

September 22, 2017

414 Nicollet Mall Minneapolis, MN 55401

-Via Electronic Filing-

Daniel P. Wolf Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

RE: COMPLIANCE FILING - PETITION REGARDING A CHANGE IN SCOPE OF A RENEWABLE DEVELOPMENT FUND GRANT CONTRACT DOCKET NO. E002/M-12-1278

Dear Mr. Wolf:

Northern States Power Company, doing business as Xcel Energy, submits the attached petition to the Commission requesting approval of a scope change in the Renewable Development Fund (RDF) grant contract EP4-15 with the Minnesota Renewable Energy Society (MRES).

This scope change is filed in accordance with the framework laid out in the Commission's ORDER SETTING RIDER, APPROVING CONTRACT AMENDMENTS AND PROCESS FOR FUTURE AMENDMENTS, AND REQUIRING CONTINUED REPORTING in Docket No. E002/M-05-109. Under that framework, where there is an amendment for a significant change in the Contractor's scope of work, the Company first seeks the RDF advisory group's support for the change and then files the amendment with the Commission for approval.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list.

Please contact me at <u>bria.e.shea@xcelenergy.com</u> or (612) 330-6064 if you have any questions regarding this filing.

Sincerely,

/s/

BRIA E. SHEA DIRECTOR, REGULATORY & STRATEGIC ANALYSIS

Enclosure Cc: Official Service List

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange Dan Lipschultz Matthew Schuerger Katie J. Sieben John Tuma Chair Commissioner Commissioner Commissioner

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY, A MINNESOTA CORPORATION, REGARDING A CHANGE IN SCOPE OF A RENEWABLE DEVELOPMENT FUND GRANT CONTRACT DOCKET NO. E002/M-12-1278

PETITION

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits to the Commission this amended and restated Renewable Development Fund (RDF) energy production grant with Minnesota Renewable Energy Society (MRES or Contractor) for project EP4-15.

In summary, MRES' original RDF proposal to create two community solar gardens (CSG) to serve low income customers required some modifications due to changes that have occurred since their initial submission in 2013. We have successfully worked through the necessary changes (which include using the CSG tariff and allowing a third party to own the PV equipment) with MRES and now have an amended grant contract for the Commission's review and approval. As a result of the project changes and the efficiencies gained over time, the RDF funding necessary to support the project has been reduced by approximately \$1.4 million. Accordingly, in this petition, we also seek to redirect a portion of that \$1.4 million for additional fulfillment of MRES' original stated purpose by allowing MRES to partner with the City of Minneapolis to build a third CSG for low income customers. This unique opportunity to expand the project scope is within the public interest as it will allow greater CSG access for low-income customers while still aligning with the initial funds allocated and approved by the Commission for this project.

By of background, MRES' proposal, which was submitted in 2013, prior to the creation of the Minnesota Community Solar Gardens (CSG) statute¹, proposed to create two 500 kilowatt direct-current (kW_{DC}) photovoltaic (PV) CSGs that would serve low income customers. In its proposal, MRES contemplated creating a system for tracking subscriptions in cooperation with the Company, and included a set rate for the energy it would produce. MRES executed a standard Energy Production RDF grant contract for the project on February 17, 2015.

As MRES and the Company were working through the details of creating MRES' solar garden program (which would have required negotiating a power purchase agreement (PPA), developing a new tariff specifically for MRES' solar garden program, and changes to our billing system), the parties determined that it would be less confusing to subscribers and less administratively burdensome to allow MRES to participate in the existing CSG program. The use of the CSG program reduces the grant award from approximately \$2.7 million to \$1.3 million to offset the increase in energy payments contemplated under the CSG program, as compared to MRES' offered PPA price in its approved proposal.

In addition, the amended grant contract allows the solar PV equipment to be owned by a third-party to take advantage of the tax equity benefits, as we have done for other Cycle 4 projects.

The Company has discussed the aforementioned contract changes with the RDF advisory group, and the advisory group did not have any concerns about the proposal.

The fully executed First Amended and Restated Grant Contract is provided as Attachment A and a redline comparing the First Amended and Restated Grant Contract with the original Grant Contract executed on February 15, 2015 is included as Attachment B.

The Company also respectfully requests that the Commission allow MRES to use up to \$1.4 million (of the \$1.4 million less than the grant the Commission originally awarded to MRES) to build a third CSG for low income subscribers in conjunction with the City of Minneapolis. The City of Minneapolis has long supported MRES' proposal, filing a letter of support for MRES' project when it was originally submitted to the Company in April 2013. The reduced grant award contemplated in the amended and restated contract, in conjunction with the lower cost of solar panels today and developer efficiencies create a unique opportunity for MRES to increase, by 50 percent, the solar capacity they are installing as part of the project. If the Commission approves of this increased scope of MRES' project, then the Company

¹ Minn. Stat. § 216B.1641

would make a compliance filing with a contract amendment that increases the capacity MRES will install and the increased grant amount.

Both the changes in the first amended and restated grant contract and the proposed increase in capacity and grant amount are changes in project scope that are a material change in the RDF Contract and therefore the Company considers both a Type 3 amendment. Change in Project scope is subject to its approval by the Commission pursuant to Order Point No. 3 of the Commission's June 28, 2005 Order. Therefore, Xcel Energy respectfully requests Commission approval of:

- (1) The amended and restated RDF grant contract; and
- (2) Approval of the amendment described below (and attached as Attachment C) which would increase the grant amount and the capacity MRES will install.

If the Commission does not approve the amendment to increase the grant amount (which is still within the initially-approved amount approved by the Commission for EP4-15), the Company still requests approval of the amended and restated RDF grant contract.

I. GENERAL FILING INFORMATION

Pursuant to Minnesota Rule 7829.1300, subp. 3, Xcel Energy provides the following required information.

