110	38,443	180,000	1147	183,201	4,340	203,190
Year 36	5440	110	40,113	180,000	1137	183,201	4,280	208,980
Year 37	5691	110	41,833	180,000	1127	183,201	4,220	214,770
Year 38	5954	110	43,603	180,000	1117	183,201	4,160	220,560
Year 39	6230	110	45,423	180,000	1107	183,201	4,100	226,350
Year 40	6519	110	47,293	180,000	1097	183,201	4,040	232,140
Total	148,826	1,880	705,728	215,248	55,840	222,337	478,888	

Assumes that the customer pays the minimum credit amount. The customer receives a 10% discount on the utility bill.







**Why Us**

**Why Now**

**Monitoring**

**Public  
Relations**

# The iDEAL Partner

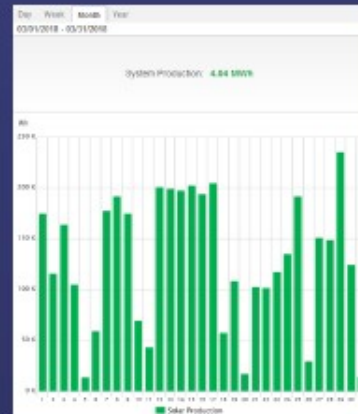
- Fee-title ownership, Day 1
- \$0 Down
- Operated & Maintained by iDEAL during payback period
- Preferred solar vendor for the State of Minnesota
- Vertically integrated, turnkey developer:
  - Development
  - Design
  - Installation
  - Procurement
  - Financing & Tax Equity
  - Operations & Maintenance



# The iDEAL Time

- Tax credits sunset 30% - 10% from 2019 - 2022
- Solar technology is established and standardized, efficient and
- Solar equipment durable and
- A solar array stabilizes and hedges energy costs in the present
- Helps satisfy your City's current environmental initiatives

# System Monitoring



# Public Relations

- Press Release
- REC Ownership
- Ribbon Cutting
- Local Awards



- City-wide sustainability goals
- B3 Benchmarking
- Live monitoring can be displayed and publicized

# THANK YOU FOR YOUR TIME



**iDEAL ENERGIES**  
— A GREEN<sup>2</sup> COMPANY —



**iDEAL**



**Roseville  
Details**



**Economics**



**Your Benefits  
with iDEAL**

**City of Roseville**

**Presented by Rich Ragatz**







## A GREEN<sup>2</sup> OPPORTUNITY

Make Money. Save the Planet.

### Cashflow Summary

Capital Lease - Solar for Minnesota Non-Profits, Schools & Public Organizations

Xcel SolarRewards  
General Service Rate Plan

Rooftop Ballasted Solar Array - 39.96 kWDC SilfabSLG370M Solar Panels @ 10° w/ 40 kWAC SolarEdge





## Solar Array Technical Information

Rooftop Ballasted Solar Array - 39.96 kWDC SiifabSLG370M Solar Panels @ 10° w/ 40 kWAC SolarEdge

Xcel SolarRewards  
General Service Rate Plan

### Solar Array Specification (Typical)

System Size (kW DC)	39.96
Inversion Ratio (DC / AC)	0.999
Maximum AC Output of Inverters (AC KW)	40.0
Maximum Peak AC Output including AC line losses (kW)	38.8
Expected Energy Production (kWh/kW DC)	1175
Expected Energy Production (kWh/Year)	46953

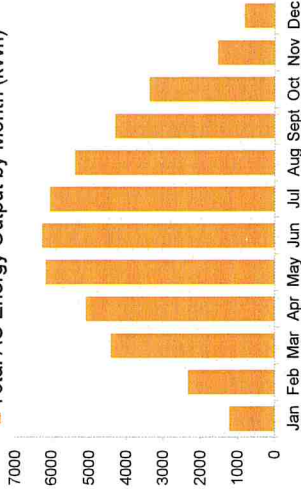
### Information on Expected Solar Array Production (kWh)

Typical Solar Array Energy Production (kWh) using NREL modeling, Helioscope or PV Syst modelling tools with average adjusted historical weather conditions in Minneapolis, MN using TMY3 Weather Data. <http://www.nrel.gov> Estimated performance is based on information including but not limited to the equipment used, the solar array's kW DC size, AC/DC line losses, standard rectangular configuration, and the array pointing due south. Your System's energy production will vary with actual equipment, layout and weather conditions. Expected Energy Production above does not include any annual degradation in solar panel kWDC output.

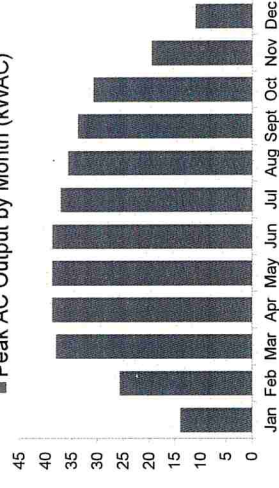
### Expected Energy Production from the Solar Array

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Total AC Energy Output by Month (kWh)	1208	2323	4416	5098	6154	6260	6047	5395	4308	3383	1537	823	46953
	2.6%	4.9%	9.4%	10.9%	13.1%	13.3%	12.9%	11.5%	9.2%	7.2%	3.3%	1.8%	100.0%
Peak AC Output by Month (kWAC)	14	26	38	39	39	39	37	36	34	31	20	11	
	35.8%	66.3%	97.9%	100.0%	100.0%	100.0%	95.9%	92.1%	87.3%	79.6%	50.6%	28.6%	

Energy Output (kWh)  
Total AC Energy Output by Month (kWh)



Energy Output (kW)  
Peak AC Output by Month (kWAC)







## Utility Bill Savings

Net Metering - w/ Energy and Demand Expense Savings

Rooftop Ballasted Solar Array - 39.96 kWDC SilfabSLG370M Solar Panels @ 10° w/ 40 kWAC SolarEdge

Xcel SolarRewards  
General Service Rate Plan

System Sizing & Energy Assumptions	
Solar system size (kW DC)	39.96
Year 1 system production (kWh/year)	46953
Year 1 degradation - reduction in kWh output (% / year)	3.00%
Year 2+ degradation - reduction in kWh output (% / year)	0.50%
Ten year average increase in utility costs (% / year)	4.50%

Energy Expense Savings (kWh) - Energy Reduction	
<b>Utility Billing Plan</b>	<b>General Service Rate Plan A14</b>
Year 1 utility cost (\$ / kWh)	\$0.0703
Year 1 annual energy expense savings (\$)	\$3,300

Demand Expense Savings (kW) - Demand Reduction	
Peak AC output available for reducing demand (kW)	38.80
Estimated AC output that reduces demand charges (%)	25.0%
Year 1 demand reduction realized (kW AC / month)	9.7
Year 1 average demand charge cost (\$ / kW)	\$13.71
Year 1 annual demand charge savings (\$)	\$1,595
Year 1 demand charge savings per kWh (\$ / kWh)	\$0.0340

Combined Energy & Demand Expense Savings	
Year 1 energy charge expense utility bill savings (\$/kWh)	\$0.0703
Year 1 demand charge expense utility bill savings (\$/kWh)	\$0.0340
<b>Year 1 combined utility bill expense savings (\$/kWh)</b>	<b>\$0.1043</b>

For documentation on the above assumptions, please refer to the product information documents and support documents available from your IDEAL salesperson. If you would like to use different assumptions, please ask.

Utility Bill Savings					
Year	Electricity Produced (kWh/year)	Annual Savings		Total Savings	
		Energy Expense Savings (\$/year)	Demand Expense Savings (\$/year)	Annual Savings (\$)	Cumulative Annual Savings (\$)
1	46953	\$ 3,300	\$ 1,595	\$ 4,896	\$ 4,896
2	45544	\$ 3,345	\$ 1,617	\$ 4,963	\$ 9,858
3	45317	\$ 3,479	\$ 1,681	\$ 5,160	\$ 15,018
4	45090	\$ 3,617	\$ 1,748	\$ 5,365	\$ 20,384
5	44865	\$ 3,761	\$ 1,818	\$ 5,579	\$ 25,962
6	44640	\$ 3,910	\$ 1,890	\$ 5,801	\$ 31,763
7	44417	\$ 4,066	\$ 1,965	\$ 6,031	\$ 37,794
8	44195	\$ 4,228	\$ 2,044	\$ 6,271	\$ 44,065
9	43974	\$ 4,396	\$ 2,125	\$ 6,521	\$ 50,586
10	43754	\$ 4,571	\$ 2,209	\$ 6,780	\$ 57,366
11	43535	\$ 4,752	\$ 2,297	\$ 7,050	\$ 64,415
12	43318	\$ 4,941	\$ 2,389	\$ 7,330	\$ 71,746
13	43101	\$ 5,138	\$ 2,484	\$ 7,622	\$ 79,367
14	42886	\$ 5,342	\$ 2,582	\$ 7,925	\$ 87,292
15	42671	\$ 5,555	\$ 2,685	\$ 8,240	\$ 95,532
16	42458	\$ 5,776	\$ 2,792	\$ 8,568	\$ 104,099
17	42246	\$ 6,005	\$ 2,903	\$ 8,908	\$ 113,008
18	42034	\$ 6,244	\$ 3,018	\$ 9,263	\$ 122,271
19	41824	\$ 6,493	\$ 3,139	\$ 9,631	\$ 131,902
20	41615	\$ 6,751	\$ 3,263	\$ 10,014	\$ 141,916
21	41407	\$ 7,019	\$ 3,393	\$ 10,413	\$ 152,329
22	41200	\$ 7,299	\$ 3,528	\$ 10,827	\$ 163,156
23	40994	\$ 7,589	\$ 3,668	\$ 11,257	\$ 174,413
24	40789	\$ 7,891	\$ 3,814	\$ 11,705	\$ 186,118
25	40585	\$ 8,205	\$ 3,966	\$ 12,171	\$ 198,289
26	40382	\$ 8,531	\$ 4,124	\$ 12,655	\$ 210,944
27	40180	\$ 8,870	\$ 4,288	\$ 13,158	\$ 224,102
28	39979	\$ 9,223	\$ 4,458	\$ 13,682	\$ 237,783
29	39779	\$ 9,590	\$ 4,636	\$ 14,226	\$ 252,009
30	39581	\$ 9,971	\$ 4,820	\$ 14,792	\$ 266,801
31	39383	\$ 10,368	\$ 5,012	\$ 15,380	\$ 282,181
32	39186	\$ 10,780	\$ 5,211	\$ 15,992	\$ 298,172
33	38990	\$ 11,209	\$ 5,418	\$ 16,628	\$ 314,800
34	38795	\$ 11,655	\$ 5,634	\$ 17,289	\$ 332,089
35	38601	\$ 12,119	\$ 5,858	\$ 17,977	\$ 350,066
36	38408	\$ 12,601	\$ 6,091	\$ 18,692	\$ 368,757
37	38216	\$ 13,102	\$ 6,333	\$ 19,435	\$ 388,193
38	38025	\$ 13,623	\$ 6,585	\$ 20,208	\$ 408,401
39	37835	\$ 14,165	\$ 6,847	\$ 21,012	\$ 429,413
40	37645	\$ 14,728	\$ 7,120	\$ 21,848	\$ 451,261





## Capital Lease Financing Summary

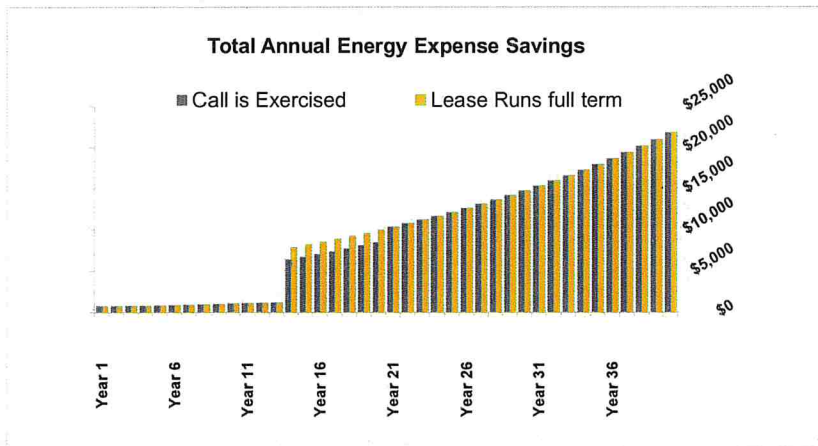
### Utility Bill Expense Savings w/ your Solar Array

Rooftop Ballasted Solar Array - 39.96 kWDC SilfabSLG370M Solar Panels @ 10° w/ 40 kWAC SolarEdge

Xcel SolarRewards  
General Service Rate Plan

Year	Utility Bill Expense Savings	Green <sup>2</sup> Solar Leasing Utility Bill Expense & Savings vs. Utility	
	Utility Bill Power Purchase Expense Reduction	Solar Array Power Purchase Expense	Power Purchase Expense Savings w/ Solar Array
1	\$4,896	\$3,917	\$979
2	\$4,963	\$3,970	\$992
3	\$5,160	\$4,128	\$1,032
4	\$5,365	\$4,292	\$1,073
5	\$5,579	\$4,463	\$1,116
6	\$5,801	\$4,641	\$1,160
7	\$6,031	\$4,825	\$1,206
8	\$6,271	\$5,017	\$1,254
9	\$6,521	\$5,217	\$1,304
10	\$6,780	\$5,424	\$1,356
11	\$7,050	\$5,640	\$1,410
12	\$7,330	\$5,864	\$1,466
13	\$7,622	\$6,097	\$1,524
14	\$7,925		\$7,925
15	\$8,240		\$8,240
16	\$8,568		\$8,568
17	\$8,908		\$8,908
18	\$9,263		\$9,263
19	\$9,631		\$9,631
20	\$10,014		\$10,014
21	\$10,413		\$10,413
22	\$10,827		\$10,827
23	\$11,257		\$11,257
24	\$11,705		\$11,705
25	\$12,171		\$12,171
<b>Total</b>	<b>\$198,289</b>	<b>\$63,495</b>	<b>\$134,794</b>

Assuming that you terminate the **20** year Lease and Power Purchase Agreements early by exercising your Call Option after **year 13** you will receive approximately... **20.0%** Utility Bill Expense Savings during years **1 to 13** Assuming an Average Annual Utility Rate Increase of **4.50%** **Thereafter, you will receive ALL of the ENERGY generated from your solar array for FREE!**



The orange bars extending above the dark blue bars represent the Total Additional Annual Energy Expense Savings Achieved when the Call is used to terminate the Lease & Power Purchase Agreements early





## Capital Lease Outcome Summary (Example)

Lease Runs Full Term, Customer Exercises its Call Option, or Green<sup>2</sup> Solar Leasing Exercises its Put Option

Rooftop Ballasted Solar Array - 39.96 kWDC SilfabSLG370M Solar Panels @ 10° w/ 40 kWAC SolarEdge

Xcel SolarRewards  
General Service Rate Plan

Year	Utility Bill Expense Savings	Utility Bill Expense Green <sup>2</sup> Solar Leasing		
		Lease Runs Full Term	If the Call is Exercised	If the Put is Exercised
	Utility Bill Expense Reduction	Power Purchase Expense	Power Purchase Expense	Power Purchase Expense
1	\$4,896	\$3,917	\$3,917	\$3,917
2	\$4,963	\$3,970	\$3,970	\$3,970
3	\$5,160	\$4,128	\$4,128	\$4,128
4	\$5,365	\$4,292	\$4,292	\$4,292
5	\$5,579	\$4,463	\$4,463	\$4,463
6	\$5,801	\$4,641	\$4,641	\$4,641
7	\$6,031	\$4,825	\$4,825	\$4,825
8	\$6,271	\$5,017	\$5,017	\$5,017
9	\$6,521	\$5,217	\$5,217	\$5,217
10	\$6,780	\$5,424	\$5,424	\$5,424
11	\$7,050	\$5,640	\$5,640	\$5,640
12	\$7,330	\$5,864	\$5,864	\$5,864
13	\$7,622	\$6,097	\$6,097	\$6,097
14	\$7,925	\$1,500	\$4,784	\$1
15	\$8,240	\$1,500		
16	\$8,568	\$1,500		
17	\$8,908	\$1,500		
18	\$9,263	\$1,500		
19	\$9,631	\$1,500		
20	\$10,014	\$1,500		
21	\$10,413			
22	\$10,827			
23	\$11,257			
24	\$11,705			
25	\$12,171			
26	\$12,655			
27	\$13,158			
28	\$13,682			
29	\$14,226			
30	\$14,792			
31	\$15,380			
32	\$15,992			
33	\$16,628			
34	\$17,289			
35	\$17,977			
36	\$18,692			
37	\$19,435			
38	\$20,208			
39	\$21,012			
40	\$21,848			
	\$451,261	\$73,995	\$68,279	\$63,496

Year	Customer's Call Price		
	[Based on Tenant's Estimated Net Cashflow Over the Remaining Lease Term at Discount]		
	Tenant's Power Sales Income	Tenant's Expense	Tenant's Net Cashflow
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14	\$1,500	-\$350	\$1,150
15	\$1,500	-\$350	\$1,150
16	\$1,500	-\$350	\$1,150
17	\$1,500	-\$350	\$1,150
18	\$1,500	-\$350	\$1,150
19	\$1,500	-\$350	\$1,150
20	\$1,500	-\$350	\$1,150
21			
22			
23			
24			
25			
	\$10,500	-\$2,450	\$8,050
	Discount Rate		15%
	<b>Customer's Call Price:</b>		<b>\$4,784</b>
	<b>Tenant's Put Price:</b>		<b>\$1.00</b>

1 **Customer's Call Option** - If Green<sup>2</sup> Solar does not exercise its Put Option, the Customer can require Green<sup>2</sup> Solar to sell its remaining interest to the Customer for the Call Price. (Can be exercised during months 4 to 12 after the Put Date)

2 **Green<sup>2</sup> Solar Leasing's Put Option** - Green<sup>2</sup> Solar Leasing can require the Customer to purchase its remaining interest for the Put Price. (Can be exercised during months 1 to 3 after the Put Date)

3 **If neither party exercises their Put or Call Options** - the Lease & Power Purchase agreements run full-term unless Green<sup>2</sup> Solar Leasing and Customer mutually agree to terminate them arrangement early.

Assumes Call or Put is exercised per the transaction documents.  
This summary is intended only as an example.



**Capital Lease - 40 Year Customer Cash Flow Example - Net Metering w/ Utility Bill Savings**  
 Rooftop Ballasted Solar Array - 39.96 kWDC SilfabSLG370M Solar Panels @ 10° w/ 40 kWAC SolarEdge

Xcel SolarRewards  
 General Service Rate Plan

Year	Customer's Utility Savings and Rent Income			Customer's Expenses			Annual Savings	
	Utility Bill Savings	Rent Revenue	Total Annual Customer Revenue	Energy Payment to GreenSky (subject to sales tax)	Insurance Expense & Utility Fees	Total Annual Expenses	Total Annual Energy Expense Savings	Total Cumulative Annual Energy Expense Savings
Year 1	\$ 4,886	\$ 100	\$ 4,986	\$ (3,917)	\$ (300)	\$ (4,217)	\$ 779	\$ 779
Year 2	\$ 4,963	\$ 100	\$ 5,063	\$ (3,970)	\$ (306)	\$ (4,276)	\$ 786	\$ 1,566
Year 3	\$ 5,180	\$ 100	\$ 5,280	\$ (4,128)	\$ (312)	\$ (4,440)	\$ 820	\$ 2,385
Year 4	\$ 5,385	\$ 100	\$ 5,485	\$ (4,292)	\$ (318)	\$ (4,611)	\$ 855	\$ 3,240
Year 5	\$ 5,579	\$ 100	\$ 5,679	\$ (4,463)	\$ (325)	\$ (4,788)	\$ 891	\$ 4,131
Year 6	\$ 5,801	\$ 100	\$ 5,901	\$ (4,641)	\$ (331)	\$ (4,972)	\$ 929	\$ 5,060
Year 7	\$ 6,031	\$ 100	\$ 6,131	\$ (4,825)	\$ (338)	\$ (5,163)	\$ 968	\$ 6,028
Year 8	\$ 6,271	\$ 100	\$ 6,371	\$ (5,017)	\$ (345)	\$ (5,362)	\$ 1,010	\$ 7,038
Year 9	\$ 6,521	\$ 100	\$ 6,621	\$ (5,217)	\$ (351)	\$ (5,568)	\$ 1,053	\$ 8,090
Year 10	\$ 6,780	\$ 100	\$ 6,880	\$ (5,424)	\$ (358)	\$ (5,782)	\$ 1,097	\$ 9,188
Year 11	\$ 7,050	\$ 100	\$ 7,150	\$ (5,640)	\$ (366)	\$ (6,005)	\$ 1,144	\$ 10,332
Year 12	\$ 7,330	\$ 100	\$ 7,430	\$ (5,864)	\$ (373)	\$ (6,237)	\$ 1,193	\$ 11,525
Year 13	\$ 7,622	\$ 100	\$ 7,722	\$ (6,097)	\$ (380)	\$ (6,478)	\$ 1,244	\$ 12,769
Year 14	\$ 7,925	\$ -	\$ 7,925	\$ -	\$ -	\$ -	\$ 7,925	\$ 20,693
Year 15	\$ 8,240	\$ -	\$ 8,240	\$ -	\$ -	\$ -	\$ 8,240	\$ 28,933
Year 16	\$ 8,568	\$ -	\$ 8,568	\$ -	\$ -	\$ -	\$ 8,568	\$ 37,501
Year 17	\$ 8,908	\$ -	\$ 8,908	\$ -	\$ -	\$ -	\$ 8,908	\$ 46,410
Year 18	\$ 9,263	\$ -	\$ 9,263	\$ -	\$ -	\$ -	\$ 9,263	\$ 55,672
Year 19	\$ 9,631	\$ -	\$ 9,631	\$ -	\$ -	\$ -	\$ 9,631	\$ 65,304
Year 20	\$ 10,014	\$ -	\$ 10,014	\$ -	\$ -	\$ -	\$ 10,014	\$ 75,318
Year 21	\$ 10,413	\$ -	\$ 10,413	\$ -	\$ -	\$ -	\$ 10,413	\$ 85,730
Year 22	\$ 10,827	\$ -	\$ 10,827	\$ -	\$ -	\$ -	\$ 10,827	\$ 96,557
Year 23	\$ 11,257	\$ -	\$ 11,257	\$ -	\$ -	\$ -	\$ 11,257	\$ 107,815
Year 24	\$ 11,705	\$ -	\$ 11,705	\$ -	\$ -	\$ -	\$ 11,705	\$ 119,520
Year 25	\$ 12,171	\$ -	\$ 12,171	\$ -	\$ -	\$ -	\$ 12,171	\$ 131,690
Year 26	\$ 12,655	\$ -	\$ 12,655	\$ -	\$ -	\$ -	\$ 12,655	\$ 144,345
Year 27	\$ 13,158	\$ -	\$ 13,158	\$ -	\$ -	\$ -	\$ 13,158	\$ 157,503
Year 28	\$ 13,682	\$ -	\$ 13,682	\$ -	\$ -	\$ -	\$ 13,682	\$ 171,185
Year 29	\$ 14,226	\$ -	\$ 14,226	\$ -	\$ -	\$ -	\$ 14,226	\$ 185,411
Year 30	\$ 14,792	\$ -	\$ 14,792	\$ -	\$ -	\$ -	\$ 14,792	\$ 200,202
Year 31	\$ 15,380	\$ -	\$ 15,380	\$ -	\$ -	\$ -	\$ 15,380	\$ 215,582
Year 32	\$ 15,992	\$ -	\$ 15,992	\$ -	\$ -	\$ -	\$ 15,992	\$ 231,574
Year 33	\$ 16,628	\$ -	\$ 16,628	\$ -	\$ -	\$ -	\$ 16,628	\$ 248,201
Year 34	\$ 17,289	\$ -	\$ 17,289	\$ -	\$ -	\$ -	\$ 17,289	\$ 265,491
Year 35	\$ 17,977	\$ -	\$ 17,977	\$ -	\$ -	\$ -	\$ 17,977	\$ 283,467
Year 36	\$ 18,692	\$ -	\$ 18,692	\$ -	\$ -	\$ -	\$ 18,692	\$ 302,159
Year 37	\$ 19,435	\$ -	\$ 19,435	\$ -	\$ -	\$ -	\$ 19,435	\$ 321,594
Year 38	\$ 20,208	\$ -	\$ 20,208	\$ -	\$ -	\$ -	\$ 20,208	\$ 341,802
Year 39	\$ 21,012	\$ -	\$ 21,012	\$ -	\$ -	\$ -	\$ 21,012	\$ 362,814
Year 40	\$ 21,848	\$ -	\$ 21,848	\$ -	\$ -	\$ -	\$ 21,848	\$ 384,662
<b>TOTAL</b>	<b>\$ 451,291</b>	<b>\$ 1,300</b>	<b>\$ 452,591</b>	<b>\$ (63,495)</b>	<b>\$ (4,404)</b>	<b>\$ (67,899)</b>	<b>\$ 384,662</b>	<b>\$ 384,662</b>

Assumes Call is exercised per the transaction documents. This Cashflow summary is intended only as an example.



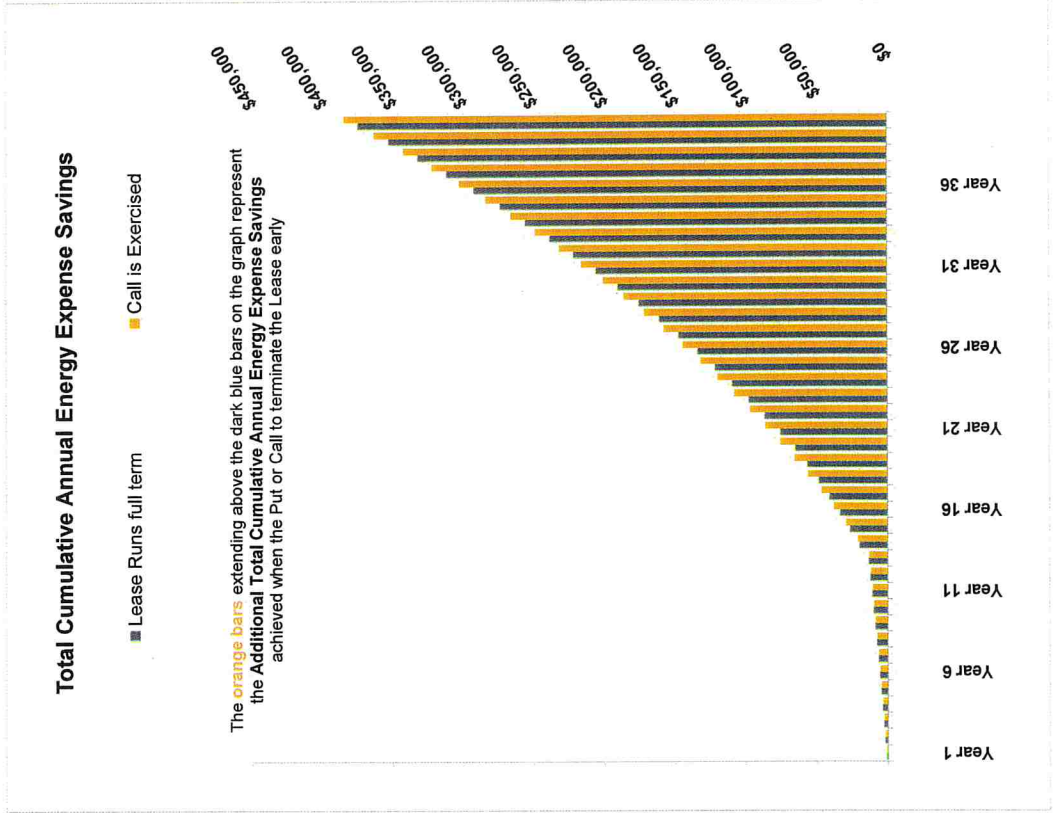
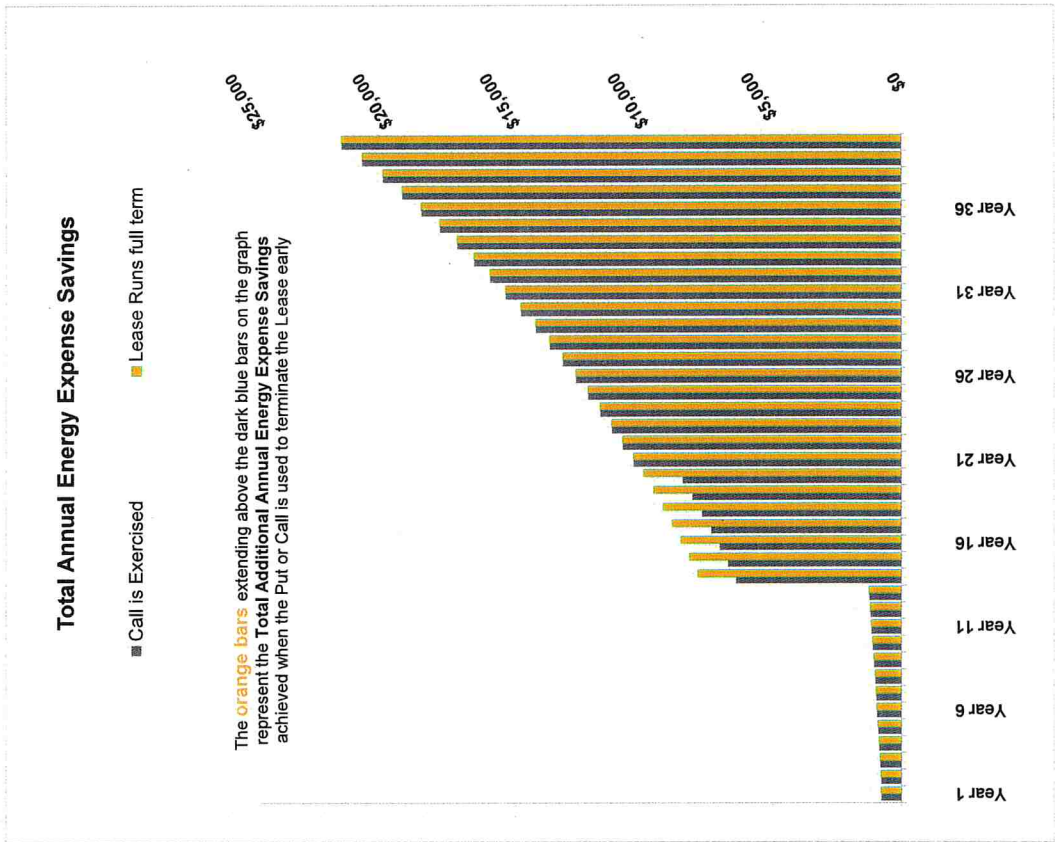


**Capital Lease - 40 Year Customer Cash Flow Example - Net Metering w/ Utility Bill Savings**

Rooftop Ballasted Solar Array - 39.96 kWDC SifabSLG370M Solar Panels @ 10° w/ 40 kWAC SolarEdge

Xcel SolarRewards

General Service Rate Plan





**iDEAL Energies Deliverables - A Turnkey Service**

Rooftop Ballasted Solar Array - 39.96 kWDC SilfabSLG370M Solar Panels @ 10° w/ 40 kWAC SolarEdge

Xcel SolarRewards  
General Service Rate Plan

**Project Task & Deliverables**

- Solar Survey
- Site Electrical Systems Review
- System Layout and Electrical Engineering
- Structural Engineering & Analytical Testing (review of roof / soil adequacy to support the system)
- Rebate Application, Procurement, and Processing Fees, if any
- Utility Interconnection Agreement(s)
- Solar Array Equipment
- Solar Array Installation
- Electrical Connection – connect system to your building's electrical switchgear
- System monitoring equipment and software for web based monitoring
- Building Permit & Inspection
- Electrical Permit & Inspection
- Project Management
- Training
- Start-up
- Solar Array Supporting Documentation
- Federal Tax Credit Documentation
- All Other Required Deliverables

**System Cost** (Paid by Tenant for Customer per Facility Lease) \$ 137,500

<b>Customer's Financial Summary</b>				
	<b>Power Payments</b>	<b>Put/Call</b>	<b>(example)</b>	<b>Total</b>
<b>Call: Exercised by Customer</b>	\$ 63,495	\$ 4,784	\$	<b>68,279</b>
<b>Put: Exercised by Tenant</b>	\$ 63,495	\$ 1	\$	<b>63,496</b>

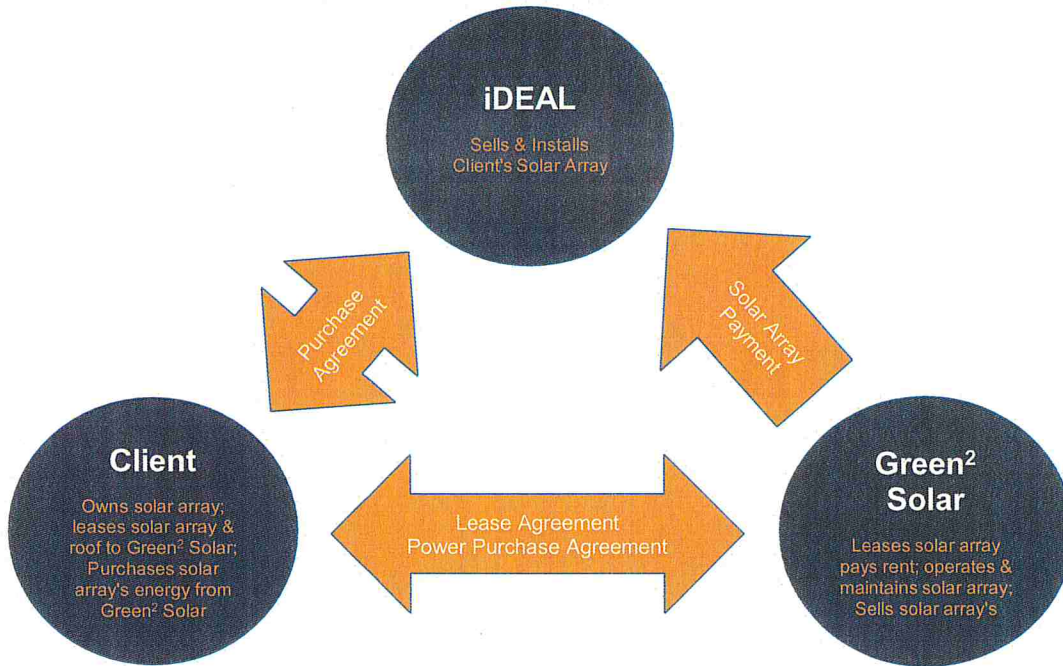


## Capital Lease - How It Works

Rooftop Ballasted Solar Array - 39.96 kWDC SilfabSLG370M Solar Panels @ 10° w/ 40 kWAC SolarEdge

Xcel SolarRewards  
General Service Rate Plan

### Our Capital Lease Program



### Purchase, Lease-back, and Power Purchase Highlights

#### Client

1. Is the Fee Title Owner of the solar array
2. Receives annual rent from Green<sup>2</sup> Solar Leasing
3. Pays Green<sup>2</sup> Solar Leasing for power generated from the solar array
4. Insures the solar array

#### Ownership

Our Client purchases their solar array from Ideal Energies and immediately owns it outright. **(Client is the fee title owner)**

#### Facility Lease

Under the Facility Lease, Green<sup>2</sup> Solar Leasing pays Ideal Energies for the solar array, and becomes the tax owner so they can leverage tax benefits on the Client's behalf. The Facility Lease also assigns any rebates to Green<sup>2</sup> Solar Leasing to help pay for the solar array. Immediately after the purchase, the Client Leases the solar array to Green<sup>2</sup> Solar Leasing for annual lease payments, and Green<sup>2</sup> Solar Leasing operates and maintains it on the Client's behalf.

#### Green<sup>2</sup> Solar Leasing

1. Pays Purchase Price to Ideal Energies for Client
2. Pays annual rent to Client
3. Receives and uses available tax benefits
4. Receives and uses available Rebates
5. Operates and maintains solar array for Client
6. Bills Client for Power generated from the solar array

#### Power Purchase

The Client pays Green<sup>2</sup> Solar Leasing for the energy generated from the solar array at a discount vs. utility rates.

#### Put & Call

If either party elects to exercise their options **[Put Option: Green<sup>2</sup> Solar Leasing requires the Client to purchase Green<sup>2</sup> Solar Leasing's remaining interest for \$1; or Call Option: the Client requires Green<sup>2</sup> Solar Leasing to sell its remaining interest to the Client at Fair Market Value]** the Lease and Power Purchase Agreements terminate, and you will receive **free Energy from your Solar Array thereafter!**



# 40kW Solar Rewards City of Roseville - Fire Department, 2701 Lexington Ave N Roseville MN

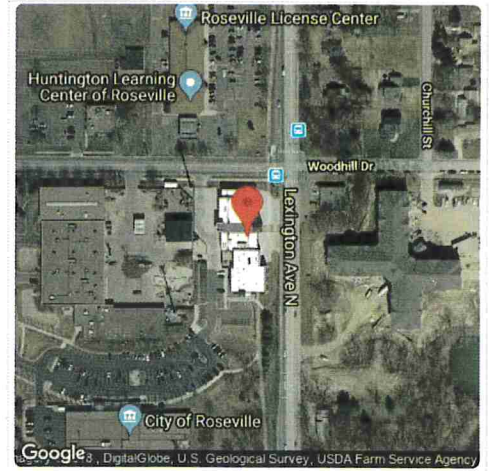
## Report

Project Name	City of Roseville - Fire Department
Project Address	2701 Lexington Ave N Roseville MN
Prepared By	Chris Psihos chris.psihos@idealenergies.com

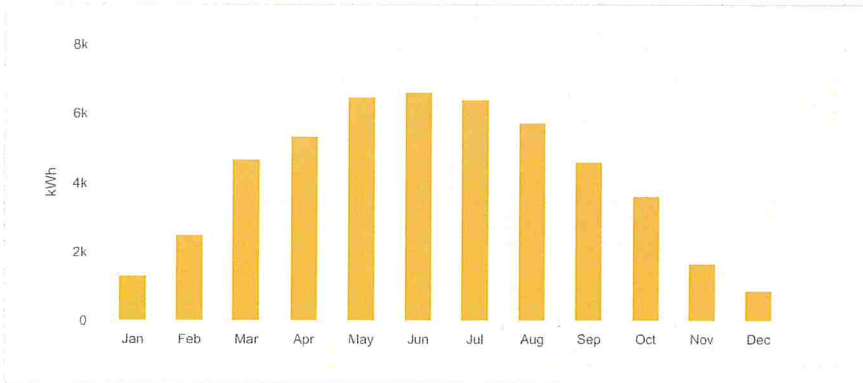
## System Metrics

Design	40kW Solar Rewards
Module DC Nameplate	40.0 kW
Inverter AC Nameplate	40.1 kW Load Ratio: 1.00
Annual Production	50.03 MWh
Performance Ratio	82.2%
kWh/kWp	1,251.9
Weather Dataset	TMY, MINNEAPOLIS-ST PAUL INTL ARP, NSRDB (tmy3, I)
Simulator Version	53a94c7c8c-a0317a9544-615178d6e9-3413761665

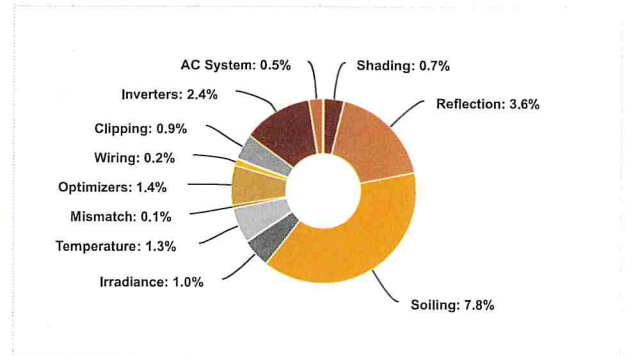
## Project Location



## Monthly Production



## Sources of System Loss



## Annual Production

Description	Output	% Delta
<b>Irradiance (kWh/m²)</b>		
Annual Global Horizontal Irradiance	1,398.8	
POA Irradiance	1,522.3	8.8%
Shaded Irradiance	1,511.5	-0.7%
Irradiance after Reflection	1,456.6	-3.6%
Irradiance after Soiling	1,343.6	-7.8%
<b>Total Collector Irradiance</b>	<b>1,343.7</b>	<b>0.0%</b>
Nameplate	54,161.3	
Output at Irradiance Levels	53,614.5	-1.0%
Output at Cell Temperature Derate	52,938.9	-1.3%
Output After Mismatch	52,880.7	-0.1%
<b>Energy (kWh)</b>		
Optimizer Output	52,140.2	-1.4%
Optimal DC Output	52,016.5	-0.2%
Constrained DC Output	51,533.0	-0.9%
Inverter Output	50,278.3	-2.4%
<b>Energy to Grid</b>	<b>50,026.9</b>	<b>-0.5%</b>
<b>Temperature Metrics</b>		
Avg. Operating Ambient Temp	11.3 °C	
Avg. Operating Cell Temp	17.8 °C	
<b>Simulation Metrics</b>		
Operating Hours	4601	
Solved Hours	4601	

## Condition Set

Description	MINNEAPOLIS-ST PAUL INTL ARP, NSRDB (tmy3, I) 25/50/50/25											
Weather Dataset	TMY, MINNEAPOLIS-ST PAUL INTL ARP, NSRDB (tmy3, I)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type	a	b	Temperature Delta								
	Fixed Tilt	-3.56	-0.075	3°C								
	Flush Mount	-2.81	-0.0455	0°C								
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	50	25	2	2	2	2	2	2	2	2	25	50
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	0% to 1.6%											
AC System Derate	0.50%											
Module Characterizations	Module	Characterization										
	SLG-M 370 (Silfab)	Spec Sheet Characterization, PAN										
Component Characterizations	Device	Characterization										
	SE20KUS (SolarEdge)	Default Characterization										
	P800S (SolarEdge)	Mfg Spec Sheet										

### Components

Component	Name	Count
Inverters	SE20KUS (SolarEdge)	2 (40.1 kW)
Strings	10 AWG (Copper)	3 (411.6 ft)
Optimizers	P800S (SolarEdge)	54 (43.2 kW)
Module	Silfab, SLG-M 370 (370W)	108 (40.0 kW)

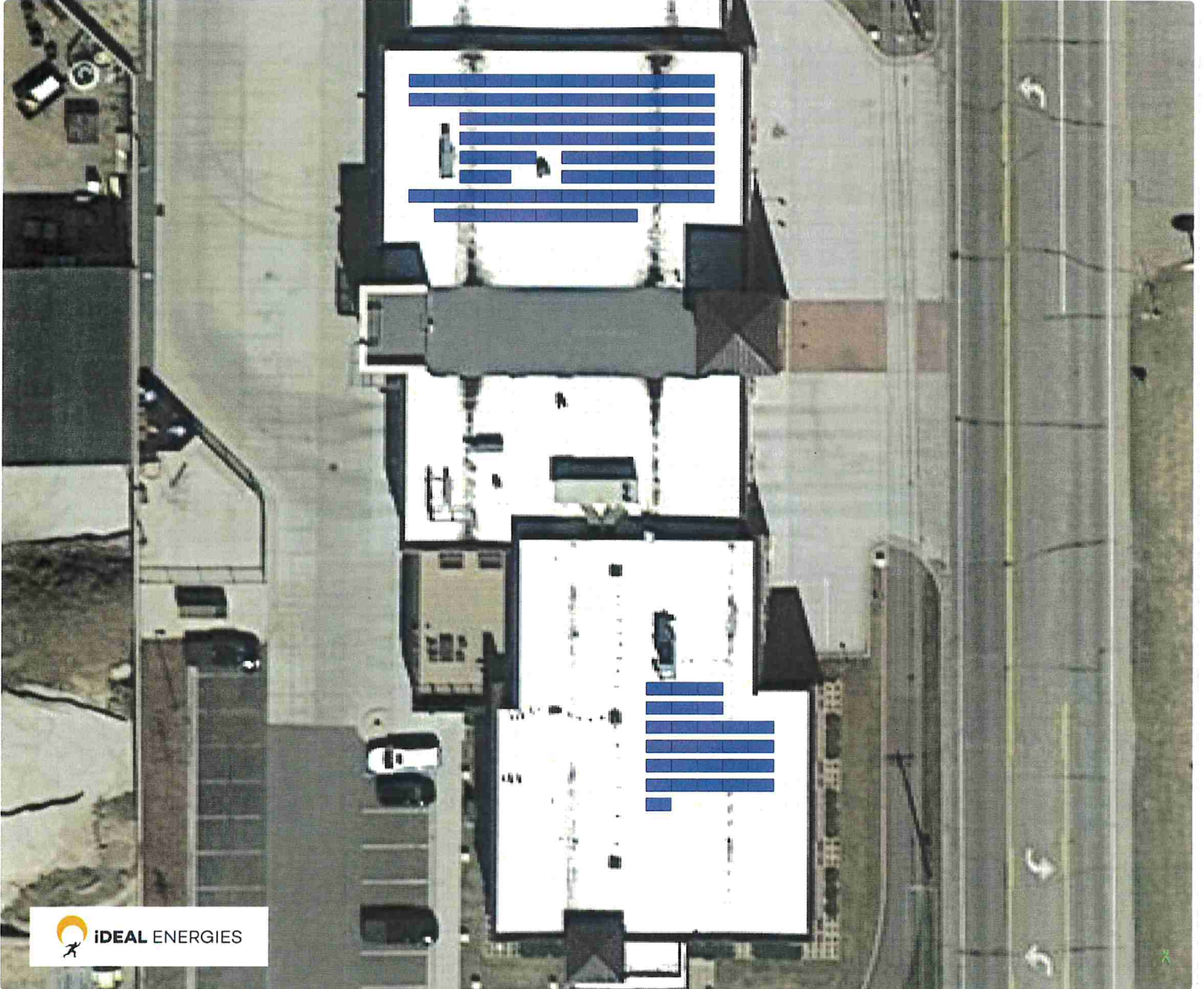
### Wiring Zones

Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	12	13-41	Along Racking

### Field Segments

Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	10°	180°	1.7 ft	1x1	27	27	9.99 kW
Field Segment 2	Fixed Tilt	Landscape (Horizontal)	10°	180°	1.7 ft	1x1	81	81	30.0 kW

### Detailed Layout







Bill History Report  
Electric Service Detail

Customer Name: FIRE ROSEVILLE CITY OF	Utility Type: Electric	Address Line1: 2701 LEXINGTON AVE N
Account Number: 51-5185464-5	Service/Register Number: 001 /	City, State, Zip: ROSEVILLE 55113-2007
Report Create Date: June 04, 2018	Meter Number: 000003588476	
	Multiplier: 300	

Premise Number: 303385382

Premise Description: FIRE DEPT

Tariff Description: General Service

Read date	Days	On-Pk Usage (kWh)	Off-Pk Usage (kWh)	Total Usage (kWh)	Avg Usage/Day (kWh)	Billed Demand (kW) On Peak	Billed Demand (kW) Off Peak	Actual Demand (kW) On Peak	Adjusted Demand (kW) On Peak	Power Factor (kV)	Load Factor (%)	Usage Billed (\$)	Demand Billed (\$)	Other Charges (\$)	EG&FCM (\$)	Electric Service Sub-Total (\$)	Tax (\$)	Electric Invoice Total (\$)	Invoice Date
05/02/18	29	0	0	27,000	931	78	0	78	78	0.93	49.73	944.46	835.38	225.98	667.97	2,673.79	0.00	2,673.79	05/21/18
04/03/18	29	0	0	30,900	1,065.5	78	0	78	78	0.92	58.92	1,080.98	835.38	200.44	764.93	2,881.63	0.00	2,881.63	04/20/18
03/05/18	30	0	0	39,600	1,320	99	0	99	99	0.92	55.66	1,385.21	1,080.29	257.36	1,081.67	3,784.53	0.00	3,784.53	03/20/18
02/03/18	31	0	0	43,500	1,403.2	90	0	90	90	0.92	64.96	1,521.63	963.90	160.43	1,196.02	3,841.96	0.00	3,841.96	02/20/18
01/03/18	32	0	0	45,900	1,434.4	87	0	87	87	0.92	68.7	1,605.58	931.77	126.17	1,156.00	3,819.52	0.00	3,819.52	01/22/18
12/02/17	33	0	0	37,200	1,127.3	81	0	81	81	0.93	57.99	1,301.26	867.51	205.51	936.40	3,310.68	0.00	3,310.68	12/20/17
10/30/17	30	0	0	23,100	770	75	0	75	75	0.94	42.78	808.04	803.25	180.05	558.56	2,349.90	0.00	2,349.90	11/20/17
09/30/17	31	0	0	21,900	706.5	57	0	57	57	0.94	51.64	701.02	801.99	282.62	507.00	2,292.63	0.00	2,292.63	10/20/17
08/30/17	29	0	0	21,300	734.5	54	0	54	54	0.93	56.67	681.81	759.78	266.49	474.14	2,182.22	0.00	2,182.22	09/20/17
08/01/17	31	0	0	26,100	841.9	57	0	57	57	0.94	61.55	835.46	801.99	268.36	685.81	2,591.62	0.00	2,591.62	08/21/17
07/01/17	28	0	0	21,300	760.7	54	0	54	54	0.93	58.7	681.81	759.78	265.04	575.27	2,271.90	0.00	2,271.90	07/20/17
06/03/17	32	0	0	21,600	675	63	0	63	63	0.94	44.64	691.42	651.77	274.59	604.41	2,222.19	0.00	2,222.19	06/20/17
05/02/17	29	0	0	20,100	693.1	84	0	84	84	0.94	34.38	643.40	836.54	285.47	542.70	2,318.21	0.00	2,318.21	05/22/17
	394			379,500								12,881.98	10,909.43	2,998.51	9,750.88	36,540.80	0.00	36,540.80	

\$ 0.0963 per kWh

\* Denotes that billing history has been rolled up to next billed invoice

Confidential Information



## A GREEN<sup>2</sup> OPPORTUNITY

Make Money. Save the Planet.

### Cashflow Summary

[Roseville - Public Works]

Capital Lease w/ PPA - Solar for Minnesota Schools & Public Organizations

Xcel Photovoltaic Credit Rider Tariff  
General Service Rate Plan

Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline 350W Solar Panels @ 10° w/ 66.6 kWAC SolarEdge





## Solar Array Technical Information

Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline350W Solar Panels @ 10° w/ 66.6 kWAC SolarEdge

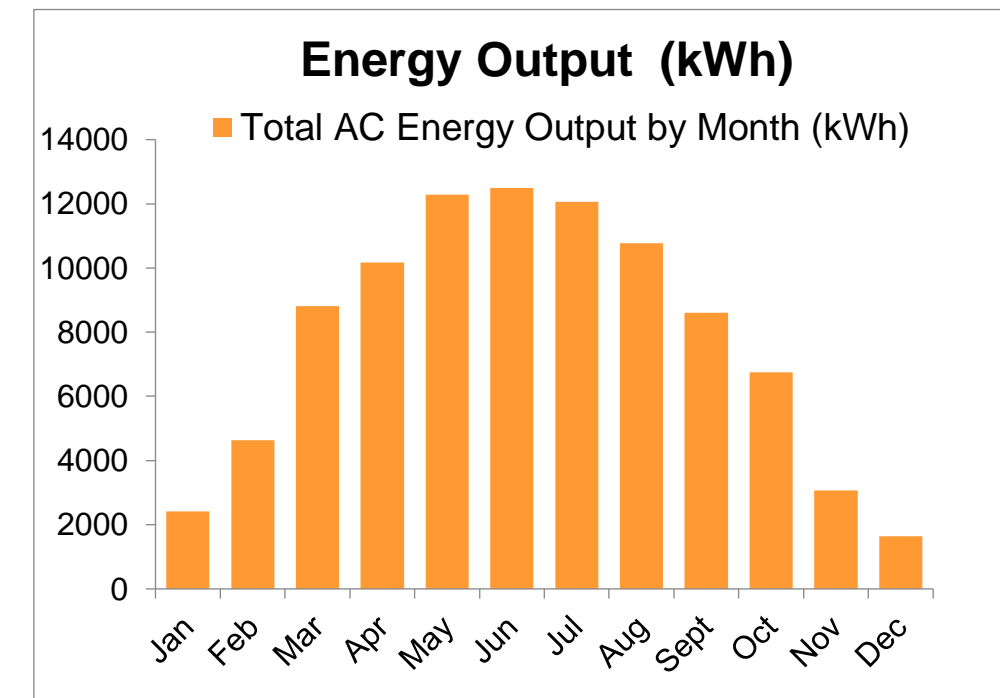
Xcel Photovoltaic Credit Rider Tariff  
General Service Rate Plan

### Solar Array Specification (Typical)

System Size (kW DC)	83.30
Inversion Ratio (DC / AC)	1.250
Maximum AC Output of Inverters (AC KW)	66.6
Maximum Peak AC Output including AC line losses (kW)	64.6
Expected Energy Production (kWh/kW DC)	1125
Expected Energy Production (kWh/Year)	93,713

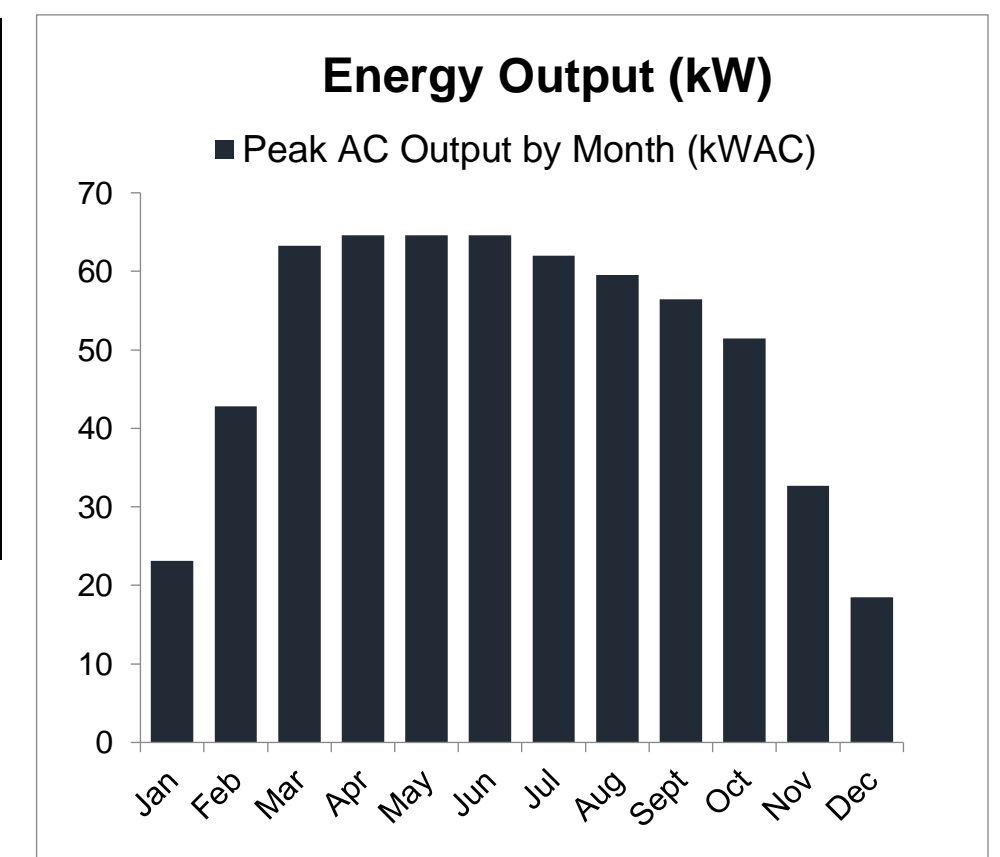
#### Information on Expected Solar Array Production (kWh)

Typical Solar Array Energy Production (kWh) using NREL modeling, Helioscope or PV Syst modelling tools with average adjusted historical weather conditions in Minneapolis, MN using TMY3 Weather Data. <http://www.nrel.gov> Estimated performance is based on information including but not limited to the equipment used, the solar array's kW DC size, AC/DC line losses, standard rectangular configuration, and the array pointing due south. Your System's energy production will vary with actual equipment, layout and weather conditions. Expected Energy Production above does not include any annual degradation in solar panel kWDC output.



#### Expected Energy Production from the Solar Array

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
<b>Total AC Energy Output by Month (kWh)</b>	2410	4637	8815	10175	12283	12494	12070	10769	8598	6752	3068	1642	93713
	2.6%	4.9%	9.4%	10.9%	13.1%	13.3%	12.9%	11.5%	9.2%	7.2%	3.3%	1.8%	100.0%
<b>Peak AC Output by Month (kWAC)</b>	23	43	63	65	65	65	62	60	56	51	33	18	
	35.8%	66.3%	97.9%	100.0%	100.0%	100.0%	95.9%	92.1%	87.3%	79.6%	50.6%	28.6%	







## Utility Bill Savings

### Net Metering w/ Solar Photovoltaic Demand Credit Rider Tariff

Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline350W Solar Panels @ 10° w/ 66.6 kWAC SolarEdge

System Sizing & Energy Assumptions	
Energy System Size (kW DC)	<b>83.30</b>
Energy System Production (kWh from 1 to 7 PM)	48.00%
Year 1 degradation - reduction in kWh output (%/year)	3.00%
Year 2+ degradation - reduction in kWh output (%/year)	0.50%
Ten year average increase in utility costs (%/year)	3.30%

Energy Expense - Savings (kWh)	
<b>Utility Billing Plan</b>	<b>General Service Rate Plan</b>
Year 1 utility cost (\$ / kWh)	\$0.0736
Year 1 annual energy expense savings (\$)	<b>\$6,896</b>

Demand Expense - Savings (kW)	
Year 1 maximum instantaneous production (kW AC)	64.6
Estimated % realized on utility bill to reduce demand charges	12.8%
Year 1 available production to reduce demand (kW AC)	8.3
Year 1 average demand charge cost (\$/kW)	\$14.85
Equivalent demand charge savings - Year 1	<b>\$1,474</b>
Equivalent demand charge savings per kWh (\$/kWh)	\$0.0157

2018 PV Credit Rider - Savings (kWh)	
Estimated Year 1 energy production: hours 1 to 7PM (kWh)	44982
Photovoltaic Standby Service Rider Credit (\$ / kWh)	\$0.07139
Annual Savings (\$/year)	<b>\$3,211</b>
Equivalent savings per kWh generated from the solar array	\$0.0343

Future Replacement PV Credit Rider - Savings (kWh)	
Estimated Year 7 energy production: hours 1 to 7PM (kWh)	42553
Photovoltaic Standby Service Rider Credit (\$ / kWh)	\$0.07139
Annual Savings (\$/year)	<b>\$3,038</b>
Equivalent savings per kWh generated from the solar array	\$0.0343

Combined Total Savings (kWh & kW)	
Year 1 Energy Expense Savings (\$/kWh)	\$0.0736
Year 1 Demand Expense Savings (\$/kWh)	\$0.0157
Year 1 to 6 2018 PV Credit Rider Savings (\$/kWh)	\$0.0343
Year 7+ PV Credit Rider Replacement savings (\$/kWh)	<u>\$0.0000</u>
Combined savings / kWh generated from the solar array	<b>\$0.1236</b>

Utility Bill Savings							
Year	Electricity Produced (kWh/year)	Annual Savings				Total Savings	
		Energy Expense Savings (\$/year)	Demand Expense Savings (\$/year)	PV Credit [Existing] (\$/year)	PV Credit [Future Program] (\$/year)	Annual Savings (\$)	Cumulative Annual Savings (\$)
1	93713	\$ 6,896	\$ 1,474	\$ 3,211	\$ -	\$ 11,581	\$ 11,581
2	90901	\$ 6,910	\$ 1,477	\$ 3,115	\$ -	\$ 11,501	\$ 23,082
3	90447	\$ 7,102	\$ 1,518	\$ 3,099	\$ -	\$ 11,719	\$ 34,801
4	89994	\$ 7,300	\$ 1,560	\$ 3,084	\$ -	\$ 11,944	\$ 46,745
5	89544	\$ 7,503	\$ 1,603	\$ 3,068	\$ -	\$ 12,175	\$ 58,920
6	89097	\$ 7,712	\$ 1,648	\$ 3,053	\$ -	\$ 12,413	\$ 71,332
7	88651	\$ 7,927	\$ 1,694	\$ -	\$ 3,038	\$ 12,658	\$ 83,991
8	88208	\$ 8,147	\$ 1,741	\$ -	\$ 3,023	\$ 12,911	\$ 96,901
9	87767	\$ 8,374	\$ 1,789	\$ -	\$ 3,008	\$ 13,171	\$ 110,072
10	87328	\$ 8,607	\$ 1,839	\$ -	\$ 2,992	\$ 13,439	\$ 123,511
11	86891	\$ 8,847	\$ 1,890	\$ -	\$ 2,978	\$ 13,715	\$ 137,225
12	86457	\$ 9,093	\$ 1,943	\$ -	\$ 2,963	\$ 13,999	\$ 151,224
13	86025	\$ 9,346	\$ 1,997	\$ -	\$ 2,948	\$ 14,291	\$ 165,515
14	85595	\$ 9,606	\$ 2,053	\$ -	\$ 2,933	\$ 14,592	\$ 180,107
15	85167	\$ 9,874	\$ 2,110	\$ -	\$ 2,918	\$ 14,902	\$ 195,008
16	84741	\$ 10,148	\$ 2,169	\$ -	\$ 2,904	\$ 15,221	\$ 210,229
17	84317	\$ 10,431	\$ 2,229	\$ -	\$ 2,889	\$ 15,549	\$ 225,778
18	83895	\$ 10,721	\$ 2,291	\$ -	\$ 2,875	\$ 15,887	\$ 241,665
19	83476	\$ 11,020	\$ 2,355	\$ -	\$ 2,860	\$ 16,235	\$ 257,900
20	83059	\$ 11,326	\$ 2,420	\$ -	\$ 2,846	\$ 16,593	\$ 274,493
21	82643	\$ 11,642	\$ 2,488	\$ -	\$ 2,832	\$ 16,961	\$ 291,454
22	82230	\$ 11,966	\$ 2,557	\$ -	\$ 2,818	\$ 17,340	\$ 308,794
23	81819	\$ 12,299	\$ 2,628	\$ -	\$ 2,804	\$ 17,730	\$ 326,524
24	81410	\$ 12,641	\$ 2,701	\$ -	\$ 2,790	\$ 18,132	\$ 344,656
25	81003	\$ 12,993	\$ 2,776	\$ -	\$ 2,776	\$ 18,545	\$ 363,201
26	80598	\$ 13,355	\$ 2,854	\$ -	\$ 2,762	\$ 18,970	\$ 382,171
27	80195	\$ 13,726	\$ 2,933	\$ -	\$ 2,748	\$ 19,407	\$ 401,579
28	79794	\$ 14,108	\$ 3,015	\$ -	\$ 2,734	\$ 19,857	\$ 421,436
29	79395	\$ 14,501	\$ 3,099	\$ -	\$ 2,721	\$ 20,320	\$ 441,756
30	78998	\$ 14,905	\$ 3,185	\$ -	\$ 2,707	\$ 20,797	\$ 462,553
31	78603	\$ 15,320	\$ 3,273	\$ -	\$ 2,694	\$ 21,287	\$ 483,839
32	78210	\$ 15,746	\$ 3,365	\$ -	\$ 2,680	\$ 21,791	\$ 505,630
33	77819	\$ 16,184	\$ 3,458	\$ -	\$ 2,667	\$ 22,309	\$ 527,939
34	77430	\$ 16,635	\$ 3,555	\$ -	\$ 2,653	\$ 22,843	\$ 550,782
35	77043	\$ 17,098	\$ 3,653	\$ -	\$ 2,640	\$ 23,391	\$ 574,173
36	76657	\$ 17,574	\$ 3,755	\$ -	\$ 2,627	\$ 23,956	\$ 598,129
37	76274	\$ 18,063	\$ 3,860	\$ -	\$ 2,614	\$ 24,536	\$ 622,665
38	75893	\$ 18,566	\$ 3,967	\$ -	\$ 2,601	\$ 25,133	\$ 647,798
39	75513	\$ 19,082	\$ 4,078	\$ -	\$ 2,588	\$ 25,748	\$ 673,546
40	75136	\$ 19,614	\$ 4,191	\$ -	\$ 2,575	\$ 26,379	\$ 699,925

Replacement PV Credit Rider represents replacement Tariff for the existing Tariff as reflected in the Tariff Document filed with the Public Utilities Commission.  
Copy of Tariff available upon request. Expected, but not guaranteed.