A. Name, Address, and Telephone Number of Utility

Northern States Power Company 401 Nicollet Mall Minneapolis, MN 55401 (612) 330-5500

B. Name, Address, and Telephone Number of Utility Attorney

Mara K. Ascheman Senior Attorney Xcel Energy Services Inc. 401 Nicollet Mall, 8th Floor Minneapolis, MN 55401 (612) 215-4605

C. Date of Filing and Date Proposed Agreement Will Take Effect

This petition is being filed on September 22, 2017. Pursuant to Minn. Stat. §116C.779, the Company requests approval the First Amended and Restated Grant Contract and the amendment to increase the grant amount and capacity. The executed amendment, if approved, would be filed at the earliest opportunity

D. Statute Controlling Schedule for Processing the Filing

This Petition is made pursuant to Minn. Stat. §116C.779 which establishes the RDF program. Since there is no determination of Xcel Energy's general revenue requirement necessary, the requested rate treatment falls within the definition of a "miscellaneous filing" under Minn. Rule 7829.0100, subp. 11. Pursuant to Minn. Rule 7829.1400, subp. 1, comments on a miscellaneous filing are due within 30 days of its filing, with reply comments due 10 days thereafter.

E. Utility Employee Responsible for Filing:

Bria E. Shea Director, Regulatory & Strategic Analysis Xcel Energy Services, Inc. 401 Nicollet Mall Minneapolis, MN 55401 (612) 330-6064

II. DESCRIPTION AND PURPOSE OF FILING

A. Background on the MRES RDF Project

1. The MRES RDF Project

In early 2013, Xcel Energy issued the Cycle 4 Request for Proposals under its RDF program to identify and support various renewable energy production projects as well as renewable energy research and development projects. During Cycle 4, MRES applied for an RDF grant in the amount of \$2,661,320 to install two, approximately 500 kW_{DC}, solar arrays (for a total capacity of 1,000 kW_{DC}) to explore the urban and rural aspects of solar gardens to determine, their market acceptance and barriers to development. To test market assumptions at least one array would be located in an urban area and one array would be located in a rural area. At the time of the project was proposed (in April 2013), the 2013 Omnibus Energy Act (2013 Minnesota Session Law, Chapter 85), which created Minnesota's existing CSG program under Minn. Stat. § 216B.1641, had not been enacted.

At the time the MRES' project was selected by the Company (in July 2013), the 2013 Omnibus Energy Act had been enacted, but the Company had not yet filed its initial CSG proposal, and therefore the MRES project was going to be the first large-scale community solar project in Minnesota. The project was recommended for funding by the RDF advisory group because it could serve as a model to demonstrate another alternative to renewable energy ownership and participation, though the advisory group did raise some concerns about the amount of detail in the proposal and that sites for the solar gardens were not specified, which had the potential to create delays. The Company concurred with the advisory group's recommendation. In its March 11, 2014 Order, the Commission approved the RDF grant award to MRES.

On February 17, 2015 the RDF Contract was fully executed and on February 19, 2015, was submitted to the Commission as an informational filing. Because MRES used the standard grant contract, no further Department of Commerce (Department) or Commission action was required to proceed with Project activity.

Upon initiation of the project, MRES began taking steps to establish an agreement with a developer, identify a staff person dedicated to this project, identify and vet potential sites for the solar installations, and take the next steps in establishing the necessary supplemental financing for this project. By July 2015 MRES had identified a rural and urban site for their CSGs. Through the remainder of 2015 and into mid-2016, MRES worked to find a solar developer for their project. Once MRES found a developer, it explored numerous ways to track and deliver the solar garden benefits back to future subscribers.

2. MRES' Request to Allow Third Party Ownership and Use CSG Tariff MRES took the position that to obtain interim financing for the project, it was necessary for the solar PV equipment be owned by a third-party financier to take advantage of tax equity benefits. To accommodate this structure (where Contractor would design, build and operate the PV system but a third-party would own the PV equipment), modification to the executed Grant Contract is required. This change was reviewed with the RDF advisory group on August 8, 2017 with no member objecting to this change. The Company and MRES negotiated modifications to the Standard Grant Contract to accommodate the third-party ownership aspect of the project and also negotiated several special conditions to clarify that although the thirdparty financer would own the PV equipment, only MRES has any rights under the negotiated grant contract. These special conditions are consistent with prior approved Cycle 4 grant contracts that allowed third-party ownership. This type of change has previously been approved by the Commission.²

² See e.g., In the Matter of a Request by Xcel Energy to Issue Renewable Development Fund Cycle 4 Request for Proposals and Petition for Approval of a Standard Grant Contract, Docket No. E002/M-12-1278, NOTICE OF CONTRACT APPROVAL (Dec. 1, 2015).

MRES and the Company also concluded that the parties should work toward finding a way to have MRES use the existing CSG program as opposed to creating a project-specific CSG program. Creating another community solar garden would have required developing an additional tariffed offering for MRES' 1,000 kW_{DC} of solar capacity and related changes to the Company's billing system. The Company and MRES also thought that an another CSG offering that only applied to a specific 1,000 kW_{DC} of capacity could create unnecessary confusion among prospective subscribers to MRES' solar gardens and other solar gardens in the CSG program.

On February 17, 2017, the Company informed the RDF advisory group that MRES would like to amend the contract to have a third-party own the solar PV equipment and had been unable to develop a viable bill credit mechanism and would like the grant contract is to be modified to allow them to use the CSG tariff rather than a PPA. The RDF advisory group was supportive of the strategy to use the existing CSG tariff and have MRES' grant award reduced to reflect the fact that the bill credits in the solar garden program are higher than the PPA MRES initially proposed.

To calculate the reduced grant award, the Company looked back at MRES' original proposal. MRES received a \$2,661,320 grant award to install 1,000 kW solar capacity. In the proposal, total project costs were estimated to be \$4,036,420, including an average PPA price of \$0.0837 kWh over a 15-year period. The net present value of the energy sold under the PPA over the 15-year period is \$825,326. The CSG tariff has a longer term of 25 years. In addition, the ARR pricing structure, for which MRES' projects qualify, averages \$0.16605/kWh. The net present value of the energy sold under the CSG program over the 25-year period is \$2,203,607. The difference between the net present value of the energy sold under the CSG program and the PPA—\$1,378,281—is the amount of the grant reduction. This analysis is presented as Attachment D.

During the evaluation of the Cycle 4 proposals, the Company used what it called a Total Resource Cost (TRC), which was a measure of the levelized cost of energy on a \$/kWh basis over the project development, construction and operation. The TRC for MRES' approved proposal was calculated to be \$0.2597/kWh. The TRC for the proposal using the CSG tariff decreases to \$0.1820/kWh, primarily due to the increase in energy over the 25-year term of a CSG project (as compared to the 15-year term of the PPA).