**Financing Summary**  
**Utility Bill Expense Savings w/ your Solar Array**

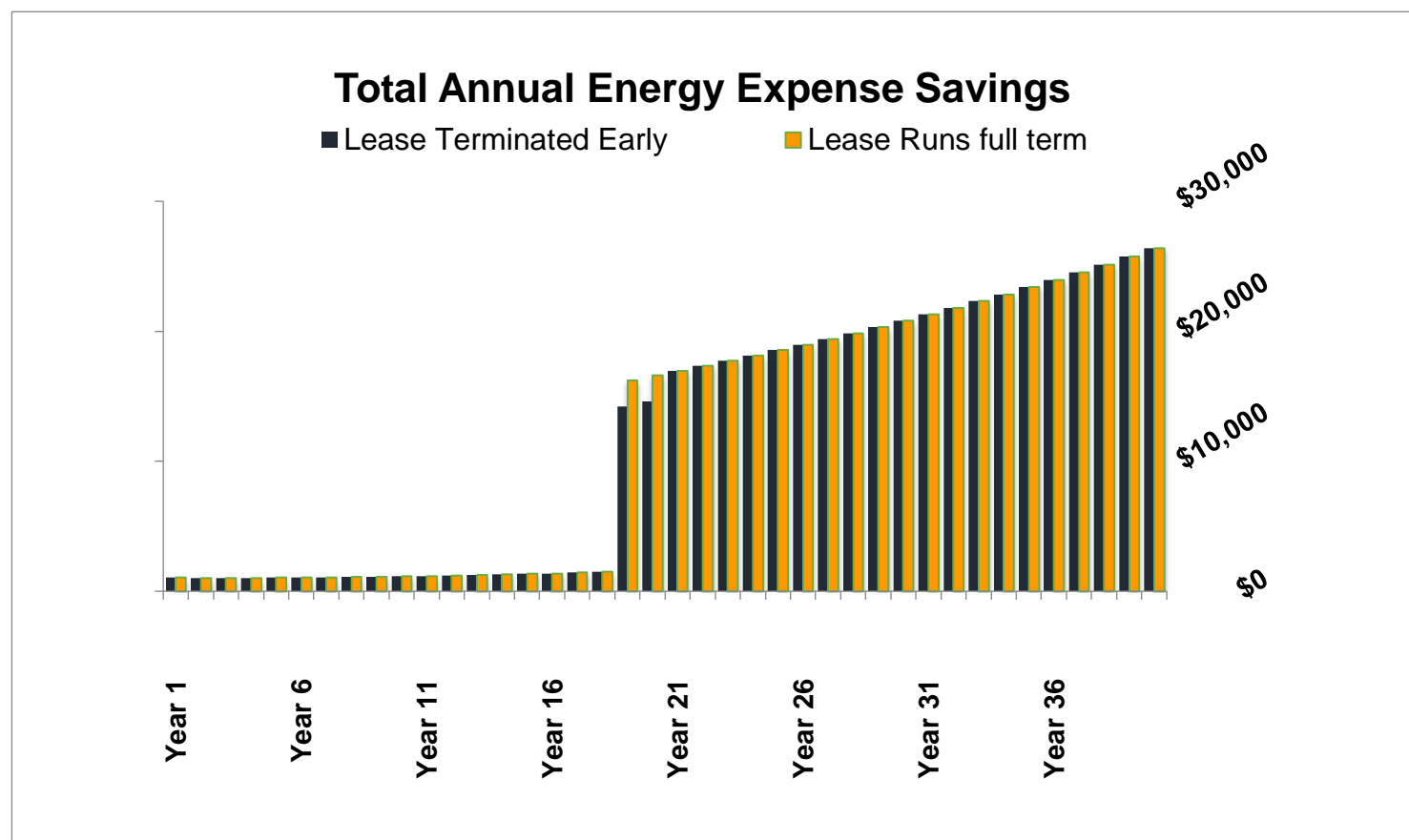
Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline350W Solar Panels @ 10° w/ 66.6 kWAC SolarEdge

Xcel Photovoltaic Credit Rider Tariff

General Service Rate Plan

Year	Utility Bill Expense Savings	Green <sup>2</sup> Solar Leasing Utility Bill Expense & Savings vs. Utility	
	Utility Bill Power Purchase Expense Reduction	Solar Array Power Purchase Expense	Power Purchase Expense Savings w/ Solar Array
1	\$11,581	\$10,215	\$1,366
2	\$11,501	\$10,156	\$1,345
3	\$11,719	\$10,358	\$1,361
4	\$11,944	\$10,564	\$1,380
5	\$12,175	\$10,774	\$1,401
6	\$12,413	\$10,988	\$1,425
7	\$12,658	\$11,206	\$1,452
8	\$12,911	\$11,429	\$1,482
9	\$13,171	\$11,656	\$1,515
10	\$13,439	\$11,888	\$1,551
11	\$13,715	\$12,124	\$1,591
12	\$13,999	\$12,365	\$1,634
13	\$14,291	\$12,611	\$1,680
14	\$14,592	\$12,861	\$1,731
15	\$14,902	\$13,117	\$1,785
16	\$15,221	\$13,378	\$1,843
17	\$15,549	\$13,643	\$1,906
18	\$15,887	\$13,915	\$1,972
19	\$16,235		\$16,235
20	\$16,593		\$16,593
21	\$16,961		\$16,961
22	\$17,340		\$17,340
23	\$17,730		\$17,730
24	\$18,132		\$18,132
25	\$18,545		\$18,545
<b>Total</b>	<b>\$363,201</b>	<b>\$213,245</b>	<b>\$149,957</b>

Assuming that you terminate the **20** year Lease and Power Purchase Agreements early by exercising your Call Option after **year 18** you will receive approximately... **11.7%** Utility Bill Expense Savings during years **1 to 18** With a Year 1 PPA Rate and Annual Escalator of **\$0.1090** **2.50%** Thereafter, you will receive ALL of the ENERGY generated from your solar array for FREE!



The orange bars extending above the dark blue bars represent the Total Additional Annual Energy Expense Savings Achieved when the Call is used to terminate the Lease & Power Purchase Agreements early





## Maximizing our Customer's Financial Outcome using the Put or Call (Example)

Lease Runs Full Term; Green<sup>2</sup> Solar Leasing or Customer Exercise their Put / Call Options

Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline350W Solar Panels @ 10° w/ 66.6 kWAC SolarEdge

Xcel Photovoltaic Credit Rider Tariff  
General Service Rate Plan

Customer's Expense Savings Achieved using the Put or Call				
Year	Utility Bill Expense Savings w/ Solar Array	G2SL Exercises its Put	Customer Exercises its Call	Lease Runs Full Term
1	\$11,581	\$10,215	\$10,215	\$10,215
2	\$11,501	\$10,156	\$10,156	\$10,156
3	\$11,719	\$10,358	\$10,358	\$10,358
4	\$11,944	\$10,564	\$10,564	\$10,564
5	\$12,175	\$10,774	\$10,774	\$10,774
6	\$12,413	\$10,988	\$10,988	\$10,988
7	\$12,658	\$11,206	\$11,206	\$11,206
8	\$12,911	\$11,429	\$11,429	\$11,429
9	\$13,171	\$11,656	\$11,656	\$11,656
10	\$13,439	\$11,888	\$11,888	\$11,888
11	\$13,715	\$12,124	\$12,124	\$12,124
12	\$13,999	\$12,365	\$12,365	\$12,365
13	\$14,291	\$12,611	\$12,611	\$12,611
14	\$14,592	\$12,861	\$12,861	\$12,861
15	\$14,902	\$13,117	\$13,117	\$13,117
16	\$15,221	\$13,378	\$13,378	\$13,378
17	\$15,549	\$13,643	\$13,643	\$13,643
18	\$15,887	\$13,915	\$13,915	\$13,915
19	\$16,235	\$1	\$1,740	\$2,000
20	\$16,593	\$0	\$0	\$2,000
21	\$16,961	\$0	\$0	\$0
22	\$17,340	\$0	\$0	\$0
23	\$17,730	\$0	\$0	\$0
24	\$18,132	\$0	\$0	\$0
25	\$18,545	\$0	\$0	\$0
26	\$18,970	\$0	\$0	
27	\$19,407	\$0	\$0	
28	\$19,857	\$0	\$0	
29	\$20,320	\$0	\$0	
30	\$20,797	\$0	\$0	
31	\$21,287	\$0	\$0	
32	\$21,791	\$0	\$0	
33	\$22,309	\$0	\$0	
34	\$22,843	\$0	\$0	
35	\$23,391	\$0	\$0	
36	\$23,956	\$0	\$0	
37	\$24,536	\$0	\$0	
38	\$25,133	\$0	\$0	
39	\$25,748	\$0	\$0	
40	\$26,379	\$0	\$0	
	<b>\$699,925</b>	<b>\$213,246</b>	<b>\$214,984</b>	<b>\$217,245</b>

G <sup>2</sup> SL's Put Option Price @ Fixed Amount	
Put Price (see note 1)	\$1

Year	Customer's Call Option Price @ Fair Market Value (FMV)		
	G <sup>2</sup> SL's Power Sales Income	G <sup>2</sup> SL's Rent & Operating Expense	G <sup>2</sup> SL's Net Cashflow
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19	\$2,000	-\$930	\$1,070
20	\$2,000	-\$930	\$1,070
21			
22			
23			
24			
25			
	\$4,000	-\$1,860	\$2,140
	Net Cashflow @ a Discount Rate of		<b>15%</b>
	Call Price (see note 2)		<b>\$1,740</b>

**note 1 Green<sup>2</sup> Solar Leasing's Put Option** - During months 1 to 3 after the Put Date, G<sup>2</sup>SL can require the Customer to purchase its remaining interest in the Lease and Power Purchase Agreements through the full term for the Put Price. The Put Price can be for a fixed value and is provided above.

**note 2 Customer's Call Option** - If G<sup>2</sup>SL does not exercise its Put Option during months 1 to 3, during months 4 to 12, the Customer can require G<sup>2</sup>SL to sell its remaining interest in the Lease and Power Purchase Agreements for the Call Price. The Call Price must be for fair market value (FMV). Since the Customer owns the Solar Array day one, G<sup>2</sup>SL's entire interest in the transaction is the its net cashflow (power purchase income, less rent and operating expenses) remaining under the Lease and Power Purchase Agreements if they ran full term. To determine FMV, we apply a discount, and our Put and Call Agreement states this explicitly.

**note 3 If neither party exercises their Put or Call Options** - the Lease & Power Purchase Agreements run full-term unless G<sup>2</sup>SL and the Customer mutually agree to terminate them early.



## 40 Year Customer Cash Flow Example - Net Metering w/ Utility Bill Savings

Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline350W Solar Panels @ 10° w/ 66.6 kWAC SolarEdge

Xcel Photovoltaic Credit Rider Tariff

General Service Rate Plan

Year	Customer's Utility Savings and Rent Income			Customer's Expenses			Annual Savings	
	Utility Bill Savings	Rent Revenue	Total Annual Customer Revenue	Energy Payment to GreenSky (subject to sales tax)	Insurance Expense & Utility Fees	Total Annual Expenses	Total Annual Energy Expense Savings	Total Cumulative Annual Energy Expense Savings
Year 1	\$ 11,581	\$ 100	\$ 11,681	\$ (10,215)	\$ (420)	\$ (10,635)	\$ 1,046	\$ 1,046
Year 2	\$ 11,501	\$ 100	\$ 11,601	\$ (10,156)	\$ (428)	\$ (10,584)	\$ 1,017	\$ 2,063
Year 3	\$ 11,719	\$ 100	\$ 11,819	\$ (10,358)	\$ (437)	\$ (10,795)	\$ 1,024	\$ 3,087
Year 4	\$ 11,944	\$ 100	\$ 12,044	\$ (10,564)	\$ (446)	\$ (11,009)	\$ 1,034	\$ 4,122
Year 5	\$ 12,175	\$ 100	\$ 12,275	\$ (10,774)	\$ (455)	\$ (11,228)	\$ 1,047	\$ 5,168
Year 6	\$ 12,413	\$ 100	\$ 12,513	\$ (10,988)	\$ (464)	\$ (11,451)	\$ 1,062	\$ 6,230
Year 7	\$ 12,658	\$ 100	\$ 12,758	\$ (11,206)	\$ (473)	\$ (11,679)	\$ 1,079	\$ 7,309
Year 8	\$ 12,911	\$ 100	\$ 13,011	\$ (11,429)	\$ (482)	\$ (11,911)	\$ 1,100	\$ 8,408
Year 9	\$ 13,171	\$ 100	\$ 13,271	\$ (11,656)	\$ (492)	\$ (12,148)	\$ 1,123	\$ 9,531
Year 10	\$ 13,439	\$ 100	\$ 13,539	\$ (11,888)	\$ (502)	\$ (12,390)	\$ 1,149	\$ 10,680
Year 11	\$ 13,715	\$ 100	\$ 13,815	\$ (12,124)	\$ (512)	\$ (12,636)	\$ 1,179	\$ 11,859
Year 12	\$ 13,999	\$ 100	\$ 14,099	\$ (12,365)	\$ (522)	\$ (12,887)	\$ 1,212	\$ 13,071
Year 13	\$ 14,291	\$ 100	\$ 14,391	\$ (12,611)	\$ (533)	\$ (13,143)	\$ 1,248	\$ 14,318
Year 14	\$ 14,592	\$ 100	\$ 14,692	\$ (12,861)	\$ (543)	\$ (13,404)	\$ 1,287	\$ 15,606
Year 15	\$ 14,902	\$ 100	\$ 15,002	\$ (13,117)	\$ (554)	\$ (13,671)	\$ 1,331	\$ 16,937
Year 16	\$ 15,221	\$ 100	\$ 15,321	\$ (13,378)	\$ (565)	\$ (13,943)	\$ 1,378	\$ 18,315
Year 17	\$ 15,549	\$ 100	\$ 15,649	\$ (13,643)	\$ (576)	\$ (14,220)	\$ 1,429	\$ 19,744
Year 18	\$ 15,887	\$ 100	\$ 15,987	\$ (13,915)	\$ (588)	\$ (14,503)	\$ 1,484	\$ 21,228
Year 19	\$ 16,235	\$ -	\$ 16,235	\$ -	\$ -	\$ -	\$ 16,235	\$ 37,463
Year 20	\$ 16,593	\$ -	\$ 16,593	\$ -	\$ -	\$ -	\$ 16,593	\$ 54,056
Year 21	\$ 16,961	\$ -	\$ 16,961	\$ -	\$ -	\$ -	\$ 16,961	\$ 71,017
Year 22	\$ 17,340	\$ -	\$ 17,340	\$ -	\$ -	\$ -	\$ 17,340	\$ 88,357
Year 23	\$ 17,730	\$ -	\$ 17,730	\$ -	\$ -	\$ -	\$ 17,730	\$ 106,087
Year 24	\$ 18,132	\$ -	\$ 18,132	\$ -	\$ -	\$ -	\$ 18,132	\$ 124,219
Year 25	\$ 18,545	\$ -	\$ 18,545	\$ -	\$ -	\$ -	\$ 18,545	\$ 142,764
Year 26	\$ 18,970	\$ -	\$ 18,970	\$ -	\$ -	\$ -	\$ 18,970	\$ 161,734
Year 27	\$ 19,407	\$ -	\$ 19,407	\$ -	\$ -	\$ -	\$ 19,407	\$ 181,142
Year 28	\$ 19,857	\$ -	\$ 19,857	\$ -	\$ -	\$ -	\$ 19,857	\$ 200,999
Year 29	\$ 20,320	\$ -	\$ 20,320	\$ -	\$ -	\$ -	\$ 20,320	\$ 221,319
Year 30	\$ 20,797	\$ -	\$ 20,797	\$ -	\$ -	\$ -	\$ 20,797	\$ 242,116
Year 31	\$ 21,287	\$ -	\$ 21,287	\$ -	\$ -	\$ -	\$ 21,287	\$ 263,402
Year 32	\$ 21,791	\$ -	\$ 21,791	\$ -	\$ -	\$ -	\$ 21,791	\$ 285,193
Year 33	\$ 22,309	\$ -	\$ 22,309	\$ -	\$ -	\$ -	\$ 22,309	\$ 307,502
Year 34	\$ 22,843	\$ -	\$ 22,843	\$ -	\$ -	\$ -	\$ 22,843	\$ 330,345
Year 35	\$ 23,391	\$ -	\$ 23,391	\$ -	\$ -	\$ -	\$ 23,391	\$ 353,736
Year 36	\$ 23,956	\$ -	\$ 23,956	\$ -	\$ -	\$ -	\$ 23,956	\$ 377,692
Year 37	\$ 24,536	\$ -	\$ 24,536	\$ -	\$ -	\$ -	\$ 24,536	\$ 402,228
Year 38	\$ 25,133	\$ -	\$ 25,133	\$ -	\$ -	\$ -	\$ 25,133	\$ 427,361
Year 39	\$ 25,748	\$ -	\$ 25,748	\$ -	\$ -	\$ -	\$ 25,748	\$ 453,109
Year 40	\$ 26,379	\$ -	\$ 26,379	\$ -	\$ -	\$ -	\$ 26,379	\$ 479,488
<b>TOTAL</b>	<b>\$ 699,925</b>	<b>\$ 1,800</b>	<b>\$ 701,725</b>	<b>\$ (213,245)</b>	<b>\$ (8,992)</b>	<b>\$ (222,237)</b>	<b>\$ 479,488</b>	

Assumes Call is exercised per the transaction documents. This Cashflow summary is intended only as an example.

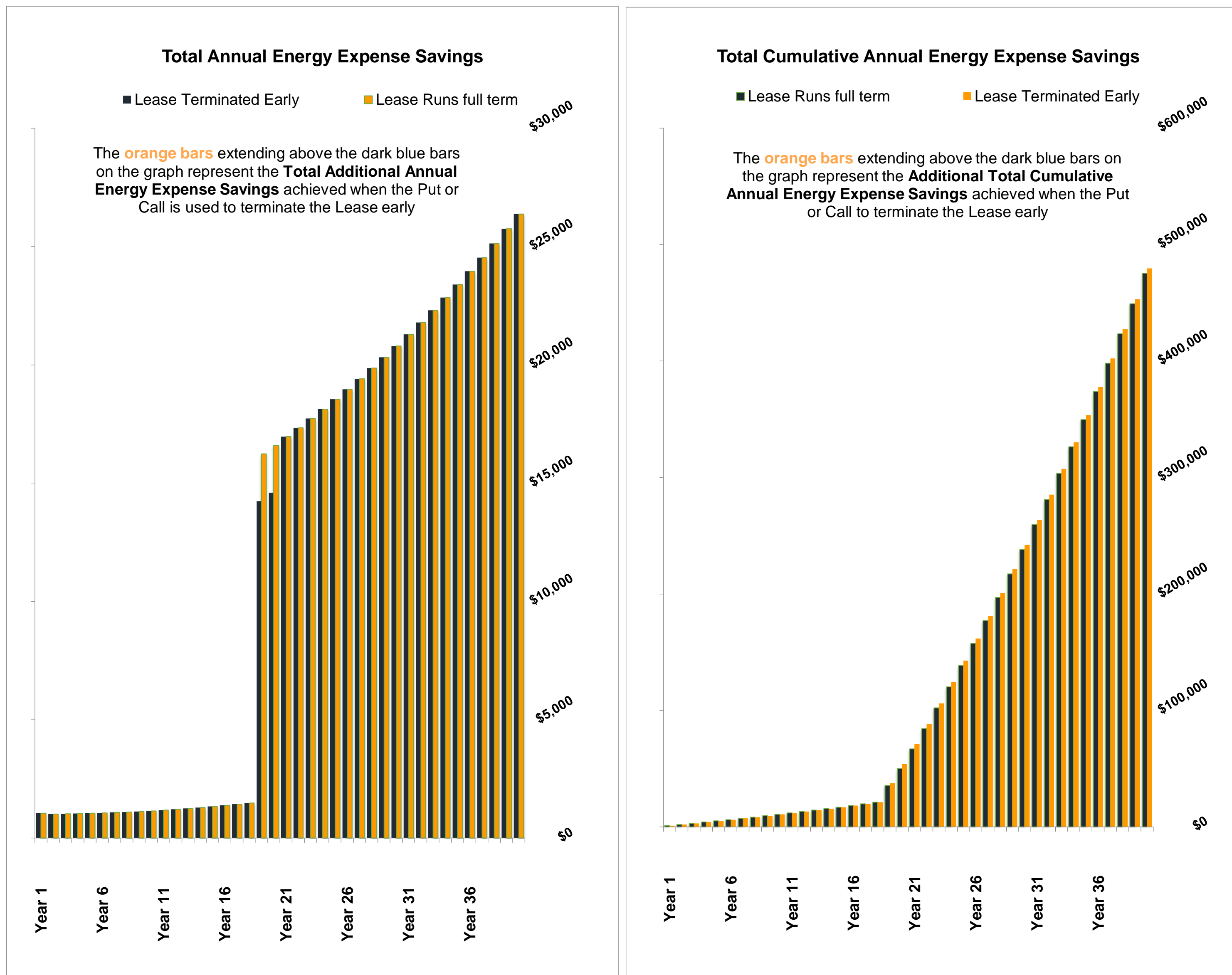


## 40 Year Customer Cash Flow Example - Net Metering w/ Utility Bill Savings

Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline350W Solar Panels @ 10° w/ 66.6 kWAC SolarEdge

Xcel Photovoltaic Credit Rider Tariff

General Service Rate Plan



# Schedule A

## Power Purchase Payment Schedule

Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline350W Solar Panels @ 10° w/66.6 kWAC SolarEdge

Year 1 PPA Rate \$.kWh: \$0.10900  
 Annual PPA Rate Escalator: 2.50%

Year	Green <sup>2</sup> Solar Leasing, LLC Utility Bill Expense			
	Estimated Annual Energy (kWh/Year)	Lease Runs Full Term		
		(\$/kWh)	(\$/Year Estimated)	(Total/Year)
1	93,713	\$ 0.10900	\$ 10,214.72	\$ 10,214.72
2	90,901	\$ 0.11173	\$ 10,155.91	\$ 10,155.91
3	90,447	\$ 0.11452	\$ 10,357.82	\$ 10,357.82
4	89,994	\$ 0.11738	\$ 10,563.59	\$ 10,563.59
5	89,544	\$ 0.12032	\$ 10,773.54	\$ 10,773.54
6	89,097	\$ 0.12332	\$ 10,987.75	\$ 10,987.75
7	88,651	\$ 0.12641	\$ 11,206.07	\$ 11,206.07
8	88,208	\$ 0.12957	\$ 11,428.82	\$ 11,428.82
9	87,767	\$ 0.13281	\$ 11,655.98	\$ 11,655.98
10	87,328	\$ 0.13613	\$ 11,887.62	\$ 11,887.62
11	86,891	\$ 0.13953	\$ 12,123.83	\$ 12,123.83
12	86,457	\$ 0.14302	\$ 12,364.86	\$ 12,364.86
13	86,025	\$ 0.14659	\$ 12,610.65	\$ 12,610.65
14	85,595	\$ 0.15026	\$ 12,861.31	\$ 12,861.31
15	85,167	\$ 0.15401	\$ 13,116.92	\$ 13,116.92
16	84,741	\$ 0.15786	\$ 13,377.60	\$ 13,377.60
17	84,317	\$ 0.16181	\$ 13,643.43	\$ 13,643.43
18	83,895	\$ 0.16586	\$ 13,914.52	\$ 13,914.52
19	83,476		\$ -	\$ 2,000.00
20	83,059		\$ -	\$ 2,000.00
21	82,643			\$ -
22	82,230			\$ -
23	81,819			\$ -
24	81,410			\$ -
25	81,003			\$ -
<b>TOTAL</b>	<b>2,154,378</b>		<b>\$ 213,244.95</b>	<b>\$ 217,244.95</b>

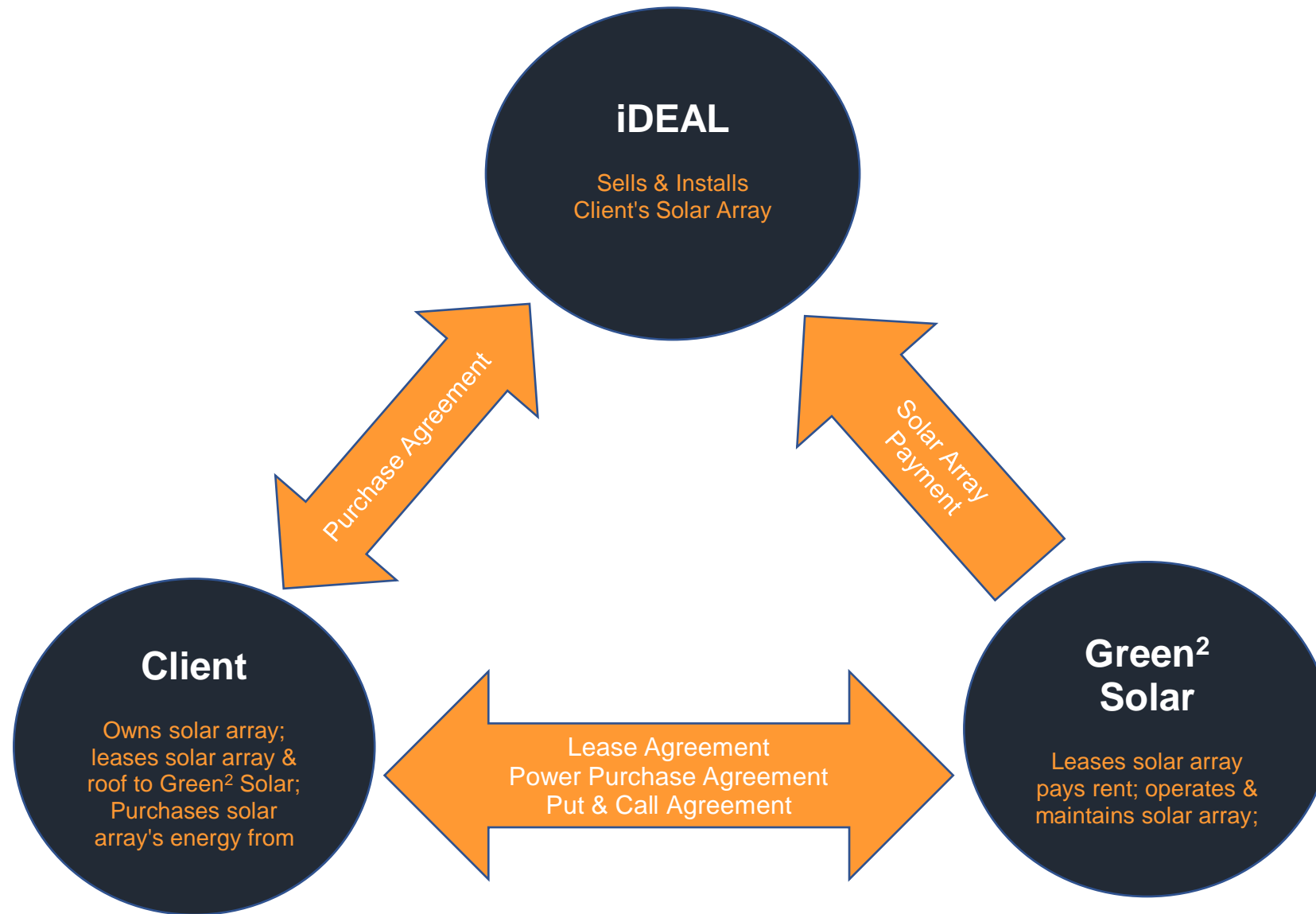


## Capital Lease - How It Works

Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline350W Solar Panels @ 10° w/ 66.6 kWAC SolarEdge

Xcel Photovoltaic Credit Rider Tariff  
General Service Rate Plan

### Our Capital Lease Program



### Purchase, Lease-back, and Power Purchase Highlights

- Client**
1. Is the Fee Title Owner of the solar array
  2. Receives annual rent from Green<sup>2</sup> Solar Leasing
  3. Pays Green<sup>2</sup> Solar Leasing for power generated from the solar array
  4. Insures the solar array

**Ownership**  
Our Client purchases their solar array from Ideal Energies and immediately owns it outright.  
**(Client is the fee title owner)**

**Facility Lease**  
Under the Facility Lease, Green<sup>2</sup> Solar Leasing pays Ideal Energies for the solar array, and becomes the tax owner so they can leverage tax benefits on the Client's behalf. The Facility Lease also assigns any rebates to Green<sup>2</sup> Solar Leasing to help pay for the solar array. Immediately after the purchase, the Client Leases the solar array to Green<sup>2</sup> Solar Leasing for annual lease payments, and Green<sup>2</sup> Solar Leasing operates and maintains it on the Client's behalf.

- Green<sup>2</sup> Solar Leasing**
1. Pays Purchase Price to Ideal Energies for Client
  2. Pays annual rent to Client
  3. Receives and uses available tax benefits
  4. Receives and uses available Rebates
  5. Operates and maintains solar array for Client
  6. Bills Client for Power generated from the solar array

**Power Purchase**  
The Client pays Green<sup>2</sup> Solar Leasing for the energy generated from the solar array at a discount vs. utility rates.

**Put & Call**  
If either party elects to exercise their options [**Put Option**: Green<sup>2</sup> Solar Leasing requires the Client to purchase Green<sup>2</sup> Solar Leasing's remaining interest for \$1; or **Call Option**: the Client requires Green<sup>2</sup> Solar Leasing to sell its remaining interest to the Client at **Fair Market Value**] the Lease and Power Purchase Agreements terminate, and you will receive **free Energy from your Solar Array thereafter!**



# iDEAL Energies Deliverables - A Turnkey Service

Rooftop Ballasted Solar Array - 83.3 kWDC Monocrystalline350W Solar Panels @ 10° w/ 66.6 kWAC SolarEdge

Xcel Photovoltaic Credit Rider Tariff  
General Service Rate Plan

## Project Task & Deliverables

Solar Survey

Site Electrical Systems Review

System Layout and Electrical Engineering

Structural Engineering & Analytical Testing (review of roof / soil adequacy to support the system)

Tariff Application, Procurement, Engineering and Processing Fees, if any

Utility Interconnection Agreement(s)

Solar Array Equipment

Solar Array Installation

Electrical Connection – connect system to your building's electrical switchgear

System monitoring equipment and software for web based monitoring

Building Permit & Inspection

Electrical Permit & Inspection

Project Management

Training

Start-up

Solar Array Supporting Documentation

Federal Tax Credit Documentation

All Other Required Deliverables

**System Cost** *(Paid by Tenant for Customer per Facility Lease)*

\$

**209,657**

Location	Actual Consumption Data (August 2017-July 2018)		
	Annual Consumption (kWh)	Average Annual \$/kWh Consumption	Average Annual \$/kWh Consumption + Demand Charge
City Hall	745,440	\$0.063	\$0.089
Fire Station	336,342	\$0.070	\$0.098
Public Works	254,320	\$0.068	\$0.106

**YEAR 1 ANALYSIS  
Solar Rewards System**

Location	System Size (kW)	Annual Production (kWh)	Savings	Savings (\$/kWh)	Expense	\$/kWh payment	Net	Net Savings \$/kWh*
City Hall	40	46,952	\$4,180.91	\$0.089	\$3,917.00	\$0.083	\$264	\$0.006
Fire Station	40	46,952	\$4,602.66	\$0.098	\$3,917.00	\$0.083	\$686	\$0.015
Public Works	40	46,952	\$4,993.75	\$0.106	\$3,917.00	\$0.083	\$1,077	\$0.023

\*Annual savings uses average annual \$/kWh shown above

**YEAR 1 ANALYSIS  
PV Demand Credit System**

Location	System Size (kW)	Annual Production (kWh)	Savings	Savings (\$/kWh)	Expense	\$/kWh payment	Net	Net Savings \$/kWh**
City Hall	125	140,569	\$17,338.69	\$0.123	\$15,322.00	\$0.109	\$2,017	\$0.014
Fire Station	0	NA						
Public Works	83	93,713	\$13,181.54	\$0.141	\$10,215.00	\$0.109	\$2,967	\$0.032

\*\*Annual savings includes \$0.0736 /kWh + Demand charge reduction of \$0.0157 + Credit Rider of \$0.0343

The above analysis uses averages computed from actual consumption and actual energy expenses. iDEAL Energies' Cash Flow analysis uses average Xcel rates of \$0.0736/kWh + assumed Demand Charge reductions of \$0.0157 to calculate savings for all three locations.



## Solar Array Purchase, Capital Lease & Power Purchase Agreements w/ Put & Call

39.960 kW DC SilfabSLG370M  
 40.00 kW AC SolarEdge SE20k 480V 3Ph Inverter(s), SolarEdge P800 Power Optimizers &  
 Unirac, Panelclaw (or equivalent) Ballasted Racking @ approximately 10°

### Xcel SolarRewards

## Customer Information

Date:	July 12, 2018
Solar Array Legal Owner:	<b>City of Roseville</b>
Customer Corporate Form:	Minnesota City
Customer Mailing Address:	2660 Civic Center Drive, Roseville, MN 55113
Customer Signer Name:	Dan Roe and Patrick Trudgeon
Customer Signer Title:	Dan Roe, its Mayor and Patrick Trudgeon, its City Manager
Customer Authorized Representative:	Ryan Johnson
Customer Authorized Representative Tel:	651-792-7049
Installation Address:	<b>** See Attached Installation Address Schedule</b>
Premise Number:	<b>** See Attached Installation Address Schedule</b>
Site Owner:	City of Roseville
Site Owner Mailing Address:	2660 Civic Center Drive, Roseville, MN 55113

## Project Information

System Size in kW DC	<b>39.960 kW DC (+/- 0.10 kW DC)</b>
Installation Cost:	<b>\$137500.00</b>
Project Completion Date:	Summer/Fall, 2018
Rebate Name:	Xcel SolarRewards
Rebate Amount:	\$0.08 (per kWh/kW)
Rebate Payer:	Xcel Energy
REC Owner:	Xcel Energy
Tax Credit Percent:	30%
Panel Description:	SilfabSLG370M
Panel Size in Watts DC:	370 (Watts DC)
Inverter Description:	SolarEdge SE20k 480V 3Ph Inverter
Total Inversion in kW AC:	40.00 (kW AC)
Power Optimizer Description:	SolarEdge P800 Power Optimizers
Solar Racking Description:	Unirac, Panelclaw (or equivalent) Ballasted Racking @ approximately 10°

## Lease, Power Purchase, and Put & Call Agreement Information

Site Use:	<b>** See Attached Installation Address Schedule</b>
Tenant:	Green2 Solar Leasing, LLC
Tenant Signer Name:	Rich Ragatz
Tenant Signer Title:	Vice President
Leased Space Rent Payment:	<b>\$90.00</b> per year
Leased Energy System Rent Payment:	<b>\$10.00</b> per year
Put / Call Year:	13



## Purchase Agreement

39.960 kW DC SilfabSLG370M,  
40.00 kW AC SolarEdge SE20k 480V 3Ph Inverter(s),  
SolarEdge P800 Power Optimizers & Unirac, Panelclaw  
(or equivalent) Ballasted Racking @ approximately 10°

<b>Customer / Owner</b>	<b>City of Roseville</b>
<b>Installation Location / Site</b>	** See Attached Installation Address Schedule
<b>Xcel Premise #</b>	** See Attached Installation Address Schedule

## Xcel SolarRewards

This **PURCHASE AGREEMENT** (this "**Agreement**"), dated **July 12, 2018** is between **IDEAL ENERGIES, LLC**, a Minnesota Limited Liability Company, whose principal place of business is located at **5810 Nicollet Avenue Minneapolis, MN 55419** ("**Seller**"), and **City of Roseville**, a Minnesota City, whose principal place of business is located at **2660 Civic Center Drive, Roseville, MN 55113** ("**Customer**"). Seller and Customer are sometimes also referred to in this Agreement jointly as "**Parties**", or individually as a "**Party**".