A TRC value for the project that would have the longer payback term and higher price was calculated to be \$0.1936/kWh. Comparison of the value of the original TRC with the recalculated TRC indicates that a \$1,283,029 RDF grant award is necessary

for the project to have similar economic value. This results in \$1,378,281 of unspent grant funding that was initially approved for the project by the Commission.

Xcel Energy, thus, negotiated a reduced grant award of \$1,283,039 to account for a higher energy price that they would receive by using the CSG tariff. MRES agreed to the amount and that the subscribers to the facilities installed with this project would be low-income customers.

B. Additional Request to Use Portion of Grant Monies to Increase Project Scope

The Company also respectfully request that the Commission allow MRES to use up to \$1.4 million (of the \$1.4 million less than the grant the Commission originally awarded to MRES) to build another CSG up to 700 kW_{DC} for low income subscribers in conjunction with the City, dependent upon the array size and project scope The City has long supported MRES' proposal, filing a letter of support for MRES' project when it was originally submitted to the Company in April, 2013, and continues to support the project today. See Attachment E.

MRES has indicated that by using the existing CSG tariff, an additional CSG array between 300 kW and 736 kW_{DC} could be installed. Presently the total capacity of MRES' project is limited due to the "not to exceed" RDF contract requirement and the 1,000 kW_{DC} approved by the Commission for the Project in March 2014.

The City has expressed an interest in having a low-income CSG installed in south Minneapolis, in addition to the location in north Minneapolis already identified by MRES for the project. In the MRES April 2013 proposal, the City provided support for the project, stating "it believes the option of community solar would greatly benefit residents by opening up solar ownership to the many people who rent, live in multifamily housing, do not have solar access on their home, or while supportive of solar for various reasons, find the process of installing solar unmanageable." The City continues to not only be willing to help MRES with this project but interested in participating as well through the expanded project scope. That expanded scope will increase number of low income subscriber participants to the MRES Community Solar program.

Due to application deadline requirements in the CSG program, any additional MRES capacity would not be able to utilize the ARR pricing. Rather, any new arrays would use the Value of Solar (VOS) pricing. The Company and MRES estimated that an additional 300 kW to 736 kW could be installed with the remaining initially-approved RDF funds for the project through a VOS pricing scenario. If the Commission

approves of this increased scope of MRES' project, then the Company would make a compliance filing with a contract amendment, consistent with Attachment C, that increases the capacity MRES will install and the grant amount. The revised grant amount will be confirmed using the same methodology used to reduce the grant award, described above.

C. Framework for Commission Review

1. Regulatory Framework for Review of RDF Amendments

In the Commission's June 28, 2005 ORDER SETTING RIDER, APPROVING CONTRACT AMENDMENTS AND PROCESS FOR FUTURE AMENDMENTS, AND REQUIRING CONTINUED REPORTING in Docket No. E002/M-05-109, the Commission found the Company's regulatory framework for amending RDF contracts reasonable and approved it. Under that framework, the level of documentation and regulatory review is dependent on the type of change proposed to the RDF contract. Stated briefly:

Type 1 amendments include administrative changes, such as correcting typographical errors and clarification of contract terms. For this type of change, an amendment to the contract is not required, but documentation of the change and demonstration that there was agreement between the parties is required.

Type 2 amendments include minor contract amendments, including such things as schedule changes for justifiable reasons, reorder or reshipment of specified equipment to correct for contracting errors, delays in completion of routine research progress work reports, and minor changes in work scope. For this type of change, a formal amendment to the RDF contract is required.

Type 3 amendments include more material modifications, including such things as significant changes in the Contractor's scope of work, material modifications of technology and/or equipment to be installed for the RDF project, significant change of contractors, or remediation for defective work. For this type of change, the Company first seeks the RDF advisory group's support for the change and then files the amendment with the Commission for approval.

The Commission also clearly explained the Company "ultimately bears the burden to demonstrate the reasonableness of its actions."

2. Regulatory Framework in Practice—the Diamond K Dairy Assignment and Bergey Scope Change

The Commission has considered two other Type 3 Amendments. The Company requested, and the Commission approved, an assignment of a Cycle 2 RDF grant contract from RCM Digesters, Inc. to Diamond K Feeds, LLP. *See* Order, Docket No. E002/M-03-1883 (Jan. 23, 2013). In so approving the Diamond K Dairy assignment, the Commission agreed with and adopted the recommendations of the Department of Commerce. The Department of Commerce recommended the Commission approve the Diamond K Dairy assignment because:

- The proposed agreement did not propose to change the intent, scope, location or goals of the original grant award proposal;
- The proposed Agreement ensured that the project will be completed in a timely and cost-effective manner;
- Significant work had been done on the project; and
- The RDF Advisory Board³ recommended approval of the Agreement.

There was another element of the Department of Commerce's analysis related to feedstock, which is inapplicable here because the facilities are PV cells. The Company undertook a similar analysis when requesting the Commission's approval to expand the project area for the Bergey Windpower energy production grant. *See* Order, Docket No. E002/M-12-1278 (July 27, 2016). The Company will try to address the components of this analysis below.

D. Demonstration that expansion of the Project installed capacity is in the public interest, reasonable, and protects the interest of ratepayers

While the amended and restated grant contract changes the scope of the approved proposal and the February 2015 grant contract, it does not change the intent, location, or goals. A unique aspect of this project was to find the best practices for Community Solar in Minnesota through a demonstrable, replicable and scalable pilot project in an urban setting with an active community versus a rural installation. MRES still plans to install two community solar gardens—one rural and one urban—but now offer subscriptions to low-income subscribers. The changes to the grant contract are in the public interest because the third party ownership-related changes allow MRES to move forward with their project and the CSG-related changes allow low-income subscribers in the metro area greater access to CSG.

³ What is now the "RDF advisory group" was the "RDF Advisory Board" at this time.

MRES has represented to the Company that it believes that the improved economics of CSG tariff pricing and ability to increase the number of low-income participants in the CSG program will create a greater familiarity with social and economic limitations and improve project subscription rates. The Company believes that the change in scope will ensure that the project is completed in a timely and cost-effective manner with an increase in the knowledge base regarding promoting CSG to low-income subscribers.