### RECITALS

- A. Seller sells and installs grid connected photovoltaic solar energy systems and Customer desires to purchase and install the Energy System (defined below) at the installation location described above (the "**Site**"); and
- B. Seller will provide and install a **39.960 kW DC (+/- 0.10 kW DC)** Energy System at the Site (the "**Energy System**") in accordance with this Agreement; and
- C. Seller has or will apply for the Rebate (defined below) on behalf of Customer for the Energy System, and after the Rebate is secured for the Project (defined below), will install the Energy System, in accordance with the terms and conditions set forth in this Agreement; and
- D. The Customer will, in connection with this Agreement, enter into a **Facility Lease Agreement** (the "**Facility Lease Agreement**") with **Green2 Solar Leasing, LLC** ("**Tenant**") pursuant to which the Tenant will lease, operate and maintain the Customer's Energy System.
- E. The Customer will, in connection with this Agreement, enter into a Power Purchase Agreement (the "**Power Purchase Agreement**") with Tenant pursuant to which Tenant will sell power generated by the Energy System to Customer.

### AGREEMENT

**NOW, THEREFORE**, for valuable consideration, the receipt of which is hereby acknowledged, the Parties agree as follows:

1. **Contingency.** The Parties performance under this Agreement is contingent on the Customer's Project securing the Rebate (defined below) for the Energy System.
2. **Services.** After the Project has secured a Rebate, if available, Seller will, at its expense, perform electrical engineering on the Energy System, perform structural engineering on the Site to verify it is adequate to support the Energy System (the "**Design Documents**"). Seller will provide and install a **39.960 kW DC (+/- 0.10 kW DC)** Energy System on the Site and perform Energy System commissioning (the "**Project**"). The Energy System will consist of the Energy System components identified on **Schedule A** (the "**System Components**") and the Project Design Documents.

3. **Title and Risk of Loss.** Title and risk of loss for the Energy System will pass to Customer upon its Final Project Completion (defined below).
4. **Purchase and Sale; Installation Costs and Payment Terms.** Seller agrees to sell and Customer agrees to purchase the Energy System and the services provided for hereunder for a total cost of **\$137500.00** (the "**Installation Cost**"). The Installation Cost for the Project will be paid in full net fifteen (**15**) days after its Final Project Completion date, except in the event that Customer has entered into an Installment Sale Finance Agreement or a Facility Lease Agreement with Seller or Seller's affiliates, in which case the terms of those agreements will govern payment of the Installation Cost.
5. **Customer's Representations and Responsibilities.**
  - a. Customer represents that the Site is owned by Customer or an affiliated entity that has common ownership with Customer as described in **Schedule B**.
  - b. The individual listed in **Schedule B** is authorized to act on behalf of Customer.
  - c. Customer will, at least two weeks before the Final Project Completion date for the Project, provide either a wireless internet connection or a RJ45 internet outlet at the electrical room for connecting the Energy System to web-based monitoring equipment. If Customer does not provide the foregoing, Seller may, at its election, provide this service to assure internet service is available for Energy System monitoring on the Final Project Completion date for the Project. If Seller provides the foregoing service, a separate fee will be invoiced to Customer for this service of \$250.00.
  - d. If required by the applicable Rebate program, Customer will participate in energy audits to identify additional energy savings opportunities.
6. **Seller's Representations and Responsibilities.**
  - a. Seller will provide all System Components, Design Documents, labor, equipment, supplies and services necessary to install the Energy System at the Site in accordance with the "Scope of Work" described in **Schedule C**.
  - b. Seller will perform all services in material compliance with applicable laws, rules, regulations, governmental approvals and permits, including all applicable agreements with, and tariffs of, the local utility (collectively, "**Applicable Requirements**").
7. **Installation Plan; Final Project Completion.** Customer and Seller will work together to develop a proposed work plan and schedule for the installation of the Project (the "**Schedule**"). If events arise which make meeting the Schedule impractical, such as availability of equipment and other reasonable delays, Seller will notify Customer of the same as soon as reasonably possible, and the Parties will adjust the Schedule accordingly. The Project is completed

when a system witness test is performed for the Project, and the Energy System is turned on, and is capable and authorized under Applicable Requirements, to generate and deliver electric energy to Customer and the local utility's electrical grid at the interconnection point ("**Final Project Completion**"). Notwithstanding any delays, the anticipated date for Final Project Completion for the Energy System is **Summer/Fall, 2018**.

8. **Changes.**

- a. It is the desire of the Parties to keep changes to the terms of this Agreement to a minimum, including changes to the Schedule. Either Party may request a change by advising the other Party in writing of the proposed change. For each change request, Seller will prepare a revised Schedule, an updated schedule to this Agreement, or any other necessary document and an applicable cost estimate. Customer will advise Seller in writing of its approval or disapproval of the change. If Customer approves the change, Seller will perform the services as changed, and the Installation Costs will be adjusted to reflect the requested change.
- b. The equipment selected by Seller and described on **Schedule A** may be substituted by Seller with other equipment (with at least a 10-year manufacturer's workmanship warranty and a 25-year production warranties achieving at least 80% of rated capacity) to accommodate structural limitations of the Site, the availability of equipment, changes in panel wattage available from manufacturers, or other reasonable reasons. A substitution in panel wattage that results in a kW DC variance of +/- 0.10 kW DC for an Energy System may be made by Seller without amending this Agreement.

9. **Rebates, Tax Credits, and Net Metering.** The Parties anticipate the Project will be eligible for the following rebates and credits:

- a. The Project may be eligible to receive the **Xcel SolarRewards Rebate** totaling **\$0.08** per kWh generated from the Energy System (the "**Rebate**") payable to Customer (or its assignee) from **Xcel Energy**. The Rebate is scheduled to be paid annually for ten consecutive years based on the Energy System's prior year's annual kWh production. In exchange for receiving the Rebate, as may be required by the utility interconnection requirements between Customer and the utility, Customer will be required to convey Renewable Energy Credits ("**RECs**") for electricity produced by the Energy System to **Xcel Energy**, and execute any required paperwork required to convey the RECs. Any RECs remaining after the termination or expiration of any conveyance to **Xcel Energy** belong solely to the Customer.
- b. The Project may be eligible to receive a Federal Tax Credit from the U.S. Treasury pursuant to the terms of the Facility Lease equal to **30%** of eligible Installation Cost of the Energy System ("**Tax Credit**") that is put into service during **2018 or 2019**.
- c. The Project may be eligible to participate in the local utility's **Net Metering Program**. Under this program, the energy generated from the Energy System is available for use to reduce the total amount of energy that the Customer needs to purchase from the utility, and for months where the Energy System produces more kWh than the Site consumes, the utility will compensate Customer at the applicable rate.

10. **Insurance.**

- a. Seller will, at its own cost and expense, maintain in full force and effect, insurance reasonable and customary for the services being performed by Seller under this Agreement. Upon request, Seller shall provide Customer with certificate(s) evidencing such insurance prior to commencement of any work at the Site.
- b. Customer will at all times, at its own cost and expense, maintain in full force and effect, insurance reasonable and customary for the Site and, after Final Project Completion has occurred for the Project for the Energy System.
- c. As required, Customer will provide Seller and the utility with a certificate of insurance that conforms with any utility or Rebate program requirements.

11. **Seller's Waiver and Indemnity Regarding Liens.** To the fullest extent permitted under the Applicable Requirements, Seller waives any right to file or impose any mechanic's, materialman's, or other liens with respect to the Site or the Project. Seller shall promptly pay all undisputed amounts owed for services, materials, equipment, and labor furnished by any person to Seller with respect to the Project. Seller shall, at Seller's sole cost and expense, discharge and cause to be released, whether by payment or posting of an appropriate surety bond in accordance with the Applicable Requirements, within thirty (30) days of its filing, any mechanic's, materialman's, or other lien in respect of the Project, the Energy System, or the Site created by, through or under, or as a result of any act or omission (or alleged act or omission) of, Seller or any subcontractor or other person providing services, materials, equipment or labor with respect to the Project. If Seller defaults in its obligation to discharge, satisfy or settle such liens, Customer may discharge, satisfy or settle such liens and Seller shall, within fifteen (15) days of a written request by Customer, reimburse Customer for all costs and expenses incurred by Customer to discharge, satisfy or settle such liens.

12. **Warranties.**

- a. Customer understands and acknowledges that the System Components furnished and installed by Seller (including the solar modules, inverters, power optimizers, racking, and monitoring equipment and their performance/energy output), are not manufactured by Seller and will carry only the warranty of their manufacturer. Seller provides only the warranties set forth on **Schedule D** hereto. Except as otherwise set forth on **Schedule D**, all other warranties are disclaimed as further set forth below. For detailed information about warranties on the System Components, please see the applicable manufacturer's specification sheets and warranties included in the operations manual(s) provided by Seller, or available on the manufacturer's websites. Customer is solely responsible for pursuing any warranty claims on System Components against the manufacturer at its own expense, and may look only to such manufacturer, and not to Seller, for any warranty with respect thereto. In accordance with the Facility Lease Agreement, if applicable, Tenant will assist Customer in resolving any warranties relating to System Components as described therein.
- b. **EXCEPT AS EXPRESSLY PROVIDED IN SCHEDULE D, SELLER MAKES NO WARRANTIES, WHETHER EXPRESS,**

**IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY AS TO THE INSTALLATION, DESIGN, DESCRIPTION, QUALITY, MERCHANTABILITY, COMPLETENESS, USEFUL LIFE, ENERGY PRODUCTION, PROJECTED ECONOMIC VIABILITY, FINANCIAL DATA AND PROJECTIONS, ROOF PERFORMANCE, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER MATTER OF THE ENERGY SYSTEM, THE SYSTEM COMPONENTS, THE PROJECT, OR ANY SERVICES PROVIDED UNDER THIS AGREEMENT.**

13. **Ownership of Project Documents and Design.** All Design Documents for the Energy System shall be the sole and exclusive property of Customer. Customer grants Seller a perpetual, royalty free license to use the Design Documents for its own private use.

14. **Indemnification; Limitation of Damages.**

- a. Subject to the limitations set forth below, Seller hereby indemnifies and holds harmless Customer and its officers, directors, members, consultants, representatives, agents, employees and affiliates (each a "**Customer Indemnified Party**") against any damages, liabilities, losses, costs and expenses, including reasonable attorney fees and costs (collectively, "**Damages**") incurred or suffered by any of them caused by (i) any material breach of this Agreement by Seller, or (ii) the negligence, gross negligence or willful misconduct of Seller, its employees, or subcontractors in connection with the Project.
- b. Customer hereby indemnifies and holds harmless Seller and its officers, directors, members, consultants, representatives, agents, employees and affiliates (each a "**Seller Indemnified Party**") against any Damages incurred or suffered by any of them in any way arising out of, relating to, or in connection with (i) any material breach of this Agreement by Customer, or (ii) the negligence, gross negligence or willful misconduct of Customer or its employees in connection with the Project.
- c. Any Customer Indemnified Party or Seller Indemnified Party claiming indemnification hereunder must give each Party prompt notice of the relevant claim and each Party agrees to cooperate with each other Party, at the its own expense, in the defense of such claim. Notwithstanding the forgoing, any Party from whom indemnification is sought shall control the defense and settlement of such claim; provided however that such Party shall not agree to any settlement that materially adversely affects the other Party without the prior written consent of such Party, which approval shall not be unreasonably withheld. Without limiting or diminishing the foregoing, any Party may, at its option and its own expense, participate in the defense of any such claim with legal counsel of its own choice.
- d. **IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES ARISING FROM, CONNECTED WITH OR RELATING TO THIS**

**AGREEMENT, THE ENERGY SYSTEM OR THE PROJECT, OR TO SELLER'S OR CUSTOMER'S ACTS OR OMISSIONS IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, WHETHER FOR NEGLIGENCE, STRICT LIABILITY, PRODUCT LIABILITY OR OTHERWISE, EXCEPT FOR ANY DAMAGES OF THIRD PARTIES FOR WHICH ONE PARTY IS REQUIRED TO INDEMNIFY THE OTHER PARTY.**

- e. **IN NO EVENT WILL SELLER'S LIABILITY, EXCLUDING ANY LIABILITY WITH RESPECT TO INDEMNIFICATION OF THIRD PARTY CLAIMS, WHETHER IN CONTRACT, IN TORT (INCLUDING GROSS NEGLIGENCE), IN STRICT LIABILITY OR OTHERWISE, EXCEED THE AMOUNT OF THE INSTALLATION COSTS PAID TO SELLER.**

15. **Termination.** This Agreement may be terminated as follows:

- a. Either Party may terminate this Agreement by providing the other Party written notice in the event (i) the Rebate is not secured for the Project within two (2) years after the date first written above, or (ii) the structural analysis indicates the Site is not capable of supporting the Energy System (except where Seller includes and provides in the Installation Cost, alternate equipment and/or structural retrofits or other requirements specified in the structural engineering report for the Energy System that render the Site suitable for installing the Energy System).
- b. Customer may also terminate this Agreement by giving written notice to Seller at any time prior to the Final Project Completion: (i) in the event that Seller has breached any representation, warranty or covenant contained in this Agreement in any material respect, Customer has notified Seller of such breach, and the breach has continued without cure by Seller or written waiver by Customer for a period of thirty (30) days after the notice of breach; or (ii) upon sixty (60) days' prior notice to Seller if Seller has not achieved Final Project Completion on or prior to December 31, 2019.
- c. Seller in its sole discretion may also terminate this Agreement by providing Customer written notice: (i) in the event the procurement times for solar equipment are too long to allow execution on the Project in accordance with the terms of this Agreement, or (ii) in the event Customer has breached any representation, warranty or covenant contained in this Agreement in any material respect, Seller has notified Customer of the breach, and the breach has continued without cure by Customer or written waiver by Seller for a period of thirty (30) days after the notice of breach.
- d. If either Party terminates this Agreement pursuant to Sections 15(a), 15(b) or 15(c), all rights and obligations of the Parties under this Agreement will terminate without any liability of any Party to any other Party, except with respect to Section 14, Section 16, and as otherwise provided in this Section 15, and except for any liability of any Party then in breach.
- e. Except as otherwise provided in this Section 15, the termination rights under this Section 15 are cumulative

with and in addition to any other rights or remedies to which the Parties may be entitled at law or under this Agreement.

16. **General.**

- a. **Subordination to Utility Rebate Agreement.** No portion of this Agreement is intended to conflict with any Utility Rebate Agreements (the “**Utility Rebate Agreements**”) to which Seller or Customer is a party. In the case of a conflict between the terms or conditions of this Agreement and the Utility Rebate Agreements, the terms and conditions of Utility Rebate Agreements shall control. The utility, or its successors and assigns, is a third-party beneficiary of the provision of this paragraph. Nothing in this Agreement shall prevent the utility, from fully enforcing the terms and conditions of Utility Rebate Agreements.
- b. **Relationship of the Parties.** The Parties shall for all purposes be considered independent contractors with respect to each other, and neither shall be considered an employee, employer, agent, principal, partner or joint venturer of the other.
- c. **Entire Agreement.** This Agreement and all the schedules, exhibits, and attachments hereto, together with any agreements referenced herein, constitute the entire agreement and understanding of the Parties relative to the subject matter hereof. The Parties have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to herein. This Agreement replaces and supersedes any and all prior oral or written agreements, representations and discussions relating to such subject matter.
- d. **Survival of Representations.** All representations, warranties, covenants and agreements of the Parties contained in this Agreement, or in any instrument, certificate, exhibit or other writing provided for in it, shall survive the execution of this Agreement and the consummation of the transactions contemplated herein.
- e. **Amendment.** This Agreement may be amended or modified only by a document executed by the Parties. No custom or practice of the Parties at variance with the terms hereof shall have any effect.
- f. **Notices.** All notices to be given under this Agreement shall be in writing and shall be effectively given upon personal delivery, facsimile or email transmission (with confirmation of receipt), delivery by overnight delivery service or three days following deposit in the United States Mail (certified or registered mail, postage prepaid, return receipt requested).
- g. **No Delay.** No delay or failure on the part of any Party hereto to exercise any right, power or privilege hereunder shall operate as a waiver thereof.
- h. **Force Majeure.** Neither Party will be liable to the other Party for any delay, error, failure in performance or interruption of performance resulting from causes beyond its reasonable control, including without limitation fires, flood, accidents, explosions, sabotage, strikes or other labor disturbances, product unavailability, labor unavailability, civil commotion, riots, invasions, wars, acts of God, acts of government, terrorism or any cause (whether similar or dissimilar to

the foregoing) beyond the reasonable control of the Party.

- i. **Governing Law / Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Minnesota without regard to its conflicts of laws principals. Any lawsuit brought only in a court of general jurisdiction in Hennepin County, Minnesota.
- j. **Severability.** The provisions of this Agreement are severable. If any part of this Agreement is rendered void, invalid or unenforceable, such rendering shall not affect the validity and enforceability of the remainder of this Agreement.
- k. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Neither Party shall assign this Agreement, or any portion thereof, without the prior written consent of the other Party, provided Seller may assign this Agreement in connection with the sale of any or all of its assets to a third party or Bank. Any attempted assignment or transfer without prior written consent of the other Party shall be of no force or effect. As to any permitted assignment: (i) reasonable prior notice of any such assignment shall be given to the other Party; and (ii) any assignee shall expressly assume the assignor’s obligations hereunder, unless otherwise agreed to by the other Party in writing.
- l. **Marketing and Promotion.** Seller shall not use Customer’s name, image or likeness in connection with advertising and promoting the Project or the Energy System without Customer’s approval, which shall not be unreasonably withheld.
- m. **Data Practices.** Seller considers the information contained in this Agreement related to the programs, methods, techniques and processes utilized by Seller to offer and implement the Energy System to be trade secret information of Seller as defined in the Minnesota Government Data Practices Act Ch. 13 .37 Subd. 1 (b) GENERAL NONPUBLIC DATA. In no event shall this information be shared or disclosed with any person or third party without the prior written approval of Seller.

The Parties hereto have caused this Agreement to be duly signed in their respective names effective the date first written above.

Seller  
**IDEAL ENERGIES, LLC**

By: \_\_\_\_\_  
Chris Psihos, its President

Dated: \_\_\_\_\_

Customer  
**City of Roseville**

By: \_\_\_\_\_  
Dan Roe and Patrick Trudgeon, its Dan Roe, its Mayor and Patrick Trudgeon, its City Manager

Dated: \_\_\_\_\_



## SCHEDULE A

### System Components

The **Energy System** is comprised of the following System Components:

1. UL Listed and approved Solar Panels: **108 - SilfabSLG370M @ 370 kW DC each**
2. UL listed and approved DC/AC inverters: **2 - SolarEdge SE20k 480V 3Ph Inverter @ 20.00 kW AC each**
3. Power Optimizers: **54 - SolarEdge P800 Power Optimizers**
4. Solar Panel Racking / mounting system: **Unirac, Panelclaw (or equivalent) Ballasted Racking @ approximately 10°**
5. Electrical components including but not limited to conductive wiring, ground circuitry, conduit, junction boxes, disconnects, switches, over-current protection, and any associated hardware necessary to complete the installation of the solar electric modules and interconnect with the Site's existing electric service.
6. Monitoring equipment and web-based remote system monitoring. Customer is responsible for bringing and providing internet service at the installation location (typically the electrical room).

The Parties agree that the Energy System does **NOT** include the following unless purchased as an option (except where Seller includes them in the Installation Costs):

1. Any structural improvements to the building required to support the Energy System and the System Components, or any fencing for groundmounted installations, if required.
2. Batteries or emergency back-up power capability.
3. Any upgrades to Customer's electrical service to bring their service up to code.
4. Third-party fees for web-based monitoring of the Energy System.

## SCHEDULE B

### Contact Information for Parties

<b>Site Owner:</b>	<b>City of Roseville</b> 2660 Civic Center Drive, Roseville, MN 55113
<b>Customer's Authorized Representative:</b>	<b>Ryan Johnson</b> 651-792-7049
<b>Seller/Installer:</b>	<b>Ideal Energies, LLC</b> Chris Psihos t. (612)928-5008 chris.psihos@idealenergies.com 5810 Nicollet Avenue Minneapolis, MN 55419
<b>Project Electrician(s):</b>	<b>Green<sup>2</sup> Electric, LLC</b> Joaquin Thomas, Master Electrician Russell Goetze, Master Electrician t. (612)928-5008 f: (612)928-5009 5810 Nicollet Avenue Minneapolis, MN 55419 License <b>EA719118</b>

## **SCHEDULE C**

### **Scope of Work**

#### **A. Design Scope**

1. Seller will prepare structural and electrical Design Documents describing the Project.
2. Seller will comply with all building codes and, as necessary, obtain any code variances.
3. Seller will ensure that the Energy System installation meets then current National Electrical Code requirements.
4. Seller will apply for all permits, and complete inspections to close such permits after Project Completion.
5. Seller will apply for interconnection of the Energy System and net metering with the local utility.

#### **B. Installation**

1. Seller will furnish and install all required material or equipment for a complete installation.
2. Seller will connect the Energy System to Customer's electric panel.
3. Seller will commission and test the Energy System after installation.
4. Electrical interconnections will be performed by licensed electricians.
5. Except as provided in the Purchase Agreement, the Parties agree that Seller will not be liable for any indirect or consequential losses incurred by Customer as a result of the Energy System installation. Such losses may result from disruption of operations, interruption of electrical service, suspension of mechanical services and other interruptions reasonably related to standard Energy System installation of the size and type contemplated by the Project.

#### **C. Safety**

1. Seller will adhere to all current safety laws including without limitation federal, state and local safety regulations.
2. Seller's workers will conform to standard OSHA safety practices and procedures during installation.

#### **D. General**

1. Seller will provide all required design, engineering, construction, administration and management services necessary to complete the Project.
2. Seller will take all action reasonably necessary or required to bring the Project to commercial operation.
3. Seller will provide to Customer copies of all operating and maintenance manuals and third-party warranties.
4. Customer is responsible for scheduling and completing, if necessary, the energy audit required for purposes of the Rebates.



## SCHEDULE D

### Seller's Warranties

**Engineering and Design Services Warranty** Seller warrants that it will perform the engineering and design services in a professional and workmanlike manner using the degree of care, skill, prudence, judgment and diligence that a reasonable, qualified and competent provider of similar services would exercise. Except as otherwise provided herein, during the period beginning on the Final Project Completion date and ending five years later (the "**Warranty Period**"), it is shown that there was an error in such engineering and design services as a result of Seller's failure to meet those standards, and if Customer properly notifies Seller within the Warranty Period, Seller will, at its own expense and at no cost to Customer, re-perform such services to remedy such error within a reasonable timeframe.

**Installation Services Warranty** Seller warrants that it will perform the installation services in a professional and workmanlike manner using the degree of care, skill, prudence, judgment and diligence that a reasonable, qualified and competent provider of similar services would exercise. Except as otherwise provided herein, if during the Warranty Period it is shown that there was an error in such installation services as a result of Seller's failure to meet those standards, and if Customer properly notifies Seller within the Warranty Period, Seller will, at its own expense and at no cost to Customer, re-perform such services to remedy such error within a reasonable timeframe.

**Limited System Components Warranty** Seller warrants that the System Components will be new and not physically damaged by Seller at the time of Final Project Completion. If Customer notifies Seller within a reasonable timeframe after Final Project Completion that any System Components were not new or are physically damaged by Seller at the time of Final Project Completion, Seller shall replace such System Components within a reasonable timeframe with System Components that are new and undamaged.

**Roof Warranty** Except as otherwise provided herein, if during the Warranty Period it is shown that the roof leaks solely as a result of Seller's installation of the Energy System, and if Customer properly notifies Seller within the Warranty Period, Seller will, at its own expense and at no cost to Customer, promptly repair the roof so that it does not leak; provided that such leaking is not due to normal wear and tear.

**Limitation on Warranties** The above warranties do NOT cover damage, malfunctions or services failures to the extent caused by:

1. Failure to follow the any applicable operations or maintenance manual or any other maintenance instructions provided by Seller or the manufacturer of the System Components, or failure to maintain or operate the Energy System;
2. Repair, modification, maintenance, movement or relocation of the Energy System or the System Components by someone other than a service technician approved by Seller or the manufacturer of the System Components;
3. Attachment or connection to the Energy System of any equipment not supplied by Seller, or the use of the Energy System for a purpose for which the Project was not intended;
4. Abuse, misuse or acts of Customer or any third person (other than Seller or its employees or agents), including intentional damage, theft or vandalism; or
5. Damage or deteriorated performance of the Energy System or Site caused by electrical surges, building settling, building component failure, work done on the building or adjacent structures, use of machinery or vehicle in the area, winds in excess of the system design rating, lightning, fire, flood, extreme weather conditions, pests, tornadoes, hurricanes, hail, storms, explosions, earthquakes, ground subsidence, falling debris, accidental breakages (not caused by Seller or its employees or agents), normal wear and tear, and other events or accidents outside the reasonable control of Seller.

**Customer's Right to Remedy** In the event that Seller fails to remedy any breach of warranty within the prescribed timeframe under this **Schedule D** or such breach threatens imminent harm to Customer or its property, Customer shall have the right to employ any reasonable means necessary to remedy such breach, and Seller shall reimburse Customer for all reasonable and necessary expenses incurred by Customer in carrying out such remedy.

## Facility Lease Agreement

39.960 kW DC SilfabSLG370M,  
40.00 kW AC SolarEdge SE20k 480V 3Ph Inverter(s),  
SolarEdge P800 Power Optimizers & Unirac, Panelclaw  
(or equivalent) Ballasted Racking @ approximately 10°

<b>Customer / Owner</b>	<b>City of Roseville</b>
<b>Installation Location / Site</b>	** See Attached Installation Address Schedule
<b>Xcel Premise #</b>	** See Attached Installation Address Schedule

### Xcel SolarRewards

This **FACILITY LEASE AGREEMENT** (this "**Agreement**"), dated **July 12, 2018**, is between **Green2 Solar Leasing, LLC**, a Minnesota Limited Liability Company, whose principal place of business is located at **5810 Nicollet Avenue, Minneapolis, MN 55419** ("**Tenant**"), and **City of Roseville**, a Minnesota City, whose principal place of business is located at **2660 Civic Center Drive, Roseville, MN 55113** ("**Customer**"). The Tenant and Customer are sometimes also referred to in this Agreement jointly as "**Parties**", or individually as a "**Party**".

#### RECITALS

- A. Customer is the owner or lessee of certain real property located at **\*\* See Attached Installation Address Schedule** (the "**Site**") presently used as a(an) **Fire Station** (the "**Property**"); and
- B. Tenant desires to lease from Customer, and Customer desires and is authorized to lease to Tenant, subject to the terms and conditions of this Agreement, a portion of the Property for the construction, operation and maintenance of a photovoltaic solar electric system ("**Energy System**") further described as the **Project** in that certain Purchase Agreement (the "**Purchase Agreement**") between Customer and **Ideal Energies, LLC** ("**Seller**") of even date herewith; and
- C. Customer has or will be the **legal owner of the Energy System upon purchase from Ideal Energies, LLC**, and Customer desires to lease the same to Tenant subject to the terms and conditions of this Agreement; and
- D. Tenant and Customer will, in connection with this Agreement, enter into a **Power Purchase Agreement** (the "**Power Purchase Agreement**") pursuant to which Tenant will sell power generated by the Energy System to the Customer; and
- E. For federal tax purposes, Customer and Tenant will treat this Agreement as a transfer of the ownership of the Energy System from Customer to Tenant; and
- F. The Tenant should be eligible to receive a Federal Tax Credit from the U.S. Treasury pursuant to the terms of this Agreement equal to **30%** of eligible Installation Cost of any Energy System ("**Tax Credit**") that is put into service during **2018 or 2019**.

#### AGREEMENT

**NOW, THEREFORE**, in consideration of the foregoing Recitals, the mutual promises of the Parties hereto and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. **Contingency.** The Parties performance under this Agreement is contingent on Final Project Completion (defined in the Purchase Agreement) occurring for the

**Project in accordance with the terms of the Purchase Agreement.**

2. **Lease of Energy System and Leased Space.** Customer hereby leases to Tenant, and Tenant hereby leases from Customer the following: (a) the Energy System and (b) all roof/ground space required for the installation and operation of the Energy System on the Property ("**Leased Space**") as generally prescribed on the Plan View drawing included herewith as **Schedule A**, including rights to place wiring to the point of electrical interconnection. The Energy System and the Leased Space together constitute the leased property ("**Leased Property**"). The final As-Built Plan View drawing provided to Customer by Seller in its Operations Manual after Final Project Completion occurs is hereby incorporated into **Schedule A** of this Agreement by reference.
3. **System Payments, Tax Ownership.**
  - a. **Installation Cost Payment.** Tenant will pay Customer's Installation Cost (defined in the Purchase Agreement) for the Project on the respective date of Final Project Completion (defined in the Purchase Agreement).
  - b. **Transfer of Tax Ownership.** The Parties shall treat the Energy System as having been sold to the Tenant for federal tax purposes in consideration of the payment(s) made under Section 3(a) above.
4. **Rebate.** The Rebate, as defined in the Purchase Agreement, (the "**Rebate**") is irrevocably assigned to Tenant as additional consideration and will be treated by Tenant as a fee earned for services. In the event the actual Rebate received is greater or less than the expected Rebate described in the Purchase Agreement, there will be no adjustment to the Rebate or the terms of this Agreement, and each Party waives its right to recover any surplus or deficiency from the other Party.
5. **Access to Leased Space.** Customer grants to Tenant the right to access the Leased Space via reasonable route or routes over and across the Property upon reasonable prior notice to Customer. Customer will cooperate with Tenant to access the meter or any other part of the Energy System which is not located within the Leased Property.
6. **Permitted Use of Leased Space.** During the Term (as defined below), Tenant shall have the exclusive right to use the Leased Space for the construction, installation, operation, maintenance, repair, replacement, relocation, reconfiguration, removal, alteration, modification, improvement, use and enjoyment of the Energy System (and other necessary and incidental uses for the operation of the Energy System) to fulfill Tenant's obligations under this Agreement and the Power Purchase Agreement (the "**Permitted Uses**"). Tenant may not erect any other facilities or use any other equipment on the Leased Space that is not expressly permitted under the terms of this

Agreement without first obtaining Customer's written consent, which consent shall not be unreasonably withheld, delayed or conditioned provided the other facilities or equipment are necessary for the operation of the Energy System and are not likely, in Customer's reasonable opinion, to damage the Property or interfere with Customer's business.

7. **Term.** The term (the "**Term**") of this Agreement shall begin on the date that Final Project Completion occurs for the Energy System and shall terminate on the date that is **twenty (20)** years after such Final Project Completion Date.
  8. **Rent of Leased Space.** Beginning on the first anniversary of the Final Project Completion and continuing on each and every anniversary thereof throughout its Term, Tenant shall pay to Customer Rent for the Leased Space. Leased Space Rent for the **Project** shall be **\$90.00** per year.
  9. **Rent of Energy System.** Beginning on the first anniversary of the Final Project Completion and continuing on each and every anniversary thereof throughout its Term, Tenant shall pay to Customer Rent for the Energy System. Energy System Rent for the **Project** shall be **\$10.00** per year.
  10. **Holdover.** If Tenant holds over its tenancy after expiration of the Term, such tenancy shall be month-to-month subject to the terms and conditions of this Agreement. Either Party may terminate such month-to-month tenancy at any time upon the giving to the other Party no less than thirty (30) days written notice.
  11. **Operating Permits.** Tenant shall, at its sole expense, maintain in full force and effect all certificates, permits and other approvals ("**Operating Permits**") required by any federal, state or local authorities ("**Governmental Authorities**") having jurisdiction over Tenant or the Leased Property.
  12. **Energy System Title and Condition on Facility Lease Termination.** The Parties agree that legal title to any and all fixtures, equipment, improvements or personal property of whatsoever nature at any time constructed or placed on or affixed to the Leased Space by Tenant, including without limitation the Energy System and its System Components, shall be and remain with System Owner. Tenant shall leave the Energy System at the end of this Agreement in substantially the same condition as existed on the Final Project Completion date plus any improvements, ordinary wear and tear and casualty damage excepted.
  13. **Energy System Operation and Maintenance.**
    - a. **Operation and Maintenance of the Energy System.** Tenant will at its sole cost and expense operate the Energy System, monitor the system's performance and keep and maintain the Energy System in good condition and repair utilizing the Maintenance List provided in **Schedule B** herewith as a guideline, with strict adherence hereto not expected by the Parties. Customer is solely responsible for pursuing any available warranties on System Components against the manufacturer at its own expense, and may look only to such manufacturer, and not to Tenant, for any warranty with respect thereto. Tenant will assist Customer in resolving any warranties relating to System Components on a time and material basis. Should such services be required, Tenant will provide the labor at reasonably discounted market rates and pass through its direct expenses at Tenant's actual cost.
  - b. **Operation and Maintenance Standard of Care.** Tenant will use commercially reasonable efforts to identify, respond to, and complete necessary maintenance and repairs and to operate the Energy System to maximize its energy production. Notwithstanding the foregoing, the Parties understand that delays may be caused by multiple causes including without limitation delay in the identification of operational issues, troubleshooting issues, warranty replacement, warranty procurement, parts availability, parts delivery, crew availability, equipment defects, equipment performance, internet downtime, and similar causes.
  - c. **Energy System Casualty.** In the case of casualty to the Energy System, Tenant agrees to repair the Energy System with proceeds described in Section 17a. Said Proceeds will be provided to Tenant to make the repairs caused by the casualty. Tenant shall repair, at Tenant's expense, any damage to the Leased Space that results from the Tenant's repair, reconfiguration, alteration, modification or replacement of the Energy System.
14. **Repair of Leased Space During Term.** Customer shall have the right at any time to access the Leased Space to inspect, maintain, replace or repair items and components thereof, excluding the Energy System. ("**Customer Maintenance**"). Customer Maintenance shall include temporary removal such components of the Energy System that interfere with Customer Maintenance of the Leased Space, and the replacement of such components upon completion. Customer shall provide thirty (30) days prior notice of any scheduled Customer Maintenance, except in the case of an emergency, the Customer shall give notice as soon as possible. Customer, at its own cost, will perform Customer Maintenance, and use Seller or, another third party approved by Tenant to perform Customer Maintenance (Tenant's approval of third parties will not be unreasonably withheld). The Customer Maintenance will be performed at Tenant's expense to the extent the Customer Maintenance was required as a result of damage to the Leased Space caused by the Energy System. Customer will reimburse Tenant for any lost Rebate revenue resulting from the Energy System being non-operational in excess of forty-five (45) days, excluding any downtime resulting from damage to the Leased Space caused by the Energy System.
  15. **Utilities / Taxes.** Customer shall pay all applicable taxes, assessments, or similar levied against the Energy System and other personal property located and/or installed on the Site by the Tenant.
  16. **Interference.**
    - a. **Interference by Tenant.** Tenant shall operate the Energy System in a manner that will not unreasonably interfere with any existing operations or equipment located, operated or owned by Customer or any other permitted occupants as of the date of this Agreement ("**Existing Operations**"). All operations by Tenant shall be lawful and in material compliance with all regulations and requirements of the Minnesota Public Utilities Commission, as well as any other applicable state, federal or local regulations and requirements ("**Legal Requirements**") and any applicable agreements with, or tariffs of, the local utility.
    - b. **Interference by Customer.** Following installation of the Energy System, Customer shall not, and shall not cause or permit any other persons or parties to, install

equipment or facilities or construct or allow any construction of a structure or structures ("**New Construction**") near the Leased Space if such New Construction will interfere with the Energy System or its performance. Customer shall not move, modify, remove, adjust, alter, change, replace, reconfigure or operate the Energy System or any part of it during the term of the Agreement without prior written direction or approval of Tenant, except if there is an occurrence reasonably deemed by Customer to be a bona fide emergency, in which case Customer will immediately notify Tenant of such emergency and Customer's proposed actions. Customer shall be responsible for, and promptly notify Tenant, of any damage to the Energy System caused by the Customer or its employees, invitees or agents, and shall promptly pay Tenant the costs to repair such damage to the Energy System, along with any lost Rebate revenue.