MRES has done a significant amount of work on the project, finding site locations, working with the Company to evaluate different community solar garden alternatives, and submitting CSG and interconnection applications. Project participants must be Xcel Energy electric customers. This requirement assures that any benefits related to an RDF grant buying down installation costs of a solar facility are directed to a ratepayer that supports the RDF.

In addition, disbursement of milestone payments for this project remain tied to the installation and commissioning of incremental kWs. This payment structure minimizes risk for the RDF and protects ratepayer interests as no payments will be made until solar arrays are operating and generating energy.

Finally, the RDF advisory group has been informed of these proposed changes, and no member has objected to these changes to the project.

V. EFFECT OF CHANGE UPON XCEL ENERGY REVENUE

There is no effect of change upon Xcel Energy revenue since we are not requesting an adjustment of the 2017 RDF rate rider factor. Further, any increase in the grant amount from the amount stated in the First Amended and Restated Grant Contract for EP4-15 is still within the amount the Commission approved in March 2014 for this project. MRES is merely able to take advantage of panel cost reductions and development efficiencies to add additional capacity to the project.

VI. MISCELLANEOUS INFORMATION

A. Service List

Pursuant to Minn. Rule 7829.0700, Xcel Energy requests that the following persons be placed on the Commission's official service list for this matter:

Mara K. Ascheman Senior Attorney Xcel Energy Services, Inc. 401Nicollet Mall, 8th Floor Minneapolis, MN 55401 (612) 215-4605

Carl Cronin Records Specialist Xcel Energy 401 Nicollet Mall – 7th Floor Minneapolis, MN 55401

E. Summary of Filing

Pursuant to Minnesota Rule 7829.1300, subp. 1, a one-paragraph summary of the filing accompanies this petition.

F. Service on Other Parties

Pursuant to Minn. Stat. § 216B.17, subd. 3, we electronically filed this Petition and supporting materials. We also served a copy on the Minnesota Office of the Attorney General – Residential Utilities Division. A summary of the filing was provided to all persons on the attached service list.

CONCLUSION

Xcel Energy respectfully requests the Commission approve a change in scope for the RDF Contract for MRES' project as described in the First Amended and Restated Grant Contract and a reduction in the grant amount to reflect use of the ARR under the existing CSG program. Approval of this amended and restated contract will allow installation of CSG for low-income subscribers to move forward. Additionally, the Company requests approval of a Contract Amendment to increase the project by up to 700 kW_{DC}, and an increase in the grant amount (still within the total grant amount approved by the Commission for the project in 2014) accordingly.

Dated: September 22, 2017

Northern States Power Company a Minnesota corporation

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange
Dan Lipschultz
Matthew Schuerger
Katie J. Sieben
John Tuma

Chair Commissioner Commissioner Commissioner

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY, A MINNESOTA CORPORATION, REGARDING A CHANGE IN SCOPE OF A RENEWABLE DEVELOPMENT FUND GRANT CONTRACT DOCKET NO. E002/M-12-1278

PETITION

SUMMARY OF FILING

Please take notice that on September 22, 2017, Northern States Power Company, a Minnesota corporation ("Xcel Energy" or "Company"), filed with the Minnesota Public Utilities Commission a petition requesting approval to modify the scope of the Minnesota Renewable Energy Society Renewable Development Fund ("RDF") grant contract (EP4-15) dated February 17, 2015 executed between the Company and Minnesota Renewable Energy Society. The proposed scope change will expand the project installed capacity and change facility ownership.

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment A 1 of 78

FIRST AMENDED AND RESTATED GRANT CONTRACT

GRANT CONTRACT TERMS AND CONDITIONS EP4-15 [PRODUCTION]

THIS GRANT CONTRACT is made this <u>22nd</u> day of <u>September</u>, 2017, by and between Northern States Power Company, a Minnesota corporation ("NSP"), with its principal place of business at 414 Nicollet Mall, Minneapolis, Minnesota 55401 and the Minnesota Renewable Energy Society, Inc. ("Contractor"), a Minnesota non-profit corporation, with its principal place of business at 2928 Fifth Avenue South, Minneapolis, MN 55408. NSP and Contractor are sometimes individually referred to as a "Party" or collectively as the "Parties".

WHEREAS, Contractor intends to design, build, and operate an electric generating facility project, on behalf of a third party project owner, Greenway Solar, LLC, a Minnesota limited liability company ("Greenway"), to be located in the vicinity of Xcel Energy's Minnesota service area, consisting of two generators with a total nameplate capacity of not more than 1.0 megawatts of direct current (" MW_{DC} "), which will be interconnected with NSP's electric system and will produce renewable energy which may be sold to NSP. A description of the Project, which is the subject of this Grant Contract, is provided in this Grant Contract and Exhibits hereto;

WHEREAS, NSP and Contractor intend to fund the Contractor's electric generating Project utilizing Renewable Development Fund ("RDF") grant funds pursuant to Minnesota Statutes Section 116C.779 in accordance with the terms and conditions of this Grant Contract and Exhibits hereto; and

WHEREAS, Contractor may choose to enter into a power purchase agreement with NSP for the sale of the output of such facility or choose to otherwise utilize the output from the generating facility all as more fully described in the applicable Renewable Development Fund Request for Proposals.

WHEREAS, the Contractor has determined that while it intended to be able to lease the Project to a third party for purposes of utilizing federal investment tax credits associated with the operation of the solar photovoltaic installation portion of the Project, the only mechanism available at this time for this Project is to partner with a third-party owner, requiring changes to the grant contract originally effective between the Parties as of February 19, 2015, and amended on December 1, 2015, April 21, 2016, and January 30, 2017 ("Original Grant Contract").

WHEREAS, since the time the Contractor submitted its proposal, the Minnesota Public Utilities Commission has approved the tariff and application requirements for the Xcel Energy Solar*Rewards Community® program ("SRC Program"), setting the rate for community solar gardens, like the Project. Contractor has elected to participate in the SRC Program. To account for the change between the amount included in Contractor's Approved Proposal (Exhibit J) and the bill credit under the SRC Program, while maintaining the same total resource cost for the Project, Contractor and NSP have agreed to a reduction in the RDF grant amount under the Original Grant Contract payable to Contractor to the amount set forth in this Grant Contract.