#### 17. Insurance.

- a. **General Liability and Property Insurance.** Customer shall keep the Energy System insured against loss by fire, theft, hail and wind and such other hazard as Tenant shall reasonably require with an insurance company acceptable to Tenant in its reasonable discretion, at all times will insure the Energy System at an amount equal to the Installation Cost (defined in the Purchase Agreement) and will provide Tenant with a Certificate of Insurance that names Tenant as an additional insured and loss payee. Customer shall also secure and maintain adequate comprehensive general liability insurance against liability related to the Energy System. Customer shall provide Tenant with evidence of having acquired such insurance coverages prior to the Final Project Completion date and on an annual basis thereafter. The loss, injury or destruction of the Energy System shall not release Customer from payment as provided in this Agreement. Any insurance policies obtained by Customer shall provide that such policy of insurance cannot be terminated or cancelled by the insurer without thirty (30) days prior written notice to Tenant. Customer is responsible for any deductibles due under the insurance policies for casualties and will pay Tenant said deductible along with insurance proceeds received to repair the Energy System, and Tenant's lost Rebate revenue resulting from the casualty. Customer's failure or refusal to repair and recommission an Energy System following a loss shall constitute a breach of this Agreement.
- b. **Workers' Compensation Insurance and Employers' Liability Insurance.** In accordance with Minnesota state law, Tenant shall maintain in force workers' compensation insurance for all of its employees. Tenant shall also maintain employer's liability coverage in an amount of not less than One Million Dollars (\$1,000,000.00) per accident. Tenant shall also secure and maintain adequate comprehensive general liability insurance against liability related to the Leased Premises. Upon request, Tenant will provide Customer with a Certificate of Insurance.

#### 18. Indemnification.

- a. Tenant shall indemnify and hold harmless Customer and its officers, directors, members, consultants, representatives, agents, employees and affiliates (each a **Tenant Indemnified Party**) against any damages, liabilities, losses, costs and expenses, including reasonable attorney fees and costs

(collectively, "**Damages**") incurred or suffered by any of them in any way arising out of, relating to, or in connection with (i) any breach of this Agreement by Tenant, or (ii) the negligence, gross negligence or willful misconduct of Tenant or its employees or agents in connection with the transactions contemplated by this Agreement.

- b. Tenant shall indemnify Customer from any mechanic's, materialman's, or other lien with respect to the Property or the Leased Property to the extent such lien is attributable to Tenant's failure to pay the Installation Cost or other costs incurred in the performance of Tenant's obligations for maintenance and repair of the Energy System.
- c. Customer shall indemnify and hold harmless Tenant and its officers, directors, members, consultants, representatives, agents, employees and affiliates (each a **Customer Indemnified Party**) against any Damages incurred or suffered by any of them in any way arising out of, relating to, or in connection with (i) any breach of this Agreement by Customer, or (ii) the negligence, gross negligence or willful misconduct of Customer or its employees or agents in connection with the transactions contemplated by this Agreement.
- d. A Customer Indemnified Party or Tenant Indemnified Party claiming indemnification hereunder must give each Party prompt notice of the relevant claim and each Party agrees to cooperate with each other Party, at its own expense, in the defense of such claim. Notwithstanding the foregoing, any Party from whom indemnification is sought, shall control the defense and settlement of such claim; provided however that such Party shall not agree to any settlement that materially adversely affects the other Party without the prior written consent of such Party, which approval shall not be unreasonably withheld. Without limiting or diminishing the foregoing, any Party may, at its option and its own expense, participate in the defense of any such claim with legal counsel of its own choice.

#### 19. General.

- a. **Subordination to Utility Rebate Agreement.** No portion of this Agreement is intended to conflict with any Utility Rebate Agreements (the "**Utility Rebate Agreements**") to which Tenant or Customer is a party. In the case of a conflict between the terms or conditions of this Agreement and the Utility Rebate Agreements, the terms and conditions of Utility Rebate Agreements shall control. The Utility, or its successors and assigns, is a third-party beneficiary of the provision of this paragraph. Nothing in this Agreement shall prevent the Utility, from fully enforcing the terms and conditions of Utility Rebate Agreements.
- b. **Relationship of the Parties.** The Parties shall for all purposes be considered independent contractors with respect to each other, and neither shall be considered an employee, employer, agent, principal, partner or joint venturer of the other.
- c. **Entire Agreement.** This Agreement and all the schedules, exhibits and attachments hereto, together with any agreement reference herein, constitute the entire agreement and understanding of the Parties relative to the subject matter hereof. The Parties have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to

herein. This Agreement replaces and supersedes any and all prior oral or written agreements, representations and discussions relating to such subject matter.

- d. **Survival of Representations.** All representations, warranties, covenants and agreements of the Parties contained in this Agreement, or in any instrument, certificate, exhibit or other writing provided for in it, shall survive the execution of this Agreement and the consummation of the transactions contemplated herein.
- e. **Amendment.** This Agreement may be amended or modified only by a writing executed by the Parties to this Agreement. No custom or practice of the Parties at variance with the terms hereof shall have any effect.
- f. **Notices.** All notices to be given under this Agreement shall be in writing and shall be effectively given upon personal delivery, facsimile or email transmission (with confirmation of receipt), delivery by overnight delivery service or three days following deposit in the United States Mail (certified or registered mail, postage prepaid, return receipt requested).
- g. **No Delay.** No delay or failure on the part of any Party hereto to exercise any right, power or privilege hereunder shall operate as a waiver thereof.
- h. **Force Majeure.** Neither Party will be liable to the other Party for any delay, error, failure in performance or interruption of performance resulting from causes beyond its reasonable control, including without limitation fires, flood, accidents, explosions, sabotage, strikes or other labor disturbances, product unavailability, labor unavailability, civil commotion, riots, invasions, wars, acts of God, acts of government, terrorism or any cause (whether similar or dissimilar to the foregoing) beyond the reasonable control of the Party.
- i. **Governing Law / Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Minnesota without regard to its conflicts of laws principals. Any lawsuit brought in connection with this Agreement shall be brought only in a court of general jurisdiction in Hennepin County, Minnesota.
- j. **Severability.** The provisions of this Agreement are severable. If any part of this Agreement is rendered void, invalid or unenforceable, such rendering shall not affect the validity and enforceability of the remainder of this Agreement.
- k. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Neither Party shall assign this Agreement, or any portion thereof, without the prior written consent of the other Party. Any attempted assignment or transfer without such prior written consent of the other Party shall be of no force or effect. As to any permitted assignment: (i) reasonable prior notice of any such assignment shall be given to the other Party; and (ii) any assignee shall expressly assume the assignor's obligations hereunder, unless otherwise agreed to by the other Party in writing. Notwithstanding the foregoing, as may be required for Tenant to avoid being classified as a Public Utility under Minnesota Statutes Chapter 216B.02, Subd. 4., or to leverage tax

benefits as tax owner, Tenant may, at its sole discretion, assign and/or sublease all or part of its full interest under this Agreement to a controlled affiliate of Tenant, assign its rights under the Power Purchase Agreement a controlled affiliate of Tenant, or assign this Agreement in connection with any sale of any or all of its Assets to a third party or Bank.

- l. **Quiet Possession.** Customer agrees that upon compliance with the terms and conditions of this Agreement, Tenant shall peaceably and quietly have, hold and enjoy the Leased Space for the Term and any extensions thereof.
- m. **Data Practices.** Seller considers the information contained in this Agreement related to the programs, methods, techniques and processes utilized by Seller to offer and implement the Energy System to be trade secret information of Seller as defined in the Minnesota Government Data Practices Act Ch. 13 .37 Subd. 1 (b) GENERAL NONPUBLIC DATA. In no event shall this information be shared or disclosed with any person or third party without the prior written approval of Seller.

The Parties acknowledge they have read this Agreement, understand it and agree to be bound by its terms and conditions as of the date first set forth above.

Tenant  
**Green2 Solar Leasing, LLC**

By: \_\_\_\_\_  
Rich Ragatz, its Vice President

Dated: \_\_\_\_\_

Customer  
**City of Roseville**

By: \_\_\_\_\_  
Dan Roe and Patrick Trudgeon, its Dan Roe, its Mayor and Patrick Trudgeon, its City Manager

Dated: \_\_\_\_\_



## **SCHEDULE A**

### **Site Plan**

Facility Plan View Drawing Indicating the Final Location of the Energy System on the Leased Space and the point of interconnection of the Energy System with the electrical system at the Property

[The above document is provided by Seller, and is included in the Owner's Manual that is provided to the Customer after Final Project Completion]



## **SCHEDULE B**

### Maintenance Items

- A. Weekly performance monitoring via online monitoring system to validate performance of panels and inverters, energy production; benchmark performance vs. similar systems for validation
- B. Identify any defective equipment via on-line monitoring system
- C. Semi-annual Site audits of system performing the following tasks
  - i. Inspect panels, inverters, and racking for physical damage
  - ii. Clean any debris on or under the solar arrays
  - iii. Ensure labels are intact
  - iv. Check for loose hanging wires, repair as necessary
  - v. Check electrical connections; tighten/torque as necessary
  - vi. Check for corrosion of electrical enclosures, repair as necessary
  - vii. Ensure roof drainage is adequate, that roof drains are not clogged, and confirm there are no signs of pooling water in the vicinity of the solar array
- D. Management of System Component Warranty Claims

## Power Purchase Agreement

39.960 kW DC SilfabSLG370M,  
40.00 kW AC SolarEdge SE20k 480V 3Ph Inverter(s),  
SolarEdge P800 Power Optimizers & Unirac, Panelclaw  
(or equivalent) Ballasted Racking @ approximately 10°

### Xcel SolarRewards

<b>Customer / Owner</b>	<b>City of Roseville</b>
<b>Installation Location / Site</b>	** See Attached Installation Address Schedule
<b>Xcel Premise #</b>	** See Attached Installation Address Schedule

This **POWER PURCHASE AGREEMENT** (this "Agreement"), dated **July 12, 2018**, is between **Green2 Solar Leasing, LLC** a Minnesota Limited Liability Company, whose principal place of business is located at **5810 Nicollet Avenue, Minneapolis, MN 55419** ("Tenant"), and **City of Roseville**, a Minnesota City, whose principal place of business is located at **2660 Civic Center Drive, Roseville, MN 55113** ("Customer"). Tenant and Customer are sometimes also referred to in this Agreement jointly as "**Parties**", or individually as a "**Party**".

#### RECITALS

- A. Tenant leases, operates and maintains Customer's photovoltaic solar electric system (the "**Energy System**") (further defined as the Project, and located at the installation location described above (the "**Site**") described above, all of which are defined in that certain **Purchase Agreement** (the "**Purchase Agreement**") between Customer and **Ideal Energies, LLC** ( the "**Seller**") of even date herewith) pursuant to a Facility Lease Agreement (the "**Facility Lease**") between the Parties of even date herewith; and
- B. Tenant desires to sell renewable electric power inclusive of all rights to its available environmental attributes to Customer, and Customer desires to purchase from Tenant all such electricity which is produced by the Energy System; and
- C. Tenant or its affiliate has, or will, apply for the "**Rebate**" (defined in the Purchase Agreement) on behalf of Customer. After award of the Rebate and before the Final Project Completion date for the Energy System (defined in the Purchase Agreement), Customer will enter into an agreement(s) ("**Utility Agreement**") with the local utility ("**Utility**") pursuant to which Customer will convey to the Utility, as may be required by the Utility Agreement, all Renewable Energy Credits ("**RECs**") for electricity produced by the Energy System for the term specified in the Utility Agreement; and
- D. The Customer may be eligible to participate in the Utility's **Net Metering Program**. Under this program, the energy generated from the Energy System is available for use and to reduce the total amount of energy that needs to be purchased from the Utility. Under this program, for months where the Energy System produces more kWh than the Site consumes, the Utility will compensate Customer at the applicable rate; and
- E. Pursuant to the Facility Lease, the Tenant may be eligible to receive a Federal Tax Credit from the U.S. Treasury equal to **30%** of eligible Installation Cost of any Energy System ("**Tax Credit**") that is put into service during **2018 or 2019**.
- Contingency.** The Parties performance under this Agreement is contingent on Final Project Completion (defined in the Purchase Agreement) occurring for the Project in accordance with the terms of the Purchase Agreement.
  - Power Purchase.** Tenant shall deliver all power generated from the Energy System to Customer at the point of interconnection shown on Schedule A of the Facility Lease.
    - Customer will pay Tenant for all the power generated from the Energy System and delivered to the interconnection point by making the payments specified in **Schedule A** (the "**Power Payments**").
    - In the event the DC Wattage of the Project installed differs from the size specified in the Purchase Agreement, a revised Schedule A will be provided that reflects the final Project installed
    - The Power Payments for the Energy System are due monthly beginning on the first day of the first month following its Final Project Completion date and continuing each month until expiration of the Term (defined below) of this Agreement for the Energy System. Power Payments do not include any sales tax. Sales tax will be added to the Power Payments based on Customer's applicable sales tax rate. Customer authorizes Tenant to debit Customer's bank account to collect Power Payments when due under this Agreement until all Power Payments are received in full. Where Tenant does not collect payments via debiting Customer's account, Customer will mail payments to the Tenant to the address below.
 

**Green2 Solar Leasing, LLC**  
5810 Nicollet Avenue  
Minneapolis, MN 55419
  - Ownership of Renewable Energy Credits.** Customer will, if required by the Utility Agreement, convey to the Utility all RECs generated by the Energy System for the term specified in the Utility Agreement. Subject to any required assignment to the Utility, Customer owns all RECs. For purposes of this Agreement, RECs include all attributes of an environmental or other nature that are created or otherwise arise from the Energy System, including without limitation tags, certificates or similar projects or rights associated with solar energy as a "green" or "renewable" electric generation resource. RECs shall also include any other environmental attribute intended to be transferred to the Utility under the Utility Agreement.
  - Term.** The term (the "**Term**") of this Agreement for the Energy System shall begin on the date that Final Project Completion occurs for such Energy System and shall terminate on the date that is **twenty (20)** years after such Final Project Completion Date.
  - Late Charge / Costs of Collection.** In the event Customer fails to make any Power Payment when due, Customer agrees that the greater of \$50, or interest due based on an

#### AGREEMENT

**NOW, THEREFORE**, in consideration of the foregoing Recitals, the mutual promises of the Parties hereto and for other good and valuable consideration, the receipt and sufficiency of which hereby are acknowledged, the Parties agree as follows:

interest rate not to exceed the lesser of one and one-half percent (1 1/2%) per month or the highest rate permitted by law for commercial transactions, may be charged as a late charge on a monthly basis on the amount of any Power Payment remaining unpaid more than ten (10) days after it is due from the due date until paid in full. In addition, Customer agrees to pay Tenant's attorney's fees and costs of collection, including expert witness fees, whether a lawsuit is commenced or not commenced, and Customer's liability for attorneys' fees and costs of collection, including expert witness fees, extends to any appeals.

6. **Grant of Security Interest.** In order to secure the payment and performance of all of Customer's liabilities, obligations and covenants under this Agreement or the Facility Lease, Customer hereby grants to Tenant a continuing security interest in all Rebates, in the Energy System, together with all attachments, accessories or replacement parts placed upon the Energy System, and in all proceeds of each of the foregoing. Upon the request of Tenant, Customer shall promptly obtain a subordination agreement in favor of Tenant from any third-party lienholder who may have a lien or security interest in any of the foregoing. Customer irrevocably assigns the right to receive Rebates to Tenant and Tenant may exercise this right upon default of Customer. Tenant's security interest and other rights under this Section shall be extinguished upon the later of termination of this Agreement and the Facility Lease and performance of all of Customer's obligations hereunder and thereunder, and Tenant shall execute and file any evidence of such extinguishment reasonably requested by Customer.

7. **Insurance.** Customer shall keep the Energy System insured against loss by fire, theft, hail and wind and such other hazards as required by the Facility Lease. The loss, injury or destruction of the Energy System shall not release Customer from making all Power Payments described in **Schedule A.**

8. **Events of Default.** Each of the following shall constitute an event of default ("**Event of Default**"):

- a. Customer shall fail to make any payment to Tenant when due hereunder, Tenant has notified the Customer of such failure, and the failure has continued without cure by Customer or written waiver by Tenant for a period of thirty (30) days after the notice of failure;
- b. Customer shall breach any representation, warranty or covenant contained in this Agreement in any material respect, Tenant has notified Customer of the breach, and the breach has continued without cure by Customer or written waiver by Tenant for a period of thirty (30) days after the notice of breach;
- c. Customer shall cease to do business, become insolvent, make an assignment for the benefit of creditors or file any petition under bankruptcy, reorganization, insolvency or moratorium law, or any other law for the relief of debtors;
- d. Any involuntary petition shall be filed under any bankruptcy statute against Customer or any receiver, trustee, or similar official shall be appointed to take possession of the properties of Customer unless such petition or appointment ceases to be in effect within thirty (30) days of such filing or appointment; or
- e. The Customer fails to comply with any of its obligations under any of Customer's agreements with the Utility.

f. The Customer's failure or refusal to repair and recommission an Energy System following a casualty loss.

9. **Remedies.**

- a. If an Event of Default shall occur, Tenant may, at its option, exercise any one or more of the following remedies:
  - i. Declare all amounts due or to become due under this Agreement immediately due and payable;
  - ii. Recover any additional damages and expenses sustained by Tenant by reason the Event of Default;
  - iii. Enforce the security interest granted hereunder, in which event Customer agrees to make the Energy System available to Tenant at a place or places acceptable to Tenant and Tenant shall have the right to take possession of the Energy System without legal process for which purpose Tenant may enter any premises where the Energy System may be found without legal process and without breaching the peace, provided that in such case the fair market value of the Energy System shall offset any amounts due under this Agreement;
  - iv. Retain all payments made by Customer as liquidated damages for the non-performance of this Agreement, for use of the Energy System and for depreciation thereof; and
  - v. Exercise any other remedies available under law, including those under Article 9 of the UCC.
- b. In the event the Energy System is sold, foreclosed on, or repossessed in the manner provided herein or by law and the fair market value of the Energy System is not sufficient to pay the amount due under this Agreement, Customer agrees to pay immediately to Tenant such deficiency. In the event the Energy System is sold, foreclosed on, or repossessed in the manner provided herein or by law and the fair market value of the Energy System exceeds the amount that Customer is required to pay Tenant under this Agreement, Tenant agrees to pay immediately to Customer such excess.

c. The remedies provided herein shall be cumulative and may be exercised singularly, concurrently or successively with and in addition to all other remedies in law or equity. If either Party fails to perform any of its obligations under this Agreement, the other Party may (but need not) at any time thereafter perform such obligation, and the expenses incurred in connection therewith shall be payable in full by the nonperforming Party upon demand. In addition, the nonperforming Party agrees to pay the other Party's reasonable attorney's fees and costs of collection in pursuing any remedies.

10. **Annual Energy Production Not Guaranteed.** **THE PARTIES UNDERSTAND AND AGREE THE ANNUAL ENERGY PRODUCTION FROM THE ENERGY SYSTEM MAY VARY FROM ANNUAL PROJECTIONS FOR REASONS BEYOND THE PARTIES CONTROL INCLUDING WITHOUT LIMITATION SEASON WEATHER VARIATIONS, ROUTINE AND NON-ROUTINE MAINTENANCE CAUSING DOWNTIME, EQUIPMENT**

**PERFORMANCE, PROCESSING ANY EQUIPMENT WARRANTIES FOR MALFUNCTIONING EQUIPMENT, FORCED MAJEURE, ETC. THE PARTIES UNDERSTAND THAT THE REBATES AND UTILITY BILL CREDITS/SAVINGS ARE PAID/RECOGNIZED PROPORTIONALLY WITH ENERGY SYSTEM ENERGY PRODUCTION, AND THAT THE ACTUAL AMOUNTS RECEIVED BY CUSTOMER WILL VARY ACCORDINGLY. TENANT DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, THAT PRODUCTION WILL MATCH PROJECTIONS, AND CUSTOMER AND TENANT ASSUME, AT THEIR SOLE RISK, THE VARIABILITY OF ANNUAL ENERGY PRODUCTION AND VARIATIONS FROM ANY FINANCIAL PROJECTIONS RELATING TO UTILITY BILL CREDITS, SAVINGS AND REBATES.**

11. **Customer's Maximum Payment Obligation.** Customer's maximum power payment obligation to Tenant under this Agreement is the sum of all the Power Purchase Payments listed in **Schedule A**.
12. **Power Production Adjustment.** Except where the reimbursement due under this Section is caused by Customer's breach of this Agreement, or the Energy System being non-operational during periods of Customer's Maintenance performed in accordance with Section 14 of the Facility Lease, in any 12-month period beginning with the applicable Final Project Completion date that the Energy System does not produce at least 900 kWh per KW DC, Tenant will reimburse Customer within sixty (60) days after the then applicable 12-month period as follows: Total payments made over the then applicable 12-month period \* (1 - (actual kWh/kWDC / 900 kWh/kWDC)). For Example, a 40 kWDC Energy System produces 800 kWh/kWDC and power payments equaling \$3000 are paid during the then applicable 12-month period. A \$333.33 cash reimbursement will be paid to the Customer that is calculated as follows:  $\$3000 * (1 - 800/900) = \$333.33$ .
13. **Miscellaneous.**
  - a. **Subordination to Utility Rebate Agreement.** No portion of this Agreement is intended to conflict with any Utility Rebate Agreements (the "**Utility Rebate Agreements**") to which Tenant or Customer is a party. In the case of a conflict between the terms or conditions of this Agreement and the Utility Rebate Agreements, the terms and conditions of Utility Rebate Agreements shall control. The Utility, or its successors and assigns, is a third-party beneficiary of the provision of this paragraph. Nothing in this Agreement shall prevent the Utility, from fully enforcing the terms and conditions of Utility Rebate Agreements.
  - b. **Relationship of the Parties.** The Parties shall for all purposes be considered independent contractors with respect to each other, and neither shall be considered an employee, employer, agent, principal, partner or joint venturer of the other.
  - c. **Entire Agreement.** This Agreement and the schedules, exhibits and attachments hereto, together with any agreement reference herein, constitute the entire agreement and understanding of the Parties relative to the subject matter hereof. The Parties have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to herein. This Agreement replaces and supersedes any and all prior oral or written agreements, representations and discussions relating to such subject matter.
  - d. **Survival of Representations.** All representations, warranties, covenants and agreements of the Parties contained in this Agreement, or in any instrument, certificate, exhibit or other writing provided for in it, shall survive the execution of this Agreement and the consummation of the transactions contemplated herein.
  - e. **Amendment.** This Agreement may be amended or modified only by a writing executed by the Parties to this Agreement. No custom or practice of the Parties at variance with the terms hereof shall have any affect.
  - f. **Notices.** All notices to be given under this Agreement shall be in writing and shall be effectively given upon personal delivery, facsimile or email transmission (with confirmation of receipt), delivery by overnight delivery service or three days following deposit in the United States Mail (certified or registered mail, postage prepaid, return receipt requested).
  - g. **No Delay.** No delay or failure on the part of any Party hereto to exercise any right, power or privilege hereunder shall operate as a waiver thereof.
  - h. **Force Majeure.** Neither Party will be liable to the other Party for any delay, error, failure in performance or interruption of performance resulting from causes beyond its reasonable control, including without limitation fires, flood, accidents, explosions, sabotage, strikes or other labor disturbances, product unavailability, labor unavailability, civil commotion, riots, invasions, wars, acts of God, acts of government, terrorism or any cause (whether similar or dissimilar to the foregoing) beyond the reasonable control of the Party.
  - i. **Governing Law / Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Minnesota without regard to its conflicts of laws principals. Any lawsuit brought in connection with this Agreement shall be brought only in a court of general jurisdiction in Hennepin County, Minnesota.
  - j. **Severability.** The provisions of this Agreement are severable. If any part of this Agreement is rendered void, invalid or unenforceable, such rendering shall not affect the validity and enforceability of the remainder of this Agreement.
  - k. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Neither Party shall assign this Agreement, or any portion thereof, without the prior written consent of the other Party. Any attempted assignment or transfer without such prior written consent of the other Party shall be of no force or effect. As to any permitted assignment: (i) reasonable prior notice of any such assignment shall be given to the other Party; and (ii) any assignee shall expressly assume the assignor's obligations hereunder, unless otherwise agreed to by the other Party in writing. Notwithstanding the foregoing, as may be required for Tenant to avoid

Trade Secret

- I. being classified as a Public Utility under Minnesota Statutes Chapter 216B.02, Subd. 4., or to leverage tax benefits as tax owner, Tenant may, at its sole discretion, assign and/or sublease all or part of its full interest under the Facility Lease Agreement to a controlled affiliate of Tenant, assign its rights under this Power Purchase Agreement a controlled affiliate of Tenant, or assign this Agreement in connection with any sale of any or all of its Assets to a third party or Bank.
- m. **Time is of the Essence.** Time is of the essence with respect to all of the terms of this Agreement.
- n. **Data Practices.** Seller considers the information contained in this Agreement related to the programs, methods, techniques and processes utilized by Seller to offer and implement the Energy System to be trade secret information of Seller as defined in the Minnesota Government Data Practices Act Ch. 13 .37 Subd. 1 (b) GENERAL NONPUBLIC DATA. In no event shall this information be shared or disclosed with any person or third party without the prior written approval of Seller.

The Parties acknowledge they have read this Agreement, understand it and agree to be bound by its terms and conditions as of the date first set forth above.

Tenant  
**Green2 Solar Leasing, LLC**

By: \_\_\_\_\_  
Rich Ragatz, its Vice President

Dated: \_\_\_\_\_

Customer  
**City of Roseville**

By: \_\_\_\_\_  
Dan Roe and Patrick Trudgeon, its Dan Roe, its Mayor and Patrick Trudgeon, its City Manager

Dated: \_\_\_\_\_





**SCHEDULE A**  
**Power Purchase Payment Schedule**

39.960 kW DC SilfabSLG370M,  
40.00 kW AC SolarEdge SE20k 480V 3Ph Inverter Inverters, SolarEdge P800 Power Optimizers &  
Unirac, Panelclaw (or equivalent) Ballasted Racking @ approximately 10°

**Xcel SolarRewards**

<b>Green2 Solar Leasing, LLC Utility Bill Expense</b>				
<b>Year</b>	<b>Facility Lease Runs Full Term</b>		<b>Put or Call Is Exercised</b>	
	<b>(Power Purchase Expense)</b>		<b>(Power Purchase Expense)</b>	
	<b>(\$/year)</b>	<b>(\$/month)</b>	<b>(\$/year)</b>	<b>(\$/month)</b>
<b>1</b>	\$ 3916.68	\$ 326.39	\$ 3916.68	\$ 326.39
<b>2</b>	\$ 3970.20	\$ 330.85	\$ 3970.20	\$ 330.85
<b>3</b>	\$ 4128.12	\$ 344.01	\$ 4128.12	\$ 344.01
<b>4</b>	\$ 4292.28	\$ 357.69	\$ 4292.28	\$ 357.69
<b>5</b>	\$ 4463.04	\$ 371.92	\$ 4463.04	\$ 371.92
<b>6</b>	\$ 4640.52	\$ 386.71	\$ 4640.52	\$ 386.71
<b>7</b>	\$ 4825.08	\$ 402.09	\$ 4825.08	\$ 402.09
<b>8</b>	\$ 5016.96	\$ 418.08	\$ 5016.96	\$ 418.08
<b>9</b>	\$ 5216.52	\$ 434.71	\$ 5216.52	\$ 434.71
<b>10</b>	\$ 5424.00	\$ 452.00	\$ 5424.00	\$ 452.00
<b>11</b>	\$ 5639.76	\$ 469.98	\$ 5639.76	\$ 469.98
<b>12</b>	\$ 5864.04	\$ 488.67	\$ 5864.04	\$ 488.67
<b>13</b>	\$ 6097.32	\$ 508.11	\$ 6097.32	\$ 508.11
<b>14</b>	\$ 1500.00	\$ 125.00	\$	\$
<b>15</b>	\$ 1500.00	\$ 125.00	\$	\$
<b>16</b>	\$ 1500.00	\$ 125.00	\$	\$
<b>17</b>	\$ 1500.00	\$ 125.00	\$	\$
<b>18</b>	\$ 1500.00	\$ 125.00	\$	\$
<b>19</b>	\$ 1500.00	\$ 125.00	\$	\$
<b>20</b>	\$ 1500.00	\$ 125.00	\$	\$
<b>21</b>	\$	\$	\$	\$
<b>22</b>	\$	\$	\$	\$
<b>23</b>	\$	\$	\$	\$
<b>24</b>	\$	\$	\$	\$
<b>25</b>	\$	\$	\$	\$
<b>Total</b>	<b>\$ 73994.52</b>		<b>\$ 63494.52</b>	

## Put and Call Agreement

39.960 kW DC SilfabSLG370M,  
40.00 kW AC SolarEdge SE20k 480V 3Ph Inverter(s),  
SolarEdge P800 Power Optimizers & Unirac, Panelclaw  
(or equivalent) Ballasted Racking @ approximately 10°

### Xcel SolarRewards

<b>Customer / Owner</b>	<b>City of Roseville</b>
<b>Installation Location / Site</b>	** See Attached Installation Address Schedule
<b>Xcel Premise #</b>	** See Attached Installation Address Schedule

This **PUT AND CALL AGREEMENT** (this "**Agreement**"), dated **July 12, 2018** is between **Green2 Solar Leasing, LLC**, a Minnesota Limited Liability Company, whose principal place of business is located at **5810 Nicollet Avenue, Minneapolis, MN 55419** ("**Tenant**"), and **City of Roseville**, a Minnesota City, whose principal place of business is located at **2660 Civic Center Drive, Roseville, MN 55113** ("**Customer**"). Tenant and Customer are sometimes also referred to in this Agreement jointly as "**Parties**", or individually as a "**Party**".

#### RECITALS

- A. Customer is the purchaser of a photovoltaic solar electric system (the "**Energy System**") located at the installation location described above (the "**Site**") and as described as the Project in the Purchase Agreement between Customer and **Ideal Energies, LLC** ("**Seller**") of even date herewith (the "**Purchase Agreement**"); and
- B. Tenant is the lessee of the Energy System and associated rights under the **Facility Lease Agreement** with Customer (the "**Facility Lease**") of even date herewith, and Tenant sells the Energy System generated from the Energy System pursuant to a Power Purchase Agreement with Customer (the "**Power Purchase Agreement**") of even date herewith (Tenant's interests in the Facility Lease and Power Purchase Agreement is referred to herein as an "**Interest**"); and
- C. The Parties hereto now desire to enter into this Agreement to set forth the terms and conditions upon which Tenant has an option to put its Interest(s) to the Customer and upon which Customer has an option to call Tenant's Interest(s) from Tenant.