WHEREAS, the Parties desire to amend and restate the Original Grant Contract to allow the Contractor, as part of the Project, to partner with a third-party owner of the Project for the purpose of being able to utilize tax credits associated with the operation of the Project.

NOW, THEREFORE, in consideration of the premises and mutual obligations set forth herein, the Parties agree as follows:

1. DEFINITIONS

- A. **Contractor** has the meaning set forth in the opening paragraph of this Grant Contract.
- В. *Date*.
 - 1) Grant Contract Start Date shall be the date first listed above, the date on which the Department of Commerce completes its compliance review of the Grant Contract identifying no issues that require action by the Minnesota Public Utilities Commission, or the date the Minnesota Public Utilities Commission approves the Grant Contract, whichever occurs later.
 - 2) Grant Contract End Date is the last date reimbursable expenses can be incurred, and shall be the earliest of 1) completion of the Project; 2) the Scheduled Completion Date indicated on Exhibit C; or 3) the date on which the Grant Contract has been terminated in accordance with this Grant Contract.
- C. **Facility** is the physical generator and all appurtenant equipment and facilities necessary for the production of energy and capacity and delivery of such energy and capacity that is being developed, constructed and placed into service as part of the Project.
- D. **Project** refers to the scope of work arising from the selected proposal as described in Exhibit A. The scope of work to be included in Exhibit A is derived from the scope of work described in the proposal. Exhibit A may be modified only by mutual agreement between authorized representatives of both Parties.

E. Terms Relating to Data

Technical Data or Data as used in this Grant Contract means recorded 1) information regardless of form or characteristic, of a scientific or technical nature. It may, for example, document research; document experimental, developmental, demonstration, or engineering work; or be usable or used to define a design or process; or to procure, produce, support, maintain, or operate material. The Data may be graphic or pictorial delineation in media such as drawings or photographs, test specifications or related performance or design type documents or computer software (including computer computer software databases, and computer software programs. Examples of Technical Data include manufacturing documentation). techniques and methods, machinery, devices such as tools, products, or components, research and engineering, engineering drawings and associated lists, specifications, engineering calculations, standards, process sheets, manuals, technical reports, catalog item identification, and related Technical Data as used herein does not include financial information. reports, cost analyses and other information incidental to Grant Contract administration.

- 2) **Business Information** is information about the operation of a specific business. It includes information concerning the cost and pricing of goods, supply sources, cost analyses, characteristics of customers, books and records of the business, sales information including mailing lists, customer lists, business opportunities, information regarding the effectiveness and performance of personnel, and information incidental to Grant Contract administration.
- 3) **Public Information** is information previously published, generally available from more than one source, or information in the public domain. All air monitoring and emission Data included in a proposal or requested through a Grant Contract are public information.
- 4) **Confidential Information** is Technical Data or Business Information Contractor has satisfactorily identified, which is not otherwise public and which the Parties agree is appropriately treated as confidential.
- 5) **Proprietary Data** is such Data Contractor has identified in a satisfactory manner as being under Contractor's control prior to commencement of performance of this Grant Contract or produced by Contractor or its subcontractors at its own expense, and which Contractor has reasonably demonstrated as being of a proprietary nature either by reason of copyright, patent or trade secret doctrines in full force and effect at the time when performance of this Grant Contract is commenced.
- 6) **Trade Secret** is any formula, plan, pattern, process, tool, mechanism, compound, procedure, source code, software, database, production Data, or compilation of information which is not patented and which is generally known only to certain individuals with a commercial concern who may be using it to fabricate, produce or compound an article of trade or a service having commercial value and which gives its owner or user an opportunity to obtain a business advantage over competitors who do not know or use it.
- 7) **Generated Data** is that Data that Contractor collects, collates records, deduces, reads out or postulates for use in the performance of this Grant Contract. In addition, any electronic Data processing program, model or software system developed or substantially modified by Contractor in the performance of this Grant Contract using RDF funds, together with complete documentation thereof, shall be treated as Generated Data.
- 8) **Deliverable Data** is that Data which, under the terms of this Grant Contract, is required to be delivered to NSP.
- F. **Project Manager** shall be designated by the Contractor as the administrator of the Project, and who will be responsible, on behalf of Contractor, for managing the completion of task deliverables and milestones as set forth in Exhibit C. Project Manager is also the designate to be noticed as provided in Exhibit D.

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- G. **Proposal** shall mean Contractor's proposal as approved by the Commission and attached hereto as Exhibit J.
- H. **Renewable Development Fund Advisory Group** or **Advisory Group** shall mean the current advisory group to the Renewable Development Fund as constituted from time to time.

Certain other terms are defined elsewhere in this Grant Contract.

2. CONTRACT TERM

The term of this Grant Contract shall be from the Contract Start Date to the Contract End Date. This Grant Contract is of no force or effect until it has been signed by both Parties. In the event that the Project has not been completed within three (3) years of the originally scheduled Contract End Date, this Grant Contract shall automatically be terminated, subject to the provisions of Section 16 hereof, and further subject to the rights of NSP hereunder to exercise all rights and remedies hereunder for any Event of Default by Contractor that may have occurred prior thereto at any time as permitted by this Grant Contract. Contractor and NSP acknowledge that this Grant Contract shall be effective as of the Original Grant Contract Start Date but that any obligation to disburse grant funds remains subject to NSP's receipt of all jurisdictional regulatory approvals of this Grant Contract.

3. PAYMENTS TO CONTRACTOR

Subject to the conditions in this Grant Contract and Exhibits hereto, NSP agrees to reimburse Contractor for actual and allowable expenses incurred in accordance with Exhibit C subject to the limitations herein and therein, and the milestone progress or final payment limitations in Exhibit C. The total amount of this Grant Contract shall not exceed the maximum grant amount stated in Exhibit C or Contractor's total actual and allowable costs, whichever is less, and reimbursable expenses shall not have been incurred prior to the Original Grant Contract Start Date.