#### AGREEMENT

**NOW, THEREFORE**, in consideration of the foregoing Recitals, the mutual promises of the Parties hereto and for other good and valuable consideration, the receipt and sufficiency of which hereby are acknowledged, the Parties hereby agree as follows:

1. **Contingency.** The Parties performance under this Agreement is contingent on Final Project Completion (as defined in the Purchase Agreement) occurring for the Project in accordance with the terms of the Purchase Agreement.
2. **Put of Tenant's Interest.** Commencing on the **thirteen (13) year anniversary of the Final Project Completion date for the Project**, and for a period of **three (3) months thereafter** (the "**Put Period**"), Tenant shall have the right and option to require Customer to purchase all, but not less than all, of Tenant's Interest the Energy System installed pursuant to that Project (the "**Put**"). Tenant may exercise the Put by delivering notice of exercise of such option in writing to Customer during the Put Period. If exercised, Tenant shall be obligated to sell, and Customer shall be obligated to purchase, all of the Interest owned by Tenant. The purchase price for any Interest shall be **\$1.00** (the "**Put Price**"). The date of the Put closing will be thirty (30) days following the notice of exercise of the Put, or such earlier

date as the Parties may agree in writing (the "**Put Closing Date**"). The Put Price shall be paid by Customer to Tenant in cash on the Put Closing Date. Each Party shall remain liable for any obligations arising under the Facility Lease prior to the Put Closing Date. Notwithstanding the foregoing, an invoice provided by Tenant to Customer stating the Project and its Put Price, and Customer's payment of the same satisfies the requirements of this Section.

3. **Call of Tenant's Interest.** For a period of **nine (9) months beginning the day following the last day of the Put Period** (the "**Call Period**") for the Project, Customer shall have the right and option to purchase all, but not less than all, of Tenant's Interest in the Energy System installed pursuant to that Project (the "**Call**"). Customer may exercise the Call by delivering notice of exercise of such option to Tenant during the Call Period. If exercised, Customer shall be obligated to purchase, and Tenant shall be obligated to sell, all of the Interest owned by Tenant. The purchase price for the Interest pursuant to the Call shall be an amount equal to the fair market value (the "**Fair Market Value Price**") of such Interest as agreed by the Parties and if no agreement is possible, then by an independent qualified appraiser selected by the Customer and the cost of which is paid for by the Tenant (the "**Call Price**"). The Parties agree, for the Project, that a reasonable method of establishing the Fair Market Value Price is to use a discounted cash flow value of Tenant's power purchase income less expenses remaining under the Power Purchase Agreement and Facility Lease Agreement as of the Call Date. As of the date hereof, the Parties believe that a discount rate of 15% is reasonable and agree that the Parties will use foregoing method in determining the Fair Market Value and resulting Call Price. The date of the Call closing shall be thirty (30) days following delivery of the notice of exercise of the Call, or such earlier date as the Parties may agree in writing (the "**Call Closing Date**"). The Call Price shall be paid by Customer to Tenant in cash on the Call Closing Date. Each Party shall remain liable for any obligations arising under the Facility Lease for the Energy System prior to the Call Closing Date.
4. **Obligations following exercise of Put or Call.**
  - a. **Tenant.** After the transfer and assignment of the Interest for the Energy System installed pursuant to the Project, pursuant to the Put or Call, Tenant shall have no further obligations in connection with that Interest.
  - b. **Customer.** After the transfer and assignment of the Interest pursuant to the Put or Call for the Energy System installed pursuant to a Project, Customer shall make, if not already paid, the Power Payments described in Schedule A of the Power Purchase Agreement between the Parties of even date herewith beginning with the month after that Project's Final Project Completion date through and including the month of the Project's Put or Call Closing date. Customer is not

obligated to pay Tenant any Power Purchase Payments after the Put or Call Closing date through the end of the Term for that Project as specified in the Power Purchase Agreement.

5. **Miscellaneous.**

- a. **Subordination to Utility Rebate Agreement.** No portion of this Agreement is intended to conflict with any Utility Rebate Agreements (the "**Utility Rebate Agreements**") to which Tenant or Customer is a party. In the case of a conflict between the terms or conditions of this Agreement and the Utility Rebate Agreements, the terms and conditions of Utility Rebate Agreements shall control. The utility, or its successors and assigns, is a third-party beneficiary of the provision of this paragraph. Nothing in this Agreement shall prevent the utility, from fully enforcing the terms and conditions of Utility Rebate Agreements.
- b. **Relationship of the Parties.** The Parties shall for all purposes be considered independent contractors with respect to each other, and neither shall be considered an employee, employer, agent, principal, partner or joint venturer of the other.
- c. **Entire Agreement.** This Agreement and all schedules, exhibits and attachments hereto, together with any agreement reference herein, constitute the entire agreement and understanding of the Parties relative to the subject matter hereof. The Parties have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to herein. This Agreement replaces and supersedes any and all prior oral or written agreements, representations and discussions relating to such subject matter.
- d. **Survival of Representations.** All representations, warranties, covenants and agreements of the Parties contained in this Agreement, or in any instrument, certificate, exhibit or other writing provided for in it, shall survive the execution of this Agreement and the consummation of the transactions contemplated herein.
- e. **Amendment.** This Agreement may be amended or modified only by a writing executed by the Parties to this Agreement. No custom or practice of the Parties at variance with the terms hereof shall have any effect.
- f. **Notices.** All notices to be given under this Agreement shall be in writing and shall be effectively given upon personal delivery, facsimile or email transmission (with confirmation of receipt), delivery by overnight delivery service or three days following deposit in the United States Mail (certified or registered mail, postage prepaid, return receipt requested).
- g. **No Delay.** No delay or failure on the part of any Party hereto to exercise any right, power or privilege hereunder shall operate as a waiver thereof.
- h. **Force Majeure.** Neither Party will be liable to the other Party for any delay, error, failure in performance or interruption of performance resulting from causes beyond its reasonable control, including without limitation fires, flood, accidents, explosions, sabotage, strikes or other labor disturbances, product unavailability, labor unavailability, civil commotion, riots, invasions, wars, acts of God, acts of government, terrorism or any cause (whether similar or dissimilar to the foregoing) beyond the reasonable control of the Party.
- i. **Governing Law / Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Minnesota without regard to its conflicts of laws principals. Any lawsuit brought in connection with this Agreement shall be brought only in a court of general jurisdiction in Hennepin County, Minnesota.
- j. **Severability.** The provisions of this Agreement are severable. If any part of this Agreement is rendered void, invalid or unenforceable, such rendering shall not affect the validity and enforceability of the remainder of this Agreement.
- k. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Neither Party shall assign this Agreement, or any portion thereof, without the prior written consent of the other Party. Any attempted assignment or transfer without such prior written consent of the other Party shall be of no force or effect. As to any permitted assignment: (i) reasonable prior notice of any such assignment shall be given to the other Party; and (ii) any assignee shall expressly assume the assignor's obligations hereunder, unless otherwise agreed to by the other Party in writing. Notwithstanding the foregoing, as may be required for Tenant to avoid being classified as a Public Utility under Minnesota Statutes Chapter 216B.02, Subd. 4., or to leverage tax benefits as tax owner, Tenant may, at its sole discretion, assign and/or sublease all or part of its full interest under the Facility Lease Agreement to a controlled affiliate of Tenant, assign its rights under the Power Purchase Agreement a controlled affiliate of Tenant, assign its rights under this Agreement to a controlled affiliate of Tenant, or assign this Agreement in connection with any sale of any or all of its Assets to a third party or Bank.
- l. **Time is of the Essence.** Time is of the essence with respect to all of the terms of this Agreement.
- m. **Data Practices.** Seller considers the information contained in this Agreement related to the programs, methods, techniques and processes utilized by Seller to offer and implement the Energy System to be trade secret information of Seller as defined in the Minnesota Government Data Practices Act Ch. 13 .37 Subd. 1 (b) GENERAL NONPUBLIC DATA. In no event shall this information be shared or disclosed with any person or third party without the prior written approval of Seller.

[SIGNATURE PAGE FOLLOWS]

Trade Secret

The Parties acknowledge they have read this Agreement, understand it and agree to be bound by its terms and conditions as of the date first set forth above.

Tenant  
**Green2 Solar Leasing, LLC**

By: \_\_\_\_\_  
Rich Ragatz, its Vice President

Dated: \_\_\_\_\_

Customer  
**City of Roseville**

By: \_\_\_\_\_  
Dan Roe and Patrick Trudgeon, its Mayor and its City Manager

Dated: \_\_\_\_\_



# Site Installation Address Schedule

39.960 kW DC SilfabSLG370M,  
 40.00 kW AC SolarEdge SE20k 480V 3Ph Inverter(s),  
 SolarEdge P800 Power Optimizers &  
 Unirac, Panelclaw (or equivalent)  
 Ballasted Racking @ approximately 10°

Site Use	Installation Address	Premise Number	Project DG Size
Fire Station	2701 Lexington Avenue N Roseville, MN 55113	303385382	39.96 kWDC Rooftop Ballasted Solar Array @ 10°
Ice Arena	2661 Civic Center Drive Roseville, MN 55113	303534506	39.96 kWDC Rooftop Ballasted Solar Array @ 10°
Public Works	2660 Civic Center Drive Roseville, MN 55113	302330457	39.96 kWDC Rooftop Ballasted Solar Array @ 10°





## Solar Array Purchase, Capital Lease & Power Purchase Agreements w/ Put & Call

208.250 kW DC Monocrystalline350W  
 166.50 kW AC SolarEdge SE33k 480V 3Ph Inverter Inverters, SolarEdge P730 Power Optimizers &  
 Unirac, PanelClaw (or equivalent) Ballasted Racking @ approximately 10°

### Xcel Photovoltaic Credit Rider Tariff

## Customer Information

Date:	July 13, 2018
Solar Array Legal Owner:	<b>City of Roseville</b>
Customer Corporate Form:	Minnesota City
Customer Mailing Address:	2660 Civic Center Drive, Roseville, MN 55113
Customer Signer Name:	Dan Roe and Patrick Trudgeon
Customer Signer Title:	Dan Roe, its Mayor and Patrick Trudgeon, its City Manager
Customer Authorized Representative:	Marcus Culver
Customer Authorized Representative Tel:	651-792-7041
Installation Address:	<b>2661 Civic Center Drive, Roseville, MN 55113</b>
Premise Number:	<b>303534506</b>
Real Property Owner:	City of Roseville
Real Property Owner Mailing Address:	2660 Civic Center Drive, Roseville, MN 55113

## Project Information

System Size in kW DC	<b>208.250 (kW DC)</b> (+/- 0.10 kW DC)
Installation Cost:	<b>\$470594.82</b>
Project Completion Date:	Summer/Fall, 2018
Tariff Name:	Xcel Photovoltaic Credit Rider Tariff
REC Owner:	Customer
Tax Credit Percent:	30%
Panel Description:	Monocrystalline350W
Panel Size in Watts DC:	350 (Watts DC)
Inverter Description:	SolarEdge SE33k 480V 3Ph Inverter
Total Inversion in kW AC:	166.50 (kW AC)
Power Optimizer Description:	SolarEdge P730 Power Optimizers
Solar Racking Description:	Unirac, PanelClaw (or equivalent) Ballasted Racking @ approximately 10°

## Lease, Power Purchase, and Put & Call Agreement Information

Real Property Use:	Ice Arena
Tenant:	Green2 Solar Leasing, LLC
Tenant Signer Name:	Rich Ragatz
Tenant Signer Title:	Vice President
Leased Space Rent Payment:	<b>\$270.00</b> per year
Leased Energy System Rent Payment:	<b>\$30.00</b> per year
Put / Call Year:	20

## Purchase Agreement

208.250 kW DC Monocrystalline350W,  
166.50 kW AC SolarEdge SE33k 480V 3Ph Inverter(s),  
SolarEdge P730 Power Optimizers & Unirac, PanelClaw (or  
equivalent) Ballasted Racking @ approximately 10°

### Xcel Photovoltaic Credit Rider Tariff

This **PURCHASE AGREEMENT** (this “**Agreement**”), dated **July 13, 2018** is between **IDEAL ENERGIES, LLC**, a Minnesota Limited Liability Company, whose principal place of business is located at **5810 Nicollet Avenue Minneapolis, MN 55419** (“**Seller**”), and **City of Roseville**, a Minnesota City, whose principal place of business is located at **2660 Civic Center Drive, Roseville, MN 55113** (“**Customer**”). Seller and Customer are sometimes also referred to in this Agreement jointly as “**Parties**”, or individually as a “**Party**”.

#### RECITALS

- A. Seller sells and installs grid-tied photovoltaic solar electric systems (the “**Energy System**”) and Customer desires to purchase and install an Energy System on the Installation Location described above (the “**Site**” or “**Real Property**”); and
- B. Seller has or will apply for the Tariff (as described below) on behalf of Customer for the Project (defined below) and after the Tariff is secured for the Project by the Customer’s executing Utility Agreements (defined below) required to receive the Tariff, will install the Energy System, in accordance with the terms and conditions set forth in this Agreement.
- C. Whereas, the Customer will, in connection with this Agreement, enter into a **Facility Lease Agreement** (the “**Facility Lease Agreement**”) with **Green2 Solar Leasing, LLC** (“**Tenant**”) pursuant to which Tenant leases, operates and maintains the Customer’s Energy System; and
- D. Whereas, the Customer will, in connection with this Agreement, enter into a Power Purchase Agreement (the “**Power Purchase Agreement**”) with Tenant pursuant to which Tenant will sell power generated by the Energy System to Customer.

#### AGREEMENT

**NOW, THEREFORE**, for valuable consideration, the receipt of which is hereby acknowledged, the Parties agree as follows:

1. **Contingency.** The Parties performance under this Agreement is contingent on the Customer’s Project eligibility to receive the Standby Service Tariff (as defined below).
2. **Services.** After the Project has secured the Tariff in accordance with **Section 9**, Seller will, at its expense, perform electrical engineering on the Energy System, perform structural engineering on the Site to verify it is adequate to support the Energy System, provide and install an Energy System of **208.250 kW DC** (+/- 0.10 kWDC) on the Site, and perform Energy System commissioning (the “**Project**”). The Energy System will consist of the Energy System components identified on **Schedule A** (the “**System Components**”) and the Project’s design documents (the “**Design Documents**”).
3. **Title and Risk of Loss.** Title and risk of loss for the Energy System will pass to Customer upon its Final Project Completion (as defined below).
4. **Purchase and Sale; Installation Costs and Payment Terms.** Seller agrees to sell and Customer agrees to purchase the

<b>Customer / Owner</b>	<b>City of Roseville</b>
<b>Installation Location</b>	2661 Civic Center Drive, Roseville, MN 55113
<b>Xcel Premise #</b>	303534506

Energy System and the services provided for hereunder for a total cost of **\$470594.82** (the “**Installation Cost**”). The Installation Cost for the Project will be paid in full net fifteen (**15**) days after its Final Project Completion date, except in the event that Customer has entered into an Installment Sale Finance Agreement or a Facility Lease Agreement with Seller’s affiliates, in which case the terms of those agreements will govern payment of the Installation Cost.

#### 5. **Customer’s Representations and Responsibilities.**

- a. Customer represents either (i) that the Site is owned by Customer, or an affiliated entity that has common ownership with Customer, as described in **Schedule B**.
- b. The individual listed in **Schedule B** is authorized to act on behalf of Customer.
- c. Customer will, at least two weeks before the Final Project Completion date for the Project, provide either a wireless internet connection or a RJ45 Internet outlet at the electrical room for connecting the Energy System’s web-based monitoring equipment. If Customer does not provide the foregoing, Seller may, at its election, provide this service to assure internet service is available for Energy System monitoring on the Final Project Completion date. If Seller provides the foregoing service, a separate fee will be invoiced to Customer for this service of \$250.00.

#### 6. **Seller’s Representations and Responsibilities.**

- a. Seller will provide all System Components, labor, equipment, supplies and services necessary to install the Energy System and the System Components at the Site in accordance with the “Scope of Work” described in **Schedule C**.
- b. Seller will perform all services in compliance with all applicable laws, rules, regulations, governmental approvals and permits, including all applicable agreements with, and tariffs of, the local utility (collectively, “**Applicable Requirements**”).

7. **Installation Plan.** Customer and Seller will work together to develop a proposed work plan and schedule for the installation of the Project (the “**Schedule**”). If events arise which make meeting the Schedule impractical, such as availability of equipment and other reasonable delays, Seller will notify Customer of the same as soon as reasonably possible, and the Parties will adjust the Schedule accordingly. The Project will be completed when system witness test is performed for the Project, and the full Energy System is turned on and is capable and authorized under all Applicable Requirements to generate and deliver electric energy to Customer and the local utility’s electrical grid at the Interconnection Point (“**Final Project Completion**”). Notwithstanding any delays, the anticipated date for Final Project Completion for the Project is **Summer/Fall, 2018**.

#### 8. **Changes.**

- a. It is the desire of the Parties to keep changes to the Project to a minimum. Either Party may initiate a change by

- advising the other Party in writing of the change. For any change request, Seller will prepare a revised Schedule and a cost estimate. Customer will advise Seller in writing of its approval or disapproval of the change. If Customer approves the change, Seller will perform the services as changed, and the Installation Costs will be updated.
- b. The equipment selected by Seller and described on **Schedule A** may be substituted by Seller with other equipment (with at least a 10-year manufacturer's workmanship warranty and a 25-year production warranties achieving at least 80% of rated capacity) as required to accommodate structural limitations of the Site, the availability of equipment, changes in panel wattage available from Manufacturers, or other reasonable reasons. A substitution in panel wattage that results in a kW DC variance of +/- 0.10 kW DC may be made by Seller without amending this Agreement.
9. **Tariff, Utility Bill Credits, and Tax Credits.** The Parties anticipate the Project will be eligible for the following Tariff's and resulting Utility Bill Credits:
- a. The Customer's Project should be eligible to receive the Tariff described in Xcel Energy's Electric Rate Book as Standby Service Rider (Tariff Section 5, Sheets 101-107) (the "**Standby Service Tariff**") and General Rules and Regulations applicable to Standby Service (Tariff Section 6, sheets 10-11) based on the contracted amount as reflected on Amendment No. 1 to the Electric Service Agreement). The Tariff will be reflected as credit on the Customer's utility bill (the "**Utility Bill Credit**"). To apply for the Tariff, Customer agrees to execute the following Utility agreements (the "**Utility Agreements**"): (i) Electric Service Agreement (ii) Amendment No. 1 to Electric Service Agreement, and (iii) a Uniform Statewide Contract for Cogeneration and Small Power Production Facilities, under which Renewable Energy Credits (the "**RECs**") for the Project belong to the **Customer**.
- b. The Customer's Project should be eligible to participate in any successor Tariff Program that replaces the Standby Service Tariff, including but not limited to, the Photovoltaic Demand Credit Rider (the "**Photovoltaic Rider**") currently under promulgation at the Public Utilities Commission as Docket No. E999/CI-15-115) which provides a Utility Bill Credit based on the kWh produced from the Energy System from the hours 1:00 PM to 7:00 PM multiplied by the rate specified in the proposed Tariff.
- c. The Customer's Project should be eligible to receive a Federal Tax Credit from the U.S. Treasury pursuant to the terms of the Facility Lease equal to **30%** of the eligible Installation Cost of the Energy System ("**Tax Credit**") for Energy Systems that are put into service during **2018 or 2019**.
- d. Customer should be eligible to participate in the local utility's **Net Metering Program**. Under this program, the energy generated from the Energy System is available for on-site use and reduces the total units of energy (kWh) that the Customer needs to purchase from the utility, and for months where the Energy System produces more kWh than the site consumes, the utility will compensate Customer at the applicable rate.
10. **Insurance.**
- a. Seller will, at its own cost and expense, maintain in full force and effect, insurance reasonable and customary for the services being performed by Seller under this Agreement. Upon request, Seller shall provide Customer with certificate(s) evidencing such insurance prior to commencement of any work at the Site.
- b. Customer will at all times, at its own cost and expense, maintain in full force and effect, insurance reasonable and customary for the Site and, after the Final Project Completion has occurred, for the Energy System and the System Components.
- c. As required, Customer will provide Seller and the Utility with a certificate of insurance that conforms with the Tariff and Utility Agreement Requirements.
11. **Seller's Waiver and Indemnity Regarding Liens.** To the fullest extent permitted under the Applicable Requirements, Seller waives any right to file or impose any mechanic's, materialman's, or other liens with respect to the Site or the Project. Seller shall promptly pay all undisputed amounts owed for services, materials, equipment, and labor furnished by any person to Seller with respect to the Project. Seller shall, at Seller's sole cost and expense, discharge and cause to be released, whether by payment or posting of an appropriate surety bond in accordance with the Applicable Requirements, within thirty (30) days of its filing, any mechanic's, materialmen's, or other lien in respect of the Project, the Energy System, or the Site created by, through or under, or as a result of any act or omission (or alleged act or omission) of, Seller or any subcontractor or other person providing services, materials, equipment or labor with respect to the Project. If Seller defaults in its obligation to discharge, satisfy or settle such liens, Customer may discharge, satisfy or settle such liens and Seller shall, within fifteen (15) days of a written request by Customer, reimburse Customer for all costs and expenses incurred by Customer to discharge, satisfy or settle such Liens.
12. **Warranties.**
- a. Seller provides the warranties set forth on **Schedule D** hereto. Except as otherwise set forth in **Schedule D**, the System Components furnished and installed by Seller, but not manufactured by Seller (including without limitation the solar modules, inverters, power optimizers, racking, and monitoring equipment and their performance/energy output), will carry only the warranty of their manufacturer. For more detailed information about warranties on the System Components, please see the applicable manufacturer's specification sheets and warranties included in the Operations Manual provided to Customer by Seller, or available on the manufacturer's websites. Customer is solely responsible for pursuing any available warranties on System Components against the manufacturer at its own expense, and may look only to such manufacturer, and not to Seller, for any warranty with respect thereto. In accordance with the Facility Lease Agreement, Tenant will assist Customer in resolving any warranties relating to System Components as described therein.
- b. **EXCEPT AS EXPRESSLY PROVIDED IN SCHEDULE D, SELLER MAKES NO WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY AS TO THE INSTALLATION, DESIGN, DESCRIPTION, QUALITY, MERCHANTABILITY, COMPLETENESS, USEFUL LIFE, ENERGY PRODUCTION, PROJECTED ECONOMIC VIABILITY, FINANCIAL DATA AND PROJECTIONS, THE AMOUNT OF OR CUSTOMER'S RECEIPT OF UTILITY BILL CREDITS, ROOF PERFORMANCE, FITNESS FOR**

**ANY PARTICULAR PURPOSE OR ANY OTHER MATTER OF THE ENERGY SYSTEM, THE SYSTEM COMPONENTS, THE PROJECT, OR ANY SERVICES PROVIDED UNDER THIS AGREEMENT.**

13. **Ownership of Project Documents and Design.** All Design Documents for the Energy System shall be the sole and exclusive property of Customer. Customer grants Seller a perpetual, royalty free license to use the Design Documents for its own private use.

14. **Indemnification; Limitation of Damages.**

a. Subject to the limitations set forth below, Seller hereby indemnifies and holds harmless Customer and its officers, directors, members, consultants, representatives, agents, employees and affiliates against any damages, liabilities, losses, costs and expenses, including reasonable attorney fees and costs (collectively, "**Damages**") incurred or suffered by any of them caused by (i) any material breach of this Agreement by Seller, or (ii) the negligence, gross negligence or willful misconduct of Seller, its employees, or subcontractors in connection with the Project.

b. Customer hereby indemnifies and holds harmless Seller and its officers, directors, members, consultants, representatives, agents, employees and affiliates against any Damages incurred or suffered by any of them in any way arising out of, relating to, or in connection with (i) any material breach of this Agreement by Customer, or (ii) the negligence, gross negligence or willful misconduct of Customer or its employees in connection with the Project.

c. A Party claiming indemnification will give the other Party prompt notice of the relevant claim and will reasonably cooperate with the indemnifying Party, at the indemnifying Party's expense, in the defense of such claim. The indemnifying Party shall control the defense and settlement of such claim; provided however that the indemnifying Party shall not agree to any settlement that affects the indemnified Party without the prior written consent of the indemnified Party, which approval shall not be unreasonably withheld. The indemnified Party may, at its option and its own expense, participate in the defense of any such claim with legal counsel of its own choice.

d. **IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES ARISING FROM, CONNECTED WITH OR RELATING TO THIS AGREEMENT, THE ENERGY SYSTEM OR THE PROJECT, OR TO SELLER'S OR CUSTOMER'S ACTS OR OMISSIONS IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, WHETHER FOR NEGLIGENCE, STRICT LIABILITY, PRODUCT LIABILITY OR OTHERWISE, EXCEPT FOR ANY DAMAGES OF THIRD PARTIES FOR WHICH ONE PARTY IS REQUIRED TO INDEMNIFY THE OTHER PARTY.**

e. **IN NO EVENT WILL SELLER'S LIABILITY, EXCLUDING ANY LIABILITY WITH RESPECT TO INDEMNIFICATION OF THIRD PARTY CLAIMS, WHETHER IN CONTRACT, IN TORT (INCLUDING GROSS NEGLIGENCE), IN STRICT LIABILITY OR OTHERWISE, EXCEED THE AMOUNT OF THE INSTALLATION COSTS PAID TO SELLER.**

15. **Termination.** This Agreement may be terminated as follows:

a. Either Party may terminate this Agreement by providing the other Party written notice in the event (i) A Tariff is not secured within two (2) years after the date first written above, or (ii) the structural analysis indicates the Site is not capable of supporting the Project (except where Seller provides alternate equipment and/or structural retrofits or other requirements specified in the structural engineering report that render the Site suitable for installing the solar array in the Installation Costs). In addition, Seller may, in its sole discretion, terminate this Agreement by providing Customer written notice in the event the procurement times for solar equipment are too long to allow execution on the Project in accordance with the terms of this Agreement.

b. Customer may terminate this Agreement by giving written notice to Seller at any time prior to completion of the Project in the event that: (i) Seller has breached any representation, warranty or covenant contained in this Agreement in any material respect, Customer has notified Seller of the breach, and the breach has continued without cure by Seller or written waiver by Customer for a period of thirty (30) days after the notice of breach; or (ii) upon sixty (60) days' prior notice to Seller if Seller has not achieved Final Project Completion on or prior to December 31, 2019.

c. Seller may terminate this Agreement by giving written notice to Customer at any time prior to completion of the Project in the event Customer has breached any representation, warranty or covenant contained in this Agreement in any material respect, Seller has notified Customer of the breach, and the breach has continued without cure by Customer or written waiver by Seller for a period of thirty (30) days after the notice of breach.

d. If either Party terminates this Agreement pursuant to Sections 15(a), 15(b) or 15(c), all rights and obligations of the Parties under this Agreement will terminate without any liability of any Party to any other Party, except with respect to Section 14, Section 16, and as otherwise provided in this Section 15, and except for any liability of any Party then in breach.

e. Except as otherwise provided in this Section 15, the termination rights under this Section 15 are cumulative with and in addition to any other rights or remedies to which the Parties may be entitled at law or under this Agreement.

16. **General.**

a. **Subordination to Utility Agreements.** No portion of this Agreement is intended to conflict with any Utility Agreements to which Seller or Customer is a party. In the case of a conflict between the terms or conditions of this Agreement and the Utility Agreements, the terms and conditions of Utility Agreements shall control. The utility, or its successors and assigns, is a third-party beneficiary of the provision of this paragraph. Nothing in this Agreement shall prevent the utility, from fully enforcing the terms and conditions of Utility Agreements.

b. **Relationship of the Parties.** The Parties shall for all purposes be considered independent contractors with respect to each other, and neither shall be considered an employee, employer, agent, principal, partner or joint venturer of the other.

c. **Entire Agreement.** This Agreement and the **Schedules** hereto, together with any agreements referenced herein, constitute the entire agreement and understanding of the Parties relative to the subject matter hereof. The Parties

have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to herein. This Agreement replaces and supersedes any and all prior oral or written agreements, representations and discussions relating to such subject matter.

- d. **Survival of Representations.** All representations, warranties, covenants and agreements of the Parties contained in this Agreement, or in any instrument, certificate, exhibit or other writing provided for in it, shall survive the execution of this Agreement and the consummation of the transactions contemplated herein.
- e. **Amendment.** This Agreement may be amended or modified only by a document executed by the Parties. No custom or practice of the Parties at variance with the terms hereof shall have any effect.
- f. **Notices.** All notices to be given under this Agreement shall be in writing and shall be effectively given upon personal delivery, facsimile or email transmission (with confirmation of receipt), delivery by overnight delivery service or three days following deposit in the United States Mail (certified or registered mail, postage prepaid, return receipt requested).
- g. **No Delay.** No delay or failure on the part of any Party hereto to exercise any right, power or privilege hereunder shall operate as a waiver thereof.
- h. **Force Majeure.** Neither Party will be liable to the other Party for any delay, error, failure in performance or interruption of performance resulting from causes beyond its reasonable control, including without limitation fires, flood, accidents, explosions, sabotage, strikes or other labor disturbances, civil commotion, riots, invasions, wars, acts of God, acts of government, terrorism or any cause (whether similar or dissimilar to the foregoing) beyond the reasonable control of the Party.
- i. **Governing Law / Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Minnesota without regard to its conflicts of laws principals. Any lawsuit brought in connection with this Agreement shall be brought only in a court of general jurisdiction in Hennepin County, Minnesota.
- j. **Severability.** The provisions of this Agreement are severable. If any part of this Agreement is rendered void, invalid or unenforceable, such rendering shall not affect the validity and enforceability of the remainder of this Agreement.
- k. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Neither Party shall assign this Agreement, or any portion thereof, without the prior written consent of the other Party, provided Seller may assign this Agreement in connection with the sale of any or all of its assets to a third party or Bank. Any attempted assignment or transfer without prior written consent of the other Party shall be of no force or effect. As to any permitted assignment: (a) reasonable prior notice of any such assignment shall be given to the other Party; and (b) any assignee shall expressly assume the assignor's obligations hereunder, unless otherwise agreed to by the other Party in writing.
- l. **Marketing and Promotion.** Seller shall not use Customer's name, image or likeness in connection with advertising and promoting the Project or the Energy System without Customer's approval, which shall not be unreasonably withheld.

- m. **Data Practices.** Seller considers the information contained in this Agreement related to the programs, methods, techniques and processes utilized by Seller to offer and implement the Energy System to be trade secret information of Seller as defined in the Minnesota Government Data Practices Act Ch. 13 .37 Subd. 1 (b) GENERAL NONPUBLIC DATA. In no event shall this information be shared or disclosed with any person or third party without the prior written approval of Seller.

The Parties hereto have caused this Agreement to be duly signed in their respective names effective the date first written above.

Seller  
**IDEAL ENERGIES, LLC**

By: \_\_\_\_\_  
Chris Psihos, its President

Dated: \_\_\_\_\_

Customer  
**City of Roseville**

By: \_\_\_\_\_  
Dan Roe and Patrick Trudgeon, its Dan Roe, its Mayor and Patrick Trudgeon, its City Manager

Dated: \_\_\_\_\_



## SCHEDULE A

### System Components

The Energy System is comprised of the following System Components:

1. UL Listed and approved Solar Panels: **595 - Monocrystalline350W @ 350 kW DC each**
2. UL listed and approved DC/AC inverters: **5 - SolarEdge SE33k 480V 3Ph Inverter @ 33.30 kW AC each**
3. Power Optimizers: **298 - SolarEdge P730 Power Optimizers**
4. Solar Panel Racking / mounting system: **Unirac, PanelClaw (or equivalent) Ballasted Racking @ approximately 10°**
5. Electrical components including but not limited to conductive wiring, ground circuitry, conduit, junction boxes, disconnects, switches, over-current protection, and any associated hardware necessary to complete the installation of the solar electric modules and interconnect with the Site's existing electric service.
6. Monitoring equipment and web-based remote system monitoring. Customer is responsible for bringing and providing internet service at the installation location (typically the electrical room).
7. If not provided by the Utility, a Revenue grade meter for measuring and monitoring electrical production from the Energy System.

The Parties agree that the Energy System does **NOT** include the following unless purchased as an option (except where Seller includes them in the Installation Costs):

1. Any structural improvements to the building required to support the Energy System and the System Components.
2. Batteries or emergency back-up power capability.
3. Any Upgrades to Customer's electrical service to bring their service up to code.
4. Third-party fees for web-based monitoring of the Energy System.
5. Fees charged by Xcel for upgrading Customer's service above \$5000. Any fees in excess of the \$5000 will be added to the Installation Cost, and the Year 1 Power Payment rate specified in the Power Purchase Agreement will be adjusted to recover the same.

## SCHEDULE B

### Contact Information for Parties

<b>Real Property Owner:</b>	<b>City of Roseville</b> 2660 Civic Center Drive, Roseville, MN 55113
<b>Customer's Authorized Representative:</b>	<b>Marcus Culver</b> 651-792-7041
<b>Seller/Installer:</b>	<b>Ideal Energies, LLC</b> Chris Psihos t. (612)928-5008 chris.psihos@idealenergies.com 5810 Nicollet Avenue Minneapolis, MN 55419
<b>Project Electrician(s):</b>	<b>Green<sup>2</sup> Electric, LLC</b> Joaquin Thomas, Master Electrician Russell Goetz, Master Electrician t. (612)928-5008 f: (612)928-5009 5810 Nicollet Avenue Minneapolis, MN 55419 License <b>EA719118</b>

## **SCHEDULE C**

### **Scope of Work**

#### **A. Design Scope**

1. Seller will prepare structural and electrical Design Documents describing the Project.
2. Seller will comply with all building codes and, as necessary, obtain any code variances.
3. Seller will ensure that the Energy System installation meets then current National Electrical Code requirements.
4. Seller will apply for all permits, and complete inspections to close such permits after Project Completion.
5. Seller will prepare all documentation required by the Utility for the Customer to interconnect the Energy System with the Utility's Grid.
6. Seller will prepare all documentation required by the Utility for the Customer to apply for the Standby Service Tariff.