A. A request for payment shall consist of:

- 1) An invoice that lists actual and allowable expenses incurred up to the milestone payment amounts indicated in Exhibit C; and
- 2) Substantiation of such expenses in a form reasonably acceptable to NSP; and
- 3) Documentation of the deliverables as detailed in Exhibit C satisfactory to NSP.
- 4) Each request for payment shall constitute a representation and warranty by Contractor that: (a) all representations and warranties set forth in this Grant Contract remain true and correct in all material respects, (b) Contractor has complied with all obligations contained in this Agreement through the date of the request for payment and (c) Contractor has fully disclosed to NSP all facts and other information known to Contractor which reasonably may affect Contractor's ability to complete the Project on schedule.

- B. Contractor shall submit all invoices to the NSP Contract Manager.
- C. Payments shall be made to Contractor only for undisputed invoices. An undisputed invoice is an invoice for amounts that appear to the NSP Contract Manager to be consistent with and allowed under this Grant Contract. In the event the invoice contains expenses that the NSP Contract Manager believes have not been incurred, are inconsistent, or inappropriate, the NSP Contractor shall attempt to provide notice of identified issues to the Project Manager within fifteen (15) working days after receipt the invoice. Invoices paid remain subject to audit and verification.
- D. Payment shall be made to Contractor no later than 30 calendar days from the date a correct, undisputed invoice is received by the NSP Contract Manager.
- E. Contractor shall retain all records relating to all expenses reimbursed to Contractor, and to hours of employment on this Grant Contract by all employees of Contractor for which NSP is billed. Such records shall be maintained for a period of three (3) years after final payment of this Grant Contract, or until audited by the State, whichever occurs first, and shall be available for inspection or audit at any reasonable time by NSP or its designee.

4. PROJECT SCHEDULE AND BUDGET REVISIONS

- A. Contractor shall meet the critical path schedule set forth on Exhibit B and meet the Project budget set forth on Exhibit C. Contractor shall provide reasonable advance notification to NSP of any anticipated schedule deviations or budget reallocations. Contractor may reallocate an element, or task in the budget of up to fifteen (15) percent of the total budget without prior written notice to NSP. Reallocations of more than fifteen (15) percent of the total budget require prior written approval of NSP.
- B. Contractor shall provide sixty (60) days advance written notification to NSP for any request to make a reallocation as contemplated by Section 4.A of more than fifteen (15) percent. Along with any such request, Contractor shall submit any supporting documentation as NSP may request.
- C. Contractor must report (i) changes in the scope, timing, use of equipment, use of suppliers, vendors, budgets, Project Managers and Project key assistants, location, Milestones or changes or potential changes that could affect the Milestones of the Project, and similar changes, events or conditions that could affect the Project and (ii) the occurrence of any event which could, with the giving of notice or the passage of time or both, constitute an Event of Default by Contractor under this Agreement, as soon as possible, but in no event later than five (5) business days after their occurrence or the knowledge of their potential occurrence. Such information shall be provided on the Notice of Change or Potential Change Form in Exhibit I to this Grant Contract. The NSP Contract Manager shall review such Change forms. Administrative changes may be allowed by the NSP Contract Manager and the NSP Contract Manager and shall be memorialized in a written amendment to this Grant

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Contract. Material changes must be approved by NSP in the form of a written amendment to this Grant Contract, which the Parties acknowledge may be subject to approval of the Minnesota Public Utilities Commission ("Commission") as deemed appropriate by NSP, in NSP's sole discretion. A change is material if it results in changes in deliverables, moves due dates beyond the term of the Contract or modifies the scope of work reasonably beyond that approved by the Commission (any of such changes being a "Change"), and may require regulatory approval. If NSP determines appropriate, it may approve, modify, reject or refer the Change to the Advisory Group and/or the Commission for consideration. NSP anticipates providing to the Commission any Changes that are deemed to represent significant Project scope changes. All information relating to any Change may be provided to the Commission or otherwise publicly disclosed.

5. CONTRACT MANAGEMENT

A. Project Manager

The Project Manager on behalf of Contractor is designated in Exhibit D. Such Project Manager may not be replaced without NSP's prior written approval, such approval not to be unreasonably withheld. The Project Manager is responsible for the day-to-day Project status, decisions and communications with the NSP Contract Manager.

B. NSP Contract Manager

The NSP Contract Manager is designated in Exhibit D. The NSP Contract Manager is responsible for the day-to-day contract status, decisions and communications with the Project Manager. The NSP Contract Manager will review all deliverables, reports and invoices as provided for in Section 8, and notify Project Manager of any reporting deficiencies.

6. ANNUAL EVALUATION

NSP may annually evaluate all reporting, as required in Section 8, as well as any other information collected in accordance with this Grant Contract, to determine whether the Contractor is in compliance with the Standards of Performance as stated in Section 7. Contractor shall fully cooperate with NSP in any such evaluations. Any such annual evaluation may be presented to the Advisory Group and/or the Commission.

7. STANDARD OF PERFORMANCE

A. Standard of Performance shall mean Contractor, its subcontractors and their employees and agents in the performance of Contractor's work shall exercise the degree of skill and care required by customarily accepted good professional practices and procedures used in designing and building energy production facilities and (i) shall comply with all applicable federal, state and local laws, regulations and Project permit conditions, (ii) shall not infringe upon any intellectual property rights of any third parties and (iii) shall meet or exceed all performance standards and matrices set forth in the Proposal.

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B. In the event that Contractor or its subcontractor(s) fail to perform in accordance with the Standard of Performance as defined in Section 7.A above, and in the event that the NSP Contract Manager becomes aware of any such failure, the NSP Contract Manager may notify the Project Manager who shall identify and propose an appropriate remedy for the failure. No failure of the NSP Project Manager to notify the Project Manager of any such failure shall relieve Contractor from any of its duties or obligations under this Grant Contract. In the event NSP determines the proposed remedy is not satisfactory, the NSP Contract Manager and the Project Manager shall seek to negotiate an appropriate resolution given the circumstances. If NSP determines such a resolution cannot be reached, it may refer the matter to the Advisory Group, who may choose to recommend an appropriate resolution. NSP shall retain all its rights under this contract should no mutual resolution be reached.

C. Nothing contained in this section is intended to limit any of the rights or remedies, which NSP may have under law or under other sections of this Grant Contract.

8. REPORTING

B.

- A. Once a month, beginning after the Contract Start Date, Project Manager shall prepare and provide to the NSP Contract Manager a progress report in form and detail acceptable to NSP that documents evidence of progress and deliverables as detailed in Exhibit C. Summary reports are to include a general overview of how the Project is progressing; summary of the work activity for the past period; identification of active milestone(s) and estimate percent or Project work completed; specific/unforeseen problems encountered that need to be overcome that may be expected to affect the milestones, timeline of deliverables, or costs and Contractor's efforts to comply with the Project critical path schedule; and significant Project accomplishments. All such reports will be posted by Xcel Energy on a public website approved by the Commission.
 - At the conclusion of the Contractor's work, Contractor shall prepare a comprehensive written Final Report in form and detail acceptable to NSP, including an executive summary. The Final Report is to include a summary of what the project was intended to do and what was discovered or accomplished, the usefulness and benefits of the project's discovery or accomplishments, and a summary of lessons learned or project outcomes. Such Final Report must contain sufficient detail for technical readers and a clearly written summary for non-technical readers. The non-technical summary should be one-and-a-half to two pages in length including an executive summary of the project, the methodology used for the project, ratepayer benefits from the project and any lessons learned. The Final Report must include an evaluation of the Project's financial, environmental, and other benefits to the State of Minnesota and to NSP's ratepayers.

The NSP Contract Manager will review and approve the Final Report, or in the event the Final Report is not satisfactory to NSP, shall identify deficiencies, which Contractor shall resolve within 30 days. Contractor shall also meet with the Advisory Group to present the findings, conclusions, and recommendations. The Contractor shall present the Final Report to the Advisory Group on or before the

Contract End Date. All Final Reports will be posted by Xcel Energy on a public website approved by the Commission.

C. All reports, including reprints, shall include the following legend:

LEGAL NOTICE

THIS REPORT WAS PREPARED AS A RESULT OF WORK SPONSORED BY THE RENEWABLE DEVELOPMENT FUND AS MANAGED BY XCEL ENERGY. IT DOES NOT NECESSARILY REPRESENT THE VIEWS OF XCEL ENERGY, ITS EMPLOYEES, OR THE RENEWABLE DEVELOPMENT FUND ADVISORY GROUP. XCEL ENERGY, ITS EMPLOYEES, CONTRACTORS, AND SUBCONTRACTORS MAKE NO WARRANTY, EXPRESS OR IMPLIED, AND ASSUME NO LEGAL LIABILITY FOR THE INFORMATION IN THIS REPORT; NOR DOES RENEWABLE XCEL ENERGY, ITS EMPLOYEES OR THE DEVELOPMENT FUND ADVISORY GROUP REPRESENT THAT THE USE OF THIS INFORMATION WILL NOT INFRINGE UPON THIS REPORT HAS NOT BEEN PRIVATELY OWNED RIGHTS. APPROVED OR DISAPPROVED BY NSP NOR HAS NSP PASSED UPON THE ACCURACY OR ADEQUACY OF THE INFORMATION IN THIS **REPORT.**

D. Contractor shall provide annual, public electric generation reports to document RDF benefits for the ten (10) years subsequent to Project completion. Reports are to include power generated, net sales, and economic indicators and shall be provided to the RDF Advisory Group. NSP may require adequate assurance or withhold final payment of funds until this reporting covenant has been completed.

9. RECORDKEEPING, COST ACCOUNTING AND AUDITING

A. Cost Accounting

Contractor agrees to keep separate, complete, and correct accounting of the costs involved in developing, installing, constructing, and testing of the Facility, the work on the Project or rights under this Grant Contract.

B. Accounting Procedures

The Contractor's costs shall be determined on the basis of the Contractor's accounting system procedures and practices employed as of the effective date of this Grant Contract. The Contractor's cost accounting practices used in accumulating and reporting costs during the performance of this Grant Contract shall be consistent with the practices used in estimating costs for any proposal to which this Grant Contract relates; provided that such practices are consistent with the other terms of this Grant Contract and provided, further, that such costs may be accumulated and reported in greater detail during performance of this Grant Contract. The Contractor's accounting system shall distinguish between direct costs and indirect costs. All costs incurred for the same purpose, in like circumstances, are

either direct costs only or indirect costs only with respect to costs incurred under this Grant Contract.

- C. Allowability of Costs
 - 1) Allowable Costs

The costs for which the Contractor shall be reimbursed under this Grant Contract include all direct costs incurred in the performance of the work that is identified in Exhibit C, subject to the limitations and cap of the Grant Amount in this Grant Contract and Exhibit C. Costs must be incurred within the term of the Contract.

2) Unallowable Costs

Contingency costs, imputed costs, fines and penalties, losses on contracts, liabilities from failure to comply with applicable laws, rules and regulations, costs, settlements and judgments under any litigation or arbitration, expenses not incurred, and excess profit taxes are unallowable, as well as costs determined inappropriate or inconsistent with Exhibit C, by the NSP Contract Manager.

D. Audit Rights

Contractor shall maintain books, records, documents, and other evidence, based on the procedures set forth above, sufficient to reflect properly all costs claimed to have been incurred in performing this Grant Contract. NSP, or at NSP's option, a public accounting firm designated by NSP, may audit such accounting records at all reasonable times with prior notice by NSP. Contractor agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Contractor agrees to include a similar right of NSP to audit records and interview staff in any subcontract related to performance of this Grant Contract.

10. CONFIDENTIALITY

- A. NSP agrees to work with Contractor to make reasonable efforts to keep confidential the items listed in Exhibit E. Designation of trade secrets and justification for trade secret information before the Commission and other agencies shall be the responsibility of the Contractor.
- B. Public and Confidential Deliverables

Deliverables including, but not limited to, progress reports, task deliverables and the Final Report shall not contain confidential information except when the NSP Contract Manager and the Contractor deem it necessary to include confidential information in a deliverable. In such event, the Contractor shall prepare the deliverable in two separate volumes, one for public distribution and one to be maintained in NSP's confidential records. Only those items specifically listed in

Exhibit E or in a subsequent determination of confidentiality qualify as confidential deliverables.

C. Identifying and Submitting Confidential Information

All confidential information submitted by the Contractor shall be marked "Confidential" on each document containing the confidential information.