#### **B. Installation**

1. Seller will furnish and install all required material or equipment for a complete installation.
2. Seller will connect the Energy System to Customer's electric panel.
3. Seller will commission and test the Energy System after installation.
4. Electrical interconnections will be performed by licensed electricians.
5. Except as provided in the Purchase Agreement, the Parties agree that Seller will not be liable for any indirect or consequential losses incurred by Customer as a result of the Energy System installation. Such losses may result from disruption of operations, interruption of electrical service, suspension of mechanical services and other interruptions reasonably related to standard Energy System installation of the size and type contemplated by the Project.

#### **C. Safety**

1. Seller will adhere to all current safety laws including without limitation federal, state and local safety regulations.
2. Seller's workers will conform to standard OSHA safety practices and procedures during installation.

#### **D. General**

1. Seller will provide all required design, engineering, construction, administration and management services necessary to complete the Project.
2. Seller will take all action reasonably necessary or required to bring the Project to commercial operation.
3. Seller will provide to Customer copies of all operating and maintenance manuals and third-party warranties.
4. Customer is responsible for scheduling and completing, if necessary, any energy audit required by any Tariff.

## SCHEDULE D

### Seller's Warranties

**Engineering and Design Services Warranty** Seller warrants that it will perform the engineering and design services in a professional and workmanlike manner using the degree of care, skill, prudence, judgment and diligence that a reasonable, qualified and competent provider of similar services would exercise. Except as otherwise provided herein, during the period beginning on the Final Project Completion date and ending five years later (the "**Warranty Period**"), it is shown that there was an error in such engineering and design services as a result of Seller's failure to meet those standards, and if Customer properly notifies Seller within the Warranty Period, Seller will, at its own expense and at no cost to Customer, re-perform such services to remedy such error within a reasonable timeframe.

**Installation Services Warranty** Seller warrants that it will perform the installation services in a professional and workmanlike manner using the degree of care, skill, prudence, judgment and diligence that a reasonable, qualified and competent provider of similar services would exercise. Except as otherwise provided herein, if during the Warranty Period it is shown that there was an error in such installation services as a result of Seller's failure to meet those standards, and if Customer properly notifies Seller within the Warranty Period, Seller will, at its own expense and at no cost to Customer, re-perform such services to remedy such error within a reasonable timeframe.

**Limited System Components Warranty** Seller warrants that the System Components will be new and not physically damaged by Seller at the time of Final Project Completion. If Customer notifies Seller within a reasonable timeframe after Final Project Completion that any System Components were not new or are physically damaged by Seller at the time of Final Project Completion, Seller shall replace such System Components within a reasonable timeframe with System Components that are new and undamaged.

**Roof Warranty** Except as otherwise provided herein, if during the Warranty Period it is shown that the roof leaks solely as a result of Seller's installation of the Energy System, and if Customer properly notifies Seller within the Warranty Period, Seller will, at its own expense and at no cost to Customer, promptly repair the roof so that it does not leak; provided that such leaking is not due to normal wear and tear.

**Limitation on Warranties** The above warranties do NOT cover damage, malfunctions or services failures to the extent caused by:

1. Failure to follow any applicable operations or maintenance manual or any other maintenance instructions provided by Seller or the manufacturer of the System Components, or failure to maintain or operate the Energy System;
2. Repair, modification, maintenance, movement or relocation of the Energy System or the System Components by someone other than a service technician approved by Seller or the manufacturer of the System Components;
3. Attachment or connection to the Energy System of any equipment not supplied by Seller, or the use of the Energy System for a purpose for which the Project was not intended;
4. Abuse, misuse or acts of Customer or any third person (other than Seller or its employees or agents), including intentional damage, theft or vandalism; or
5. Damage or deteriorated performance of the Energy System or Site caused by electrical surges, building settling, building component failure, work done on the building or adjacent structures, use of machinery or vehicle in the area, winds in excess of the system design rating, lightning, fire, flood, extreme weather conditions, pests, tornadoes, hurricanes, hail, storms, explosions, earthquakes, ground subsidence, falling debris, accidental breakages (not caused by Seller or its employees or agents), normal wear and tear, and other events or accidents outside the reasonable control of Seller.

**Customer's Right to Remedy** In the event that Seller fails to remedy any breach of warranty within the prescribed timeframe under this **Schedule D** or such breach threatens imminent harm to Customer or its property, Customer shall have the right to employ any reasonable means necessary to remedy such breach, and Seller shall reimburse Customer for all reasonable and necessary expenses incurred by Customer in carrying out such remedy.

## Facility Lease Agreement

208.250 kW DC Monocrystalline350W,  
166.50 kW AC SolarEdge SE33k 480V 3Ph Inverter(s),  
SolarEdge P730 Power Optimizers & Unirac, PanelClaw (or  
equivalent) Ballasted Racking @ approximately 10°

<b>Customer / Owner</b>	<b>City of Roseville</b>
<b>Installation Location</b>	<b>2661 Civic Center Drive, Roseville, MN 55113</b>
<b>Xcel Premise #</b>	303534506

### Xcel Photovoltaic Credit Rider Tariff

This **FACILITY LEASE AGREEMENT** (this "**Agreement**"), dated **July 13, 2018**, is between **Green2 Solar Leasing, LLC**, a Minnesota Limited Liability Company, whose principal place of business is located at **5810 Nicollet Avenue, Minneapolis, MN 55419** ("**Tenant**"), and **City of Roseville**, a Minnesota City, whose principal place of business is located at **2660 Civic Center Drive, Roseville, MN 55113** ("**Customer**"). The Tenant and Customer are sometimes also referred to in this Agreement jointly as "**Parties**", or individually as a "**Party**".

#### RECITALS

- A. Customer is the owner or lessee of certain real property (if lessee, owned by an affiliated entity that has common ownership with Customer) located at **2661 Civic Center Drive, Roseville, MN 55113** (the "**Installation Location**") presently used as a **Ice Arena** (the "**Property**"); and
- B. Tenant desires to lease from Customer, and Customer desires and is authorized to lease to Tenant, subject to the terms and conditions of this Agreement, a portion of the Property for the construction, operation and maintenance of a photovoltaic solar electric system (the "**Energy System**") as defined in that certain Purchase Agreement (the "**Purchase Agreement**") between Customer and **Ideal Energies, LLC** (the "**Seller**") of even date herewith; and
- C. Customer will be the **legal owner of the Energy System upon purchase from Ideal Energies, LLC**, and Customer desires to lease the same to Tenant subject to the terms and conditions of this Agreement; and
- D. Tenant and Customer will, in connection with this Agreement, enter into a **Power Purchase Agreement** (the "**Power Purchase Agreement**") pursuant to which Tenant will sell power generated by the Energy System to the Customer; and
- E. For federal tax purposes, Customer and Tenant will treat this Agreement as a transfer of the ownership of the Energy System from Customer to Tenant; and
- F. The Tenant should be eligible to receive a Federal Tax Credit from the U.S. Treasury pursuant to the terms of this Agreement equal to **30%** of the Energy System's eligible Installation Cost ("**Tax Credit**") for Energy Systems that are put into service during **2018 or 2019**.

#### AGREEMENT

**NOW, THEREFORE**, in consideration of the foregoing Recitals, the mutual promises of the Parties hereto and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. **Contingency.** The Parties performance under this Agreement is contingent on the Final Project Completion (as defined in the Purchase Agreement) occurring in accordance with the terms of the Purchase Agreement.

2. **Lease of Energy System and Leased Space.** Customer hereby leases to Tenant, and Tenant hereby leases from Customer the following: (a) the Energy System and (b) all roof/ground space required for the installation and operation of the Energy System on the Property (the "**Leased Space**") as generally prescribed on the Plan View drawing included herewith as **Schedule A**, including rights to place wiring to the point of electrical interconnection. The Energy System and the Leased Space together constitute the leased property (the "**Leased Property**"). The final As-Built Plan View drawing provided to Customer by Seller in its Operations Manual after Final Project Completion (as defined in the Purchase Agreement) occurs is hereby incorporated into **Schedule A** of this Agreement by reference.
3. **System Payments, Tax Ownership.**
  - a. **Installation Cost Payment.** Tenant will pay Customer's Installation Cost on the Final Project Completion date.
  - b. **Transfer of Tax Ownership.** The Parties shall treat the Energy System as having been sold to the Tenant for federal tax purposes in consideration of the payment made under Section 3(a) above.
4. **Access to Leased Space.** Customer grants to Tenant the right to access the Leased Space via reasonable route or routes over and across the Property upon reasonable prior notice to Customer. Customer will cooperate with Tenant to access the meter or any other part of the Energy System which are not located within the Leased Property.
5. **Permitted Use of Leased Space.** During the Term (as defined below), Tenant shall have the exclusive right to use the Leased Space for the construction, installation, operation, maintenance, repair, replacement, relocation, reconfiguration, removal, alteration, modification, improvement, use and enjoyment of the Energy System (and other necessary and incidental uses for the operation of the Energy System) to fulfill Tenant's obligations under this Agreement and the Power Purchase Agreement (the "**Permitted Uses**"). Tenant may not erect any other facilities or use any other equipment on the Leased Space that is not expressly permitted under the terms of this Agreement without first obtaining Customer's written consent, which consent shall not be unreasonably withheld, delayed or conditioned provided the other facilities or equipment are necessary for the operation of the Energy System and are not likely, in Customer's reasonable opinion, to damage the Property or interfere with Customer's business.
6. **Term.** The term (the "**Term**") of this Agreement shall begin on the date that Final Project Completion occurs and shall expire on the date that is the **20 year** anniversary of the Project's Final Project Completion Date.
7. **Rent of Leased Space.** Beginning on the first anniversary of the Final Project Completion and continuing on each and every anniversary thereof throughout the Term, Tenant shall pay to Customer rent for the Leased Space (the "**Leased Space Rent**") in the amount of **\$270.00** per year.

8. **Rent of Energy System.** Beginning on the first anniversary of the Final Project Completion and continuing on each and every anniversary thereof throughout the Term, Tenant shall pay to Customer rent for the Energy System (the “**Energy System Rent**”) in the amount of **\$30.00** per year.
9. **Holdover.** If Tenant holds over its tenancy after expiration of the Term, such tenancy shall be month-to-month subject to the terms and conditions of this Agreement. Either Party may terminate such month-to-month tenancy at any time upon the giving to the other Party no less than thirty (30) days written notice.
10. **Operating Permits.** Tenant shall, at its sole expense, maintain in full force and effect all certificates, permits and other approvals (“**Operating Permits**”) required by any federal, state or local authorities (“**Governmental Authorities**”) having jurisdiction over Tenant or the Leased Property.
11. **Energy System Title and Condition on Facility Lease Termination.** The Parties agree that legal title to any and all fixtures, equipment, improvements or personal property of whatsoever nature at any time constructed or placed on or affixed to the Leased Space by Tenant, including without limitation the Energy System and its System Components, shall be and remain with System Owner. Tenant shall leave the Energy System at the end of this Agreement in substantially the same condition as existed on the Final Project Completion date plus any improvements, ordinary wear and tear and casualty damage excepted.
12. **Energy System Operation and Maintenance.**
- Operation and Maintenance of the Energy System.** Tenant will at its sole cost and expense operate the Energy System, monitor the system’s performance and keep and maintain the Energy System in good condition and repair utilizing the Maintenance List provided in **Schedule B** herewith as a guideline, with strict adherence hereto not expected by the Parties. Customer is solely responsible for pursuing any available warranties on System Components against the manufacturer at its own expense, and may look only to such manufacturer, and not to Tenant, for any warranty with respect thereto. Tenant will assist Customer in resolving any warranties relating to System Components on a time and material basis. Should such services be required, Tenant will provide the labor at reasonably discounted market rates and pass through its direct expenses at Tenant’s actual cost.
  - Operation and Maintenance Standard of Care.** Tenant will use commercially reasonable efforts to identify, respond to, and complete necessary maintenance and repairs and to operate the Energy System to maximize its energy production. Notwithstanding the foregoing, the Parties understand that delays may be caused by multiple causes including without limitation delay in the identification of operational issues, troubleshooting issues, warranty replacement, warranty procurement, parts availability, parts delivery, crew availability, equipment defects, equipment performance, internet downtime, and similar causes.
  - Energy System Casualty.** In the case of casualty to the Energy System, Tenant shall be obligated to repair the Energy System with, but only to the extent and sufficient, proceeds described in Section 17a are provided to Tenant to make the repairs caused by the casualty. Tenant shall repair, at Tenant’s expense, any damage to the Leased Space that results from the Tenant’s repair, reconfiguration, alteration, modification or replacement of the Energy System.
13. **Repair of Leased Space During Term.** Customer shall have the right at any time to access the Leased Space to inspect, maintain, replace or repair items and components thereof, excluding the Energy System. (“**Customer Maintenance**”). Customer Maintenance shall include temporary removal such components of the Energy System that interfere with Customer Maintenance of the Leased Space, and the replacement of such components upon completion. Customer shall provide thirty (30) days prior notice of any scheduled Customer Maintenance, except in the case of an emergency, the Customer shall give notice as soon as possible. Customer, at its own cost, will perform Customer Maintenance, and use Seller or, another third party approved by Tenant to perform Customer Maintenance (Tenant’s approval of third parties will not be unreasonably withheld). The Customer Maintenance will be performed at Tenant’s expense to the extent the Customer Maintenance was required as a result of damage to the Leased Space caused by the Energy System. Customer will reimburse Tenant for any lost Power Payment revenue resulting from the Energy System being non-operational, excluding any downtime resulting from damage to the Leased Space caused by the Energy System.
14. **Utilities / Taxes.** Customer shall pay all applicable taxes, real estate taxes, assessments, or similar levied after Final Project Completion upon or against the Project and other personal property located and/or installed on the Property by the Tenant.
15. **Interference.**
- Interference by Tenant.** Tenant shall operate the Energy System in a manner that will not unreasonably interfere with any existing operations or equipment located, operated or owned by Customer or any other permitted occupants as of the date of this Agreement (the “**Existing Operations**”). All operations by Tenant shall be lawful and in material compliance with all regulations and requirements of the Minnesota Public Utilities Commission, as well as any other applicable state, federal or local regulations and requirements (“**Legal Requirements**”) and any applicable agreements with, or tariffs of, the local utility.
  - Interference by Customer.** Following installation of the Energy System, Customer shall not, and shall not cause or permit any other persons or parties to, install equipment or facilities or construct or allow any construction of a structure or structures (“**New Construction**”) near the Leased Space if such New Construction will interfere with the Energy System or its performance. Customer shall not move, modify, remove, adjust, alter, change, replace, reconfigure or operate the Energy System or any part of it during the term of the Agreement without prior written direction or approval of Tenant, except if there is an occurrence reasonably deemed by Customer to be a bona fide emergency, in which case Customer will immediately notify Tenant of such emergency and Customer’s proposed actions. Customer shall be responsible for, and promptly notify Tenant, of any damage to the Energy System caused by the Customer or its employees, invitees or agents, and shall promptly pay Tenant the costs to repair such damage to the Energy System, along with any lost Power Payment Revenue.
16. **Insurance.**
- General Liability and Property Insurance.** Customer shall keep the Energy System insured against loss by fire, theft, hail and wind and such other hazard as Tenant shall reasonably require with an insurance company acceptable to Tenant in its reasonable discretion, at all times will insure the Energy System at an amount equal to the



Installation Cost (as defined in the Purchase Agreement) and will provide Tenant with a Certificate of Insurance that names Tenant as an additional insured and loss payee. Customer shall also secure and maintain adequate comprehensive general liability insurance against liability related to the Energy System. Customer shall provide Tenant with evidence of having acquired such insurance coverages prior to the Final Project Completion date and on an annual basis thereafter. The loss, injury or destruction of the Energy System shall not release Customer from payment as provided in this Agreement. Any insurance policies obtained by Customer shall provide that such policy of insurance cannot be terminated or cancelled by the insurer without thirty (30) days prior written notice to Tenant. Customer is responsible for any deductibles due under the insurance policies for casualties and will pay Tenant said deductible, along with insurance proceeds received to repair the Energy System to its original specification. Customer's failure or refusal to repair and recommission an Energy System following a loss shall constitute a breach of this Agreement.

- b. **Workers' Compensation Insurance and Employers' Liability Insurance.** In accordance with Minnesota state law, Tenant shall maintain in force workers' compensation insurance for all of its employees. Tenant shall also maintain employer's liability coverage in an amount of not less than One Million Dollars (\$1,000,000.00) per accident. Tenant shall also secure and maintain adequate comprehensive general liability insurance against liability related to the Leased Premises. Upon request, Tenant will provide Customer with a Certificate of Insurance.

17. **Indemnification.**

- a. Tenant shall indemnify and hold harmless Customer and its officers, directors, members, consultants, representatives, agents, employees and affiliates against any damages, liabilities, losses, costs and expenses, including reasonable attorney fees and costs (collectively, "**Damages**") incurred or suffered by any of them in any way arising out of, relating to, or in connection with (i) any breach of this Agreement by Tenant, or (ii) the negligence, gross negligence or willful misconduct of Tenant or its employees or agents in connection with the transactions contemplated by this Agreement.
- b. Tenant shall indemnify Customer from any mechanic's, materialman's, or other lien with respect to the Property or the Leased Property to the extent such lien is attributable to Tenant's failure to pay the Installation Cost.
- c. Customer shall indemnify and hold harmless Tenant and its officers, directors, members, consultants, representatives, agents, employees and affiliates against any Damages incurred or suffered by any of them in any way arising out of, relating to, or in connection with (i) any breach of this Agreement by Customer, or (ii) the negligence, gross negligence or willful misconduct of Customer, its employees, agents or invitees in connection with the transactions contemplated by this Agreement.
- d. A Party claiming indemnification will give the other Party prompt notice of the relevant claim and will reasonably cooperate with the indemnifying Party, at the indemnifying Party's expense, in the defense of such claim. The indemnifying Party shall control the defense and settlement of such claim; provided however that the indemnifying Party shall not agree to any settlement that affects the indemnified Party without the prior written consent of the indemnified Party, which approval shall not be unreasonably withheld. The indemnified Party may, at

its option and its own expense, participate in the defense of any such claim with legal counsel of its own choice.

18. **General.**

- a. **Subordination to Utility Agreements.** No portion of this Agreement is intended to conflict with any Utility Agreements (the "**Utility Agreements**") to which Tenant or Customer is a party. In the case of a conflict between the terms or conditions of this Agreement and the Utility Agreements, the terms and conditions of Utility Agreements shall control. The Utility, or its successors and assigns, is a third-party beneficiary of the provision of this paragraph. Nothing in this Agreement shall prevent the Utility, from fully enforcing the terms and conditions of Utility Agreements.
- b. **Relationship of the Parties.** The Parties shall for all purposes be considered independent contractors with respect to each other, and neither shall be considered an employee, employer, agent, principal, partner or joint venturer of the other.
- c. **Entire Agreement.** This Agreement and the **Schedules** hereto, together with any agreement reference herein, constitute the entire agreement and understanding of the Parties relative to the subject matter hereof. The Parties have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to herein. This Agreement replaces and supersedes any and all prior oral or written agreements, representations and discussions relating to such subject matter.
- d. **Survival of Representations.** All representations, warranties, covenants and agreements of the Parties contained in this Agreement, or in any instrument, certificate, exhibit or other writing provided for in it, shall survive the execution of this Agreement and the consummation of the transactions contemplated herein.
- e. **Amendment.** This Agreement may be amended or modified only by a writing executed by the Parties to this Agreement. No custom or practice of the Parties at variance with the terms hereof shall have any effect.
- f. **Notices.** All notices to be given under this Agreement shall be in writing and shall be effectively given upon personal delivery, facsimile or email transmission (with confirmation of receipt), delivery by overnight delivery service or three days following deposit in the United States Mail (certified or registered mail, postage prepaid, return receipt requested).
- g. **No Delay.** No delay or failure on the part of any Party hereto to exercise any right, power or privilege hereunder shall operate as a waiver thereof.
- h. **Force Majeure.** Neither Party will be liable to the other Party for any delay, error, failure in performance or interruption of performance resulting from causes beyond its reasonable control, including without limitation fires, flood, accidents, explosions, sabotage, strikes or other labor disturbances, civil commotion, riots, invasions, wars, acts of God, acts of government, terrorism or any cause (whether similar or dissimilar to the foregoing) beyond the reasonable control of the Party.
- i. **Governing Law / Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Minnesota without regard to its conflicts of laws principals. Any lawsuit brought in connection with this Agreement shall be brought only in a court of general jurisdiction in Hennepin County, Minnesota.

- j. **Severability.** The provisions of this Agreement are severable. If any part of this Agreement is rendered void, invalid or unenforceable, such rendering shall not affect the validity and enforceability of the remainder of this Agreement.
- k. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Neither Party shall assign this Agreement, or any portion thereof, without the prior written consent of the other Party. Any attempted assignment or transfer without such prior written consent of the other Party shall be of no force or effect. As to any permitted assignment: (i) reasonable prior notice of any such assignment shall be given to the other Party; and (ii) any assignee shall expressly assume the assignor's obligations hereunder, unless otherwise agreed to by the other Party in writing. Notwithstanding the foregoing, as may be required for Tenant to avoid being classified as a Public Utility under Minnesota Statutes Chapter 216B.02, Subd. 4., or to leverage tax benefits as tax owner, Tenant may, at its sole discretion, assign and/or sublease all or part of its full interest under this Agreement to a controlled affiliate of Tenant, assign its rights under the Power Purchase Agreement a controlled affiliate of Tenant, or assign this Agreement in connection with any sale of any or all of its Assets to a third party or Bank.
- l. **Quiet Possession.** Customer agrees that upon compliance with the terms and conditions of this Agreement, Tenant shall peaceably and quietly have, hold and enjoy the Leased Space for the Term and any extensions thereof.
- m. **Data Practices.** Seller considers the information contained in this Agreement related to the programs, methods, techniques and processes utilized by Seller to offer and implement the Energy System to be trade secret information of Seller as defined in the Minnesota Government Data Practices Act Ch. 13 .37 Subd. 1 (b) GENERAL NONPUBLIC DATA. In no event shall this information be shared or disclosed with any person or third party without the prior written approval of Seller.

The Parties acknowledge they have read this Agreement, understand it and agree to be bound by its terms and conditions as of the date first set forth above.

Tenant  
**Green2 Solar Leasing, LLC**

By: \_\_\_\_\_  
Rich Ragatz, its Vice President  
Dated: \_\_\_\_\_

Customer:  
**City of Roseville**

By: \_\_\_\_\_  
Name: Dan Roe and Patrick Trudgeon, its Dan Roe, its Mayor and Patrick Trudgeon, its City Manager

Dated: \_\_\_\_\_

## **SCHEDULE A**

### **Site Plan**

Facility Plan View Drawing Indicating the Final Location of the Energy System on the Leased Space and the point of interconnection of the Energy System with the electrical system at the Property

[The above document is provided by Seller, and is included in the Owner's Manual that is provided to the Customer after Final Project Completion]

## SCHEDULE B

### Maintenance Items

- A. Weekly performance monitoring via online monitoring system to validate performance of panels and inverters, energy production; benchmark performance vs. similar systems for validation
- B. Identify any defective equipment via on-line monitoring system
- C. Semi-annual site audits of system performing the following tasks
  - i. Inspect panels, inverters, and racking for physical damage
  - ii. Clean any debris on or under the solar arrays
  - iii. Ensure labels are intact
  - iv. Check for loose hanging wires, repair as necessary
  - v. Check electrical connections; tighten/torque as necessary
  - vi. Check for corrosion of electrical enclosures, repair as necessary
  - vii. Ensure roof drainage is adequate, that roof drains are not clogged, and confirm there are no signs of pooling water in the vicinity of the solar array
- D. Management of System Component Warranty Claims

## Power Purchase Agreement

208.250 kW DC Monocrystalline350W,  
166.50 kW AC SolarEdge SE33k 480V 3Ph Inverter(s),  
SolarEdge P730 Power Optimizers & Unirac, PanelClaw (or  
equivalent) Ballasted Racking @ approximately 10°

### Xcel Photovoltaic Credit Rider Tariff

This **POWER PURCHASE AGREEMENT** (this "**Agreement**"), dated **July 13, 2018**, is between **Green2 Solar Leasing, LLC** a Minnesota Limited Liability Company, whose principal place of business is located at **5810 Nicollet Avenue, Minneapolis, MN 55419** ("**Tenant**"), and **City of Roseville**, a Minnesota City, whose principal place of business is located at **2660 Civic Center Drive, Roseville, MN 55113** ("**Customer**"). Tenant and Customer are sometimes also referred to in this Agreement jointly as "**Parties**", or individually as a "**Party**".

#### RECITALS

- A. Tenant leases, operates and maintains Customer's photovoltaic solar electric system (the "**Energy System**") (as located at the Installation Location (the "**Installation Location**") described above as defined in that certain **Purchase Agreement** (the "**Purchase Agreement**") between Customer and **Ideal Energies, LLC** (the "**Seller**") of even date herewith) pursuant to a Facility Lease Agreement (the "**Facility Lease**") between the Parties of even date herewith; and
- B. Tenant desires to sell renewable electric power inclusive of all rights to its available environmental attributes to Customer, and Customer desires to purchase from Tenant all such electric power which is produced by the Energy System; and
- C. Seller has or will apply for the Standby Service Tariff (the "**Standby Service Tariff**") as defined in the Purchase Agreement on behalf of Customer for the Project. After the Tariff is secured for the Project by Customer's executing agreements provided by the Utility required to receive the Tariff (the "**Utility Agreements**") pursuant to which the Customer owns all Renewable Energy Credits (the "**RECs**") for electricity produced by the Energy System; and
- D. Customer should be eligible to participate in the Utility's **Net Metering Program**. Under this program, the energy generated from the Energy System is available for use and reduces the total amount of energy that needs to be purchased from the Utility. Under this program, for months where the Energy System produces more kWh than the site consumes, the Utility will compensate Customer at the applicable rate specified in the Utility Agreements; and
- E. Pursuant to the Facility Lease, the Tenant should be eligible to receive a Federal Tax Credit from the U.S. Treasury equal to **30%** of the Energy System's eligible Installation Cost (the "**Tax Credit**") for Energy Systems that are put into service during **2018 or 2019**.

#### AGREEMENT

**NOW, THEREFORE**, in consideration of the foregoing Recitals, the mutual promises of the Parties hereto and for other good and valuable consideration, the receipt and sufficiency of which hereby are acknowledged, the Parties agree as follows:

1. **Contingency.** The Parties performance under this Agreement is contingent on the Final Project Completion (as defined in the Purchase Agreement) occurring in accordance with the terms of the Purchase Agreement.

<b>Customer / Owner</b>	<b>City of Roseville</b>
<b>Installation Location</b>	<b>2661 Civic Center Drive, Roseville, MN 55113</b>
<b>Xcel Premise #</b>	303534506

2. **Power Purchase.** Tenant shall deliver all power generated from the Energy System to Customer at the point of interconnection shown on Schedule A of the Facility Lease.
  - a. **Payments Due Monthly.** Customer will pay Tenant monthly, for the Term of this Agreement, for all the power generated from the Energy System during the prior month that is delivered to the interconnection point in accordance with **Schedule A**. Power payments are due on the last day of the month for the power generated during the prior month.
  - b. **Power Payments Prior to Put Date.** The monthly payment due for the energy produced from the Energy System from the System beginning with Final Project Completion through and including the **20<sup>th</sup>** year of the Term will be equal to the applicable \$/kWh rate specified in **Schedule A** multiplied by the number of kWh of energy generated during the applicable month. The revenue grade meter provided by Seller will be utilized to measure said energy production and used in determining the energy produced from the Energy System and amounts due hereunder.
  - c. **Power Payments After the Put Date.** The monthly payment due for the energy produced from the Energy System beginning with Final Project Completion after the **20<sup>th</sup>** year of the Term will be equal to the applicable fixed annual rate provided in **Schedule A** divided into twelve (12) equal monthly payments.
  - d. **Access to Data.** Customer will provide Tenant with online access to its monthly utility bills and available data downloads from the utility that are permitted to be provided to Third Parties.
  - e. **Sales Tax / Payment Remittance.** Power payments do not include any sales tax. Sales tax will be added to the Power Payments based on Customer's applicable sales tax rate. Customer authorizes Tenant to debit Customer's bank account to collect Power Payments when due under this Agreement until all Power Payments are received in full. Where Tenant does not collect payments via debiting Customer's account, Customer will mail payments to the Tenant to the address below.

**Green2 Solar Leasing, LLC**  
5810 Nicollet Avenue  
Minneapolis MN 55419

3. **Utility Bill Credits.** The Utility Bill Credits (the "**Utility Bill Credits**") as defined in the Purchase Agreement, are owned by, and for the exclusive use of the Customer. In the event the actual Utility Bill Credits received by the Customer are greater or less than the expected, there will be no adjustment to the terms of this Agreement, and each Party waives its right to recover any surplus or deficiency from the other Party.
4. **Ownership of Renewable Energy Credits.** Customer will, if required by the Utility Agreements, as may be amended, convey to the Utility all RECs generated by the Energy System for the term specified in the Utility Agreements. Subject to any

required assignment to the Utility, Customer owns all RECs. For purposes of this Agreement, RECs include all attributes of an environmental or other nature that are created or otherwise arise from the Energy System, including without limitation tags, certificates or similar projects or rights associated with solar energy as a "green" or "renewable" electric generation resource. RECs shall also include any other environmental attribute intended to be transferred to the Utility under the Utility Agreement.

5. **Term.** The term (the "**Term**") of this Agreement shall begin on the date that Final Project Completion occurs and shall expire on the date that is the **20 year** anniversary of the Project's Final Project Completion Date.
6. **Late Charge/Costs of Collection.** In the event Customer fails to make any Power Payment when due, Customer agrees that the greater of \$50, or interest due based on an interest rate not to exceed the lesser of one and one-half percent (1.50%) per month or the highest rate permitted by law for commercial transactions, may be charged as a late charge on a monthly basis on the amount of any Power Payment remaining unpaid more than ten (10) days after it is due from the due date until paid in full. In addition, Customer agrees to pay Tenant's attorney's fees and costs of collection, including expert witness fees, whether a lawsuit is commenced or not commenced, and Customer's liability for attorneys' fees and costs of collection, including expert witness fees, extends to any appeals.
7. **Grant of Security Interest.** In order to secure the payment and performance of all of Customer's liabilities, obligations and covenants under this Agreement or the Facility Lease, Customer hereby grants to Tenant a security interest in the Energy System, together with all attachments, accessories or replacement parts and labor placed upon the Energy System and proceeds thereof. Upon the request of Tenant, Customer shall promptly obtain a subordination agreement in favor of Tenant from any third-party lienholder who may have a lien in the Energy System. Tenant's security interest and other rights under this Section shall be extinguished upon the later of termination of this Agreement and the Facility Lease and performance of all of Customer's obligations hereunder and thereunder, and Tenant shall execute and file any evidence of such extinguishment reasonably requested by Customer.
8. **Insurance.** Customer shall keep the Energy System insured against loss by fire, theft, hail and wind and such other hazards as required by the Facility Lease. The loss, injury or destruction of the Energy System shall not release Customer from making all power payments described in **Schedule A**.
9. **Events of Default.** Each of the following shall constitute an event of default ("**Event of Default**"):
  - a. Customer shall fail to make any undisputed payment to Tenant when due hereunder, Tenant has notified the Customer of such failure, and the failure has continued without cure by Customer or written waiver by Tenant for a period of thirty (30) days after the notice of failure;
  - b. Customer shall breach any representation, warranty or covenant contained in this Agreement in any material respect, Tenant has notified Customer of the breach, and the breach has continued without cure by Customer or written waiver by Tenant for a period of thirty (30) days after the notice of breach;
  - c. Customer shall cease to do business, become insolvent, make an assignment for the benefit of creditors or file any petition under bankruptcy, reorganization, insolvency or moratorium law, or any other law for the relief of debtors;
  - d. Any involuntary petition shall be filed under any bankruptcy statute against Customer or any receiver, trustee, or

similar official shall be appointed to take possession of the properties of Customer unless such petition or appointment ceases to be in effect within thirty (30) days of such filing or appointment; or

- e. The Customer fails to comply with any of its obligations under any of Customer's agreements with the Utility.
- f. The Customer's failure or refusal to repair and recommission the Energy System following a casualty loss.

#### 10. **Remedies.**

- a. If an Event of Default shall occur, Tenant may, at its option, exercise any one or more of the following remedies:
  - i. Declare all amounts due or to become due under this Agreement immediately due and payable;
  - ii. Recover any additional damages and expenses sustained by Tenant by reason the Event of Default;
  - iii. Enforce the security interest granted hereunder, in which event Customer agrees to make the Energy System available to Tenant at a place or places acceptable to Tenant and Tenant shall have the right to take possession of the Energy System without legal process for which purpose Tenant may enter any premises where the Energy System may be found without legal process and without breaching the peace, provided that in such case the fair market value of the Energy System shall offset any amounts due under this Agreement;
  - iv. Retain all payments made by Customer as liquidated damages for the non-performance of this Agreement, for use of the Energy System and for depreciation thereof; and
  - v. Exercise any other remedies available under law, including those under Article 9 of the UCC.
- b. In the event the Energy System is sold, foreclosed on, or repossessed in the manner provided herein or by law and the fair market value of the Energy System is not sufficient to pay the amount due under this Agreement, Customer agrees to pay immediately to Tenant such deficiency. In the event the Energy System is sold, foreclosed on, or repossessed in the manner provided herein or by law and the fair market value of the Energy System exceeds the amount that Customer is required to pay Tenant under this Agreement, Tenant agrees to pay immediately to Customer such excess.
- c. The remedies provided herein shall be cumulative and may be exercised singularly, concurrently or successively with and in addition to all other remedies in law or equity. If either Party fails to perform any of its obligations under this Agreement, the other Party may (but need not) at any time thereafter perform such obligation, and the expenses incurred in connection therewith shall be payable in full by the nonperforming Party upon demand. In addition, the nonperforming Party agrees to pay the other Party's reasonable attorney's fees and costs of collection in pursuing any remedies.

#### 11. **Annual Energy Production Not Guaranteed. THE PARTIES UNDERSTAND AND AGREE THE ANNUAL ENERGY PRODUCTION FROM THE ENERGY SYSTEM MAY VARY FROM ANNUAL PROJECTIONS FOR REASONS BEYOND THE PARTIES CONTROL INCLUDING WITHOUT LIMITATION SEASON WEATHER VARIATIONS, ROUTINE AND NON-**



**ROUTINE MAINTENANCE CAUSING DOWNTIME, EQUIPMENT PERFORMANCE, PROCESSING ANY EQUIPMENT WARRANTIES FOR MALFUNCTIONING EQUIPMENT, FORCED MAJEURE, ETC. THE PARTIES UNDERSTAND THAT THE UTILITY BILL CREDITS/SAVINGS ARE PAID/RECOGNIZED PROPORTIONALLY WITH ENERGY SYSTEM ENERGY PRODUCTION, AND THAT THE ACTUAL AMOUNTS RECEIVED BY CUSTOMER WILL VARY ACCORDINGLY. TENANT DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, THAT PRODUCTION WILL MATCH PROJECTIONS, AND CUSTOMER AND TENANT ASSUME, AT THEIR SOLE RISK, THE VARIABILITY OF ANNUAL ENERGY PRODUCTION AND VARIATIONS FROM ANY FINANCIAL PROJECTIONS RELATING TO UTILITY BILL CREDITS AND SAVINGS.**

12. **Customer's Maximum Power Payment Obligation.** Customer's maximum power payment obligation to Tenant under this Agreement is the sum of all the Power Purchase Payments due per **Schedule A**.

13. **Miscellaneous.**

a. **Subordination to Utility Agreement** No portion of this Agreement is intended to conflict with any Utility Agreements to which Tenant or Customer is a party. In the case of a conflict between the terms or conditions of this Agreement and the Utility Agreements, the terms and conditions of Utility Agreements shall control. The Utility, or its successors and assigns, is a third-party beneficiary of the provision of this paragraph. Nothing in this Agreement shall prevent the Utility, from fully enforcing the terms and conditions of Utility Agreements.

b. **Relationship of the Parties.** The Parties shall for all purposes be considered independent contractors with respect to each other, and neither shall be considered an employee, employer, agent, principal, partner or joint venturer of the other.

c. **Entire Agreement.** This Agreement and the **Schedules** hereto, together with any agreement referenced herein, constitute the entire agreement and understanding of the Parties relative to the subject matter hereof. The Parties have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to herein. This Agreement replaces and supersedes any and all prior oral or written agreements, representations and discussions relating to such subject matter.

d. **Survival of Representations.** All representations, warranties, covenants and agreements of the Parties contained in this Agreement, or in any instrument, certificate, exhibit or other writing provided for in it, shall survive the execution of this Agreement and the consummation of the transactions contemplated herein.

e. **Amendment.** This Agreement may be amended or modified only by a writing executed by the Parties to this Agreement. No custom or practice of the Parties at variance with the terms hereof shall have any affect.

f. **Notices.** All notices to be given under this Agreement shall be in writing and shall be effectively given upon personal delivery, facsimile or email transmission (with confirmation of receipt), delivery by overnight delivery service or three days following deposit in the United States

Mail (certified or registered mail, postage prepaid, return receipt requested).

g. **No Delay.** No delay or failure on the part of any Party hereto to exercise any right, power or privilege hereunder shall operate as a waiver thereof.

h. **Force Majeure.** Neither Party will be liable to the other Party for any delay, error, failure in performance or interruption of performance resulting from causes beyond its reasonable control, including without limitation fires, flood, accidents, explosions, sabotage, strikes or other labor disturbances, civil commotion, riots, invasions, wars, acts of God, acts of government, terrorism or any cause (whether similar or dissimilar to the foregoing) beyond the reasonable control of the Party.

i. **Governing Law / Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Minnesota without regard to its conflicts of laws principals. Any lawsuit brought in connection with this Agreement shall be brought only in a court of general jurisdiction in Hennepin County, Minnesota.

j. **Severability.** The provisions of this Agreement are severable. If any part of this Agreement is rendered void, invalid or unenforceable, such rendering shall not affect the validity and enforceability of the remainder of this Agreement.

k. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Neither Party shall assign this Agreement, or any portion thereof, without the prior written consent of the other Party. Any attempted assignment or transfer without such prior written consent of the other Party shall be of no force or effect. As to any permitted assignment: (i) reasonable prior notice of any such assignment shall be given to the other Party; and (ii) any assignee shall expressly assume the assignor's obligations hereunder, unless otherwise agreed to by the other Party in writing. Notwithstanding the foregoing, as may be required for Tenant to avoid being classified as a Public Utility under Minnesota Statutes Chapter 216B.02, Subd. 4., or to leverage tax benefits as tax owner, Tenant may, at its sole discretion, assign and/or sublease all or part of its full interest under the Facility Lease Agreement to a controlled affiliate of Tenant, assign its rights under this Power Purchase Agreement a controlled affiliate of Tenant, or assign this Agreement in connection with any sale of any or all of its Assets to a third party or Bank.

l. **Time is of the Essence.** Time is of the essence with respect to all of the terms of this Agreement.

m. **Data Practices.** Seller considers the information contained in this Agreement related to the programs, methods, techniques and processes utilized by Seller to offer and implement the Energy System to be trade secret information of Seller as defined in the Minnesota Government Data Practices Act Ch. 13 .37 Subd. 1 (b) GENERAL NONPUBLIC DATA. In no event shall this information be shared or disclosed with any person or third party without the prior written approval of Seller.

**[SIGNATURE PAGE FOLLOWS]**

## Trade Secret

The Parties acknowledge they have read this Agreement, understand it and agree to be bound by its terms and conditions as of the date first set forth above.

Tenant  
**Green2 Solar Leasing, LLC**

By: \_\_\_\_\_  
Rich Ragatz, its Vice President  
Dated: \_\_\_\_\_

Customer:  
**City of Roseville**

By: \_\_\_\_\_  
Name: Dan Roe and Patrick Trudgeon, its Dan Roe, its Mayor and  
Patrick Trudgeon, its City Manager  
Dated: \_\_\_\_\_

Trade Secret

**SCHEDULE A**  
**Power Purchase Payment Schedule**

208.250 kW DC Monocrystalline350W,  
166.50 kW AC SolarEdge SE33k 480V 3Ph Inverter Inverters, SolarEdge P730 Power Optimizers &  
Unirac, PanelClaw (or equivalent) Ballasted Racking @ approximately 10°

**Xcel Photovoltaic Credit Rider Tariff**

**INSERT CORRECT SCHEDULE A FOR PROJECT**

## Put & Call Agreement

208.250 kW DC Monocrystalline350W,  
166.50 kW AC SolarEdge SE33k 480V 3Ph Inverter(s),  
SolarEdge P730 Power Optimizers & Unirac, PanelClaw (or  
equivalent) Ballasted Racking @ approximately 10°

### Xcel Photovoltaic Credit Rider Tariff

This **PUT AND CALL AGREEMENT** (this "**Agreement**"), dated **July 13, 2018** is between **Green2 Solar Leasing, LLC**, a Minnesota Limited Liability Company, whose principal place of business is located at **5810 Nicollet Avenue, Minneapolis, MN 55419** ("**Tenant**"), and **City of Roseville**, a Minnesota City, whose principal place of business is located at **2660 Civic Center Drive, Roseville, MN 55113** ("**Customer**"). Tenant and Customer are sometimes also referred to in this Agreement jointly as "**Parties**", or individually as a "**Party**".

#### RECITALS

- A. Customer is the purchaser of a photovoltaic solar electric system (the "**Energy System**") located at the Installation Location described above (the "**Installation Location**") and as defined in the Purchase Agreement between Customer and **Ideal Energies, LLC** ("**Seller**") of even date herewith (the "**Purchase Agreement**"); and
- B. Tenant is the lessee of the Energy System and associated rights under the **Facility Lease Agreement** with Customer (the "**Facility Lease**") of even date herewith, and Tenant sells the Energy System generated from the Energy System pursuant to a Power Purchase Agreement with Customer (the "**Power Purchase Agreement**") of even date herewith. Tenant's interests in the Facility Lease and Power Purchase Agreement is referred to herein as the Interest (the "**Interest**"); and
- C. The Parties hereto now desire to enter into this Agreement to set forth the terms and conditions upon which Tenant has an option to put its Interest to the Customer and upon which Customer has an option to call Tenant's Interest from Tenant.

#### AGREEMENT

**NOW, THEREFORE**, in consideration of the foregoing Recitals, the mutual promises of the Parties hereto and for other good and valuable consideration, the receipt and sufficiency of which hereby are acknowledged, the Parties hereby agree as follows:

1. **Contingency.** The Parties performance under this Agreement is contingent on the Final Project Completion (as defined in the Purchase Agreement) occurring in accordance with the terms of the Purchase Agreement.
2. **Put of Tenant's Interest.** Commencing on the **20<sup>th</sup> anniversary of the Final Project Completion date**, and for a period of **three (3) months thereafter** (the "**Put Period**"), Tenant shall have the right and option to require Customer to purchase all, but not less than all, of Tenant's Interest (the "**Put**"). Tenant may exercise the Put by delivering notice of exercise of such option in writing to Customer during the Put Period. If exercised, Tenant shall be obligated to sell, and Customer shall be obligated to purchase, all of the Interest owned by Tenant. The purchase price for the Interest shall be **\$1.00** (the "**Put Price**"). The date of the Put closing will be thirty (30) days following the notice of exercise of the Put, or such earlier

<b>Customer / Owner</b>	<b>City of Roseville</b>
<b>Installation Location</b>	<b>2661 Civic Center Drive, Roseville, MN 55113</b>
<b>Xcel Premise #</b>	<b>303534506</b>

date as the Parties may agree in writing (the "**Put Closing Date**"). The Put Price shall be paid by Customer to Tenant in cash on the Put Closing Date. Each Party shall remain liable for any obligations arising under the Facility Lease and Power Purchase Agreement prior to the Put Closing Date. Notwithstanding the foregoing, an invoice provided by the Tenant to the Customer stating the Project, its election to exercise its Put, the Put Price, and the Customer's payment and Tenant's Receipt of the same satisfies the requirements of this Section.

3. **Call of Tenant's Interest.** For a period of **nine (9) months beginning the day following the last day of the Put Period** (the "**Call Period**"), Customer shall have the right and option to purchase all, but not less than all, of Tenant's Interest (the "**Call**"). Customer may exercise the Call by delivering notice of exercise of such option to Tenant during the Call Period. If exercised, Customer shall be obligated to purchase, and Tenant shall be obligated to sell, all of the Interest owned by Tenant. The purchase price for the Interest pursuant to the Call shall be an amount equal to the fair market value (the "**Fair Market Value Price**") of such Interest and the Energy System as agreed by the Parties and if no agreement is possible, then by an independent qualified appraiser selected by the Customer and the cost of which is paid for by the Tenant (the "**Call Price**"). The Parties agree that a reasonable method of establishing the Fair Market Value Price is to use a discounted cash flow value of Tenant's power purchase income less expenses remaining under the Power Purchase Agreement and Facility Lease Agreement as of the Call Date. As of the date hereof, the Parties believe that a discount rate of fifteen percent (15%) is reasonable and agree that the Parties will use foregoing method in determining the Fair Market Value and resulting Call Price. The date of the Call closing shall be thirty (30) days following delivery of the notice of exercise of the Call, or such earlier date as the Parties may agree in writing (the "**Call Closing Date**"). The Call Price shall be paid by Customer to Tenant in cash on the Call Closing Date. Each Party shall remain liable for any obligations arising under the Facility Lease and this Agreement prior to the Call Closing Date.
4. **Customer's Additional Call Options** In addition to eh Customer's Call Option specified in Section 3, the Customer may also exercise a Call for the first three months following the fifth, tenth and fifteenth anniversary of the Final Project Completion Date. Customer may exercise the Call by delivering notice of exercise of such option to Tenant during the Call Period. If exercised, Customer shall be obligated to purchase, and Tenant shall be obligated to sell, all of the Interest owned by Tenant. The purchase price for the Interest pursuant to the Call shall be an amount equal to the fair market value (the "**Fair Market Value Price**") of such Interest and the Energy System as agreed by the Parties and if no agreement is possible, then by an independent qualified appraiser selected by the Customer and the cost of which is paid for by the Tenant (the "**Call Price**"). The Parties agree that a reasonable method of establishing the Fair Market Value Price is to use a

discounted cash flow value of Tenant's remaining Power Purchase Income under the Power Purchase Agreement and Facility Lease Agreement as of the Call Date. As of the date hereof, the Parties believe that a discount rate of fifteen percent (4%) is reasonable and agree that the Parties will use foregoing method in determining the Fair Market Value and resulting Call Price. The date of the Call closing shall be thirty (30) days following delivery of the notice of exercise of the Call, or such earlier date as the Parties may agree in writing (the "**Call Closing Date**"). The Call Price shall be paid by Customer to Tenant in cash on the Call Closing Date. Each Party shall remain liable for any obligations arising under the Facility Lease and this Agreement prior to the Call Closing Date.

5. **Obligations following exercise of Put or Call.**

- a. **Tenant.** After the transfer and assignment of the Interest pursuant to the Put or Call, Tenant shall have no further obligations in connection with the Interest.
- b. **Customer.** After the transfer and assignment of the Interest pursuant to the Put or Call, Customer shall make, if not already paid, the Power Payments described in Schedule A of the Power Purchase Agreement between the Parties of even date herewith beginning with the month after the Final Project Completion date through and including the month of the Put or Call Closing date. Customer is not obligated to pay Tenant any Power Purchase Payments after the Put or Call Closing date through the end of the Term specified in the Power Purchase Agreement.

6. **Miscellaneous.**

- a. **Subordination to Utility Agreements.** No portion of this Agreement is intended to conflict with any Utility Agreements (the "**Utility Agreements**") as defined in the Purchase Agreement to which Tenant or Customer is a Party. In the case of a conflict between the terms or conditions of this Agreement and the Utility Agreements, the terms and conditions of Utility Agreements shall control. The utility, or its successors and assigns, is a third-party beneficiary of the provision of this paragraph. Nothing in this Agreement shall prevent the utility, from fully enforcing the terms and conditions of Utility Agreements.
- b. **Relationship of the Parties.** The Parties shall for all purposes be considered independent contractors with respect to each other, and neither shall be considered an employee, employer, agent, principal, partner or joint venturer of the other.
- c. **Entire Agreement.** This Agreement and the Schedules hereto, together with any agreement reference herein, constitute the entire agreement and understanding of the Parties relative to the subject matter hereof. The Parties have not relied upon any promises, representations, warranties, agreements, covenants or undertakings, other than those expressly set forth or referred to herein. This Agreement replaces and supersedes any and all prior oral or written agreements, representations and discussions relating to such subject matter.
- d. **Survival of Representations.** All representations, warranties, covenants and agreements of the Parties contained in this Agreement, or in any instrument, certificate, exhibit or other writing provided for in it, shall survive the execution of this Agreement and the consummation of the transactions contemplated herein.

- e. **Amendment.** This Agreement may be amended or modified only by a writing executed by the Parties to this Agreement. No custom or practice of the Parties at variance with the terms hereof shall have any effect.
- f. **Notices.** All notices to be given under this Agreement shall be in writing and shall be effectively given upon personal delivery, facsimile or email transmission (with confirmation of receipt), delivery by overnight delivery service or three days following deposit in the United States Mail (certified or registered mail, postage prepaid, return receipt requested).
- g. **No Delay.** No delay or failure on the part of any Party hereto to exercise any right, power or privilege hereunder shall operate as a waiver thereof.
- h. **Force Majeure.** Neither Party will be liable to the other Party for any delay, error, failure in performance or interruption of performance resulting from causes beyond its reasonable control, including without limitation fires, flood, accidents, explosions, sabotage, strikes or other labor disturbances, civil commotion, riots, invasions, wars, acts of God, acts of government, terrorism or any cause (whether similar or dissimilar to the foregoing) beyond the reasonable control of the Party.
- i. **Governing Law / Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of Minnesota without regard to its conflicts of laws principals. Any lawsuit brought in connection with this Agreement shall be brought only in a court of general jurisdiction in Hennepin County, Minnesota.
- j. **Severability.** The provisions of this Agreement are severable. If any part of this Agreement is rendered void, invalid or unenforceable, such rendering shall not affect the validity and enforceability of the remainder of this Agreement.
- k. **Successors and Assigns.** This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns. Neither Party shall assign this Agreement, or any portion thereof, without the prior written consent of the other Party. Any attempted assignment or transfer without such prior written consent of the other Party shall be of no force or effect. As to any permitted assignment: (a) reasonable prior notice of any such assignment shall be given to the other Party; and (b) any assignee shall expressly assume the assignor's obligations hereunder, unless otherwise agreed to by the other Party in writing. Notwithstanding the foregoing, as may be required for Tenant to avoid being classified as a Public Utility under Minnesota Statutes Chapter 216B.02, Subd. 4., or to leverage tax benefits as tax owner, Tenant may, at its sole discretion, assign and/or sublease all or part of its full interest under the Facility Lease Agreement to a controlled affiliate of Tenant, assign its rights under the Power Purchase Agreement a controlled affiliate of Tenant, assign its rights under this Agreement to a controlled affiliate of Tenant, or assign this Agreement in connection with any sale of any or all of its Assets to a third party or Bank.
- l. **Time is of the Essence.** Time is of the essence with respect to all of the terms of this Agreement.
- m. **Data Practices.** Seller considers the information contained in this Agreement related to the programs,

Trade Secret

methods, techniques and processes utilized by Seller to offer and implement the Energy System to be trade secret information of Seller as defined in the Minnesota Government Data Practices Act Ch. 13 .37 Subd. 1 (b) GENERAL NONPUBLIC DATA. In no event shall this information be shared or disclosed with any person or third party without the prior written approval of Seller.

The Parties acknowledge they have read this Agreement, understand it and agree to be bound by its terms and conditions as of the date first set forth above

Tenant  
**Green2 Solar Leasing, LLC**

By: \_\_\_\_\_  
Rich Ragatz, its Vice President  
Dated: \_\_\_\_\_

Customer:  
**City of Roseville**

By: \_\_\_\_\_  
Name: Dan Roe and Patrick Trudgeon, its Dan Roe, its Mayor  
and Patrick Trudgeon, its City Manager  
Dated: \_\_\_\_\_



**ROSEVILLE**  
**REQUEST FOR COUNCIL ACTION**

Date: May 14, 2018

Item No.:

Department Approval



City Manager Approval

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Item Description: City Campus Solar Options

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**BACKGROUND**

1 City Staff has been researching and discussing solar installation opportunities for public  
2 buildings for many years. In January 2013, staff met with Powerfully Green (installer) and  
3 Newport Partners (financer) for the installation of solar photovoltaic (PV) on the City Hall and  
4 Maintenance Building roof. Powerfully Green and Newport Partners were working with the  
5 cities of Lindstrom and Champlin who received grants and Xcel Energy rebates for rooftop  
6 projects in their cities. Roseville's plan was to install two 40kW systems with the City paying  
7 \$66,000 in upfront costs, with a total project cost of \$660,000. The payback of this system was  
8 projected to be 10-12 years. City Council supported (3-2) entering into a letter of intent with  
9 Newport Partners to apply for grant funding with Xcel. The City was not selected for funding  
10 through this process.

11  
12  
13 Staff continued to meet with developers and financers in 2014 to investigate the installation of  
14 solar PV on rooftops within the City Hall campus. Grant funding was available through Made-  
15 in-MN, and a low financing option was provided by the St Paul Port Authority. The City  
16 submitted two grants, but was not selected through the lottery process.

17  
18 At the same time, the City was investigating Community Solar. The program has some  
19 community support and interest. The project would allow property owners to buy shares from a  
20 City installed system and get a credit on their utility bill for the power system they bought into.  
21 The residents encouraged the City to look at ways to participate in this program, and was the  
22 impetus for a presentation in May of 2014 by the Great Plains Institute/CERTs. CERTs goal was  
23 to educate everyone on Community Solar projects and how the City could engage the  
24 community.

25  
26 Staff sent out an RFP in January of 2015 that looked at all the rooftops in the City Hall campus  
27 to determine how feasible all the locations were, and what total capacity was available. The RFP  
28 received two responses, but neither were selected because part of the RFP was looking into grant  
29 funding through Made-in-MN. The City applied for three buildings, but was not selected  
30 through the lottery process.

31  
32 The City reworked the RFP to look at a direct purchase, or Power Purchase Agreement (PPA),  
33 for the installation of a rooftop solar system on the Skating Center. Two proposals came back  
34 with the City selecting Sundial Solar. In August of 2015, the City Council authorized staff to  
35 enter into a Letter of Intent with Sundial Solar for the installation of a 375kW Photovoltaic  
36 system on the roof of the Skating Center. Staff worked with Sundial Solar on the detailed

37 engineering and design for the proposed system on the Skating Center.

38  
39 In November 2015, staff brought the Skating Center project to the PWETC meeting to review  
40 and make a recommendation on the PPA that would help fund the installation of the proposed  
41 300kW solar PV system.

42 In early 2016, Sundial Solar approached City staff with a formal proposal to install a solar  
43 system on the Skating Center roof. However, in order to meet building code requirements for an  
44 arena, the roof substructure would require modification in order to support the additional weight  
45 of the solar panels. This work would have required shutting down the arena for several weeks,  
46 which was not acceptable given the use of the arena.

47 City staff and Sundial therefore began looking at alternatives on the City Campus for a similar  
48 installation. Sundial came back in July 2016 with a proposal to install solar arrays on top of City  
49 Hall and the Maintenance Facility. These two installations would combine for a total of 450 kW  
50 watts, which is larger than the proposed 375 kW system originally proposed for the skating  
51 center. This PPA was not supported by City Council as the timing didn't work out due to the  
52 beginning of the facility needs study, and the potential conflict of roof/building maintenance.

53 Now in 2018, staff are revisiting the potential solar projects with the City Hall Campus. Staff met  
54 with two developer/financers to discuss solar rooftop potential, and changes in the solar market  
55 from 2016. Staff received a proposal from IPS-Solar for a Community Solar Subscription  
56 Agreement. Staff is proposing to commit to up to 2 megawatts of Community Solar shares. IPS  
57 Solar would seek out available shares and the agreement would be amended as each individual  
58 development is secured. IPS Solar will be on hand to make a short presentation and answer  
59 questions.

60  
61 Staff also recently attended a seminar on a new program called Solar Possible which is a  
62 collaborative solar purchasing program for state agencies, local governments, and schools. This  
63 program is administered by the Minnesota Department of Administration and is receiving  
64 technical support from the Clean Energy Resource Team (CERTs) and the Great Plains Institute.  
65 A fact sheet on this program is attached. The City is participating as an interested party and  
66 should receive proposals sometime this summer. At that time, if the proposals are reasonable,  
67 staff will present these to the City Council for possible consideration of rooftop solar  
68 installations somewhere on campus.

#### 69 **POLICY OBJECTIVE**

70 Policy 6.2 of the Roseville 2030 Comprehensive Plan indicates the City should reduce negative  
71 human impacts on the environment through citywide energy conservation and reduction of  
72 pollution and waste.

#### 73 **BUDGET IMPLICATIONS**

74 A more thorough review of budget implications will be presented when staff presents a final  
75 draft of an agreement to approve and/or a proposed solar installation on campus. Staff's goal will  
76 be to present proposals that will have at least a short term break even result, if not annual energy  
77 savings over an extended period of time.

#### 78 **STAFF RECOMMENDATION**

79 Receive a presentation from staff updating the Council on current City Campus solar options and  
80 provide guidance to staff for future actions.

81 **REQUESTED COUNCIL ACTION**

82 Receive a presentation from staff updating the Council on current City Campus solar options and  
83 provide guidance to staff for future actions.

Prepared by: Marc Culver, Public Works Director

Attachments: A: Presentation on Community Solar Gardens

B: Solar Possible Fact Sheet

C: DRAFT Community Solar Subscriber Agreement

D: Excerpts from March 27, 2018 PWETC Meeting Minutes

**CITY OF ROSEVILLE**  
**PUBLIC WORKS ENVIRONMENT AND TRANSPORTATION COMMISSION**  
**EXCERPT FROM DRAFT MINUTES OF AUGUST 28, 2018 MEETING**

**5. Review of Community Solar Garden Subscription And On Campus Solar Options**

Mr. Culver explained at their July meeting, the PWET Commission received a presentation from iDeal Energies about their proposal for on campus solar installations on various buildings on the Civic Campus. He reviewed what the City Council approved as far as the Community Solar Garden.

Acting Chair Wozniak asked if the bill credit and BPA rates fixed.

Mr. Culver stated both have a fixed starting rate and escalator which is adjusted yearly.

Acting Chair Wozniak asked if there was a fear that BPA rate could fall below the bill credit rate.

Mr. Culver stated it should not and when the agreement is set up that is something the City wants to make sure will not happen. He noted the City will be subscribers to a Community Solar Garden sometime in 2019. The City is agreeing to support solar energy and the City will get the energy credits. What the City wants to do beyond solar gardens is to look at every possible way to actually produce solar energy on campus.

Mr. Culver introduced Mr. Rich Ragatz and Chris Psihos from iDeal Energies who made a presentation to the Commission regarding solar energy benefits and proposals for the City.

Mr. Culver stated the City is looking at two different options, one is a solar rewards program which is a smaller, up to 40-kilowatt system and is a fixed payment program with Xcel.

Mr. Chris Psihos explained to the Commission the solar rewards program and how it works.

Mr. Culver stated option two is the Solar Capacity Credit and varies from 83-kilowatt system and larger. He noted one of the proposals which the City is backing off of is the Skating Center due to the age of the roof. He stated the skating center roof is scheduled to be replaced in three to four years.

Mr. Culver stated the difference with this proposal and other proposals the Commission has looked at in the past is that with this system the City would own it from day one.

Mr. Culver reviewed the other proposals for the systems with the Commission. He indicated when this item is brought forward to the City Council he would like to be able to do the solar rewards program on all three buildings; fire hall, City hall and the maintenance

building. He indicated he would like to do one of the Solar Capacity Credit options either on City Hall or the maintenance building.

Acting Chair Wozniak asked why they would not want to do both.

Mr. Culver stated they could do both.

Member Misra wondered if there was a trade-off if the City were to do both.

Mr. Culver stated there was not. The City could use up to 120 percent of the power. They are obligating some of City Hall's energy to the Community Solar Gardens, so staff would need to keep an eye on that to make sure that between the two they are not exceeding the City's actual consumption by more than 120 percent. He thought the more systems they have the more roof tops they need to take up then the more risk there is from the standpoint of future roof maintenance or other damage.

Mr. Culver thought if they got the solar rewards program and one of the larger systems in they can see how it goes and then if they like it and it is going well then, they can accelerate the skating center roof redo and get a larger system on the skating center in 2020. If the City is really in this the skating center is a preferable roof because of the amount of energy that is consumed in that building and the building will not be going anywhere for a long time.

There was a short discussion regarding price increase of energy over a twenty-year period.

Member Kruse asked if a full life cycle analysis of the system could be done and at the end of the life cycle what the cost of removal would potentially be.

Mr. Chris Psihos stated in regard to O and M costs when there is a traditional solar array they are doing a straight O and M relationship on it. If the City were to look at someone to maintain the solar array it would cost the City \$300 to \$500 per year to pay for that and the savings on the solar array is around \$5,000. The solar equipment is warrantied for 25 years. When the equipment does need to be disposed of, it is considered electronic waste (E-waste). The cost today is \$15 to \$20 a panel and charge by the pound. In todays present economy the cost would be around \$10,000 to dispose of the equipment for a 40-Kilowatt system. This would be the same cost as what would be saved in the year 25. This would be a swap in energy cost. He stated when they get past the point of transferring the ownership over, the only burden is the continued insuring of the item and dealing with the O and M and maintenance of the asset.

Mr. Rich Ragatz stated after 25 years the equipment will still have 80% of the production output from the panels. He thought it would be doubtful that after the warranty is expired the City would want to dispose of the panels. The City would want to keep them up there because they are still producing or if the City did want to dispose of the panels there would be someone to take the panels off the City's hands.

Member Misra asked where the panels were manufactured.

Mr. Chris Psihos stated the ones iDeal Energies is using are made in Toronto Canada and are one of the three manufacturers of solar panels in Canada.

Member Misra asked what the life expectancy is of the solar panels. She understood the panels were warranted for 25 years. Assuming these are state of the art panels, how much transition does iDeal Energies expect to see going forward.

Mr. Chris Psihos stated solar panels today are basically all the same thing. He explained how current solar panels create energy using sunlight. He stated this is the same technology that has been around for forty years. He stated the warranty is two tiered.

Member Freihammer asked if the main risk about not being able to predict the electricity market.

Mr. Culver stated the two major risks, particularly owning the panels from day one is if there was some catastrophic weather event, the panels could get damaged where insurance would have to come into play versus an O and M situation. The City is insured through the League of Minnesota Cities but if they get a weather event that is significant that would damage the panels then there is other damage and the deductible would get eaten up quickly. The second risk is there is no set clause stating the City's PPA will always be lower than Xcel's energy rate. There is a possibility that there is a marginal higher rate than what the City would be paying Xcel for that same energy in a given year. Given reasonable trends and there is a set escalator on the PPA, that should be a limited concern. After the 13<sup>th</sup> year the City would not be paying the PPA anymore.

Member Kruse asked if Xcel Energy could penalize people for not using the electric grid.

Mr. Culver indicated they could not. It would be unlikely that the City would not be purchasing electricity from Xcel Energy.

Mr. Rich Ragatz stated with the solar rewards program, it is set up where the value of the energy the City is keeping 20% of that as a savings each year. This would be a buffer in case rates do not increase as much as was projected or the output of the system did not produce as much energy as was indicated. The City would still be saving money.

Mr. Chris Psihos stated the program was set up so the City would be saving money whether there was a large increase in rates or less of an increase. He noted iDeal Energies program is set up differently than most other solar companies.

Mr. Culver agreed with Mr. Chris Psihos and Mr. Rich Ragatz that their goals should be to own the system and to realize the maximum benefit of the solar power production on that because then the City is not paying for the power at all with the exception of operating and maintenance costs. He noted the panels could be left on the City roofs for 40 plus years and still produce energy off of the panels.



Mr. Culver noted some of the Councilmembers have expressed concern about owning the solar garden at all and as soon as the PPA agreement is up to get the panels off the roofs, so the City does not own them anymore and there is not the risk.

Member Misra asked if there really is a risk.

Mr. Culver stated the City Council is concerned about having another asset to own, maintain and operate and the cost of it.

Member Misra asked how well the solar panels fair in Minnesota weather.

Mr. Chris Psihos stated the solar panels are engineered for Minnesota conditions. These arrays are meant to sit on a roof and do nothing but produce energy.

Mr. Chris Psihos reviewed weather statics and the solar panels with the Commission.

Member Misra asked if Mr. Culver has had a chance to talk to other communities with the solar panels in use.

Mr. Culver indicated he has not and will reach out to the cities to get their feedback on how the installation went before this item goes before the City Council.

Member Misra thought Mr. Culver should also find out about the liability issues.

Vice Chair Wozniak recommended Mr. Culver to find out if there were any unforeseen costs the cities may have experienced, especially cities that have a ground mount system. He asked if the Parks and Recreation Department would maintain the property where the ground array may be in City Hall.

Mr. Culver stated the City has a campus grounds maintenance contract with a third party. The hillside the City will be putting the array on is a natural prairie grass area.

Member Kruse asked if there was a catastrophic event and the roof was torn off the building and the City lost four months of production, what does the contract say about that.

Mr. Chris Psihos stated iDeal Energies sets that up as part of the insurance transaction. The insurance proceeds would rebuild the asset.

Vice Chair Wozniak asked if the insurance is a different type than what cities typically carry, loss of power production.

Mr. Chris Psihos stated he was not sure but thought it was a contractual obligation and a lot of times those things are covered.

Mr. Culver stated the Commission will review this again in September if the Commission wants to make a formal recommendation to bring forward to the Council.

Member Misra thought the City was moving on the right track and she thought they have talked about this for awhile and it seems like staff has reviewed this and the risk did not seem that great to her with all of the items that are in place. She thought the City reducing its carbon footprint is a brilliant idea, especially if someday the City can declare the skating center carbon neutral. She thought that was a huge asset for them and a contribution they should be looking to do. She thought it was time.

Member Kruse agreed and thought this was a great idea.

Vice Chair Wozniak stated in addition to what Member Misra stated, he liked the idea of going after both types; Solar Rewards and the PV Demand Credit. He liked the latter especially to scope out what they might be able to do with the skating center roof a year or two down the road.

Mr. Chris Psihos stated when a solar array is put on a roof and there is an income producing asset that over the life of the roof pays for the roof, that is an awesome situation. Usually a solar array will pay for the cost of the roof with the energy savings over a 25-year period.

Vice Chair Wozniak hoped the staff in Finance will take a look at the numbers to make sure everything adds up and makes sense. He wanted to say kudos to the City Council for wanting to display being green in the City and he thought that was a good step and looked forward to more like it.

Member Misra thought the idea of using a ground base solar array for educational purposes, there are other ways of doing that educational piece such as a kiosk in different parks, something at the skating center and/or at City Hall that may not be as visually and intrusive on the landscape would be a better way to go. She would like to keep the solar array on the rooftop.

**There was no motion made due to lack of Quorum**