D. Future Confidential Information

During the term of this Grant Contract, Contractor may develop additional Data or information that the Contractor considers to be nonpublic confidential information not listed on Exhibit E. Contractor must list all items and information along with justification for confidentiality and submit a proposed revision of Exhibit E to the NSP Contract Manager. Exhibit E may be amended by mutual agreement, however any amendment to Exhibit E shall not affect NSP's rights under section 12 as to the additional Data and information by amending Exhibit E. In the event there is a disagreement over the items to be delivered under the Contract, the Parties shall use the "Disputes" clause found at section 14.A. Such subsequent determinations will be added to Exhibit E.

E. General Right to Use Information

Except for Confidential Information identified on, or added by amendment to, Exhibit E, NSP shall have the right to use all information and data delivered by Contractor or derived from the Project or this Grant Contract: (i) in the course of providing goods or services to customers of NSP whether or not affected by the Project, and (ii) for purposes of research, development, marketing and producing energy and energy systems and processes. Contractor hereby also consents to release of its customer information with regard to the foregoing.

11. REPRESENTATIONS OF CONTRACTOR

Contractor represents, warrants and covenants that, except as set forth on Schedule 11 hereto:

- A. It is duly authorized to conduct business in all jurisdictions necessary to perform this Grant Contract, and it has the power and authority to enter into and perform this Grant Contract; and
- B. The execution and performance of this Grant Contract and the construction and operation of the Facility and implementation of the Project hereunder will not conflict with or constitute a breach of or a default under any contract, license or other agreement applicable to Contractor or its property; and
- C. The execution and performance of this Grant Contract and the construction and operation of the Facility and the implementation of the Project hereunder will not require any consent, license, permit or approval that has not been obtained from the appropriate governmental authority; and

- D. It has taken all actions necessary and advisable to authorize this Grant Contract and the construction and operation of the Project hereunder, and this Grant Contract is the legal, valid and binding obligation of Contractor, fully enforceable in accordance with its terms; and
- E. It has all interim financing and co-funding resources available for the Project as required to complete the Project to be funded under this Grant Contract; and
- F. It has entered into all contracts, in a form satisfactory to NSP, necessary for the services, supplies, materials, equipment and other products necessary for performance of the Project with qualified suppliers and will promptly pay and discharge all such obligations upon receipt of conforming goods and services provided for the Project; and all such orders and contracts may be assigned to NSP if NSP exercises its right, in its sole discretion, under this Grant Contract to complete the performance of the Grant Contract, and contractor hereby authorizes any monies paid by NSP on such order or contracts to be offset and deducted from the Grant Amount of this Grant Contract; and
- G. It has all the necessary permits, orders, authorization or any other necessary permission in place for the performance of this Grant Contract, including, but not limited to, emissions permits, transportation permits, conditional use permits and waste permits; and
- H. It will provide true and correct copies of all contracts and agreements related to the performance of this Grant Contract to NSP upon execution; and
- I. It will not terminate any contract with any Minnesota-based institution, supplier or service provider involved in the performance of this Project without consultation with NSP; and
- J. It and/or its contractors will maintain the liability insurance coverage required by Exhibit F hereof and any other insurance required for the Project and name Xcel Energy, NSP and the Advisory Group as additional insureds. Contractor agrees to promptly notify NSP of any notice of cancellation received from Contractor's current insurer and who the replacements insurer will be without allowing any gap in such insurance.

12. RIGHTS OF PARTIES REGARDING INTELLECTUAL PROPERTY

A. NSP's Rights in Deliverables

Subject to Section 12.B of this Grant contract, Deliverables, reports and Deliverable Data specified for delivery to NSP under this Grant Contract shall become the property of NSP. NSP may use, publish, and reproduce the deliverables and reports subject to the provisions of subparagraph C in accordance with the goals and policies of NSP and jurisdictional regulatory authorities for public information and renewable energy development educational purposes.

B. Rights in Technical Data, Generated Data, and Deliverable Data

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1) Contractor's Rights

All Data, including Technical Data, Generated Data and Deliverable Data, produced under this Grant Contract shall be the property of the Contractor, limited by the license retained by the NSP in paragraph 12.B.2 below, and the rights NSP has in deliverables specified above in section 12.A.

2) NSP's Rights

For Technical Data, Generated Data and Deliverable Data produced under this Grant Contract, NSP retains a no-cost, non-exclusive, non-transferable, irrevocable, royalty-free, worldwide, perpetual license to use, publish, translate, produce and to authorize others to produce, translate, publish and use all such Data, subject to the provisions of subparagraph C.

C. Limitations on NSP Disclosure of Contractor's Confidential Records

1) Data provided to NSP by Contractor, which Data the Parties have agreed to keep confidential and which Contractor seeks to have designated as confidential, or is the subject of a pending application for confidential designation, shall not be disclosed by NSP, unless disclosure is required such as by order of a court of competent jurisdiction or determination by regulatory agency.

2) NSP agrees not to disclose Confidential Data or the contents of reports containing information considered by Contractor as confidential, without first providing a copy of the disclosure document for review and comment by Contractor. Contractor may make an application for confidential designation on some or all of the Data, and shall be responsible for all costs and expenses thereof.

D. Exclusive Remedy

In the event NSP intends to publish or has disclosed Data the Contractor considers confidential, the Contractor's sole and exclusive remedy shall be a civil court action for injunctive relief, which shall be filed in Hennepin County, Minnesota. This provision shall not prevent Contractor from attempting to prevent disclosure by any government agencies under the Minnesota Government Data Practices Act provisions of Minnesota Statutes, Chapter 13 or otherwise.

- E. Limitations on Contractor Disclosure of Contract Data, Information, Reports and Records
 - 1) Contractor will not disclose the contents of the final or any preliminary deliverable or report without first providing a copy of the disclosure document for review and comment to the NSP Contract Manager. The Contractor shall incorporate the comments of the NSP Contract Manager, unless, based upon professional judgment, Contractor and NSP agree otherwise.

- 2) Notwithstanding the foregoing, in the event any public statement is made by NSP as to the role of Contractor or the content of any preliminary or Final Report of Contractor hereunder, Contractor may, if it believes such statement to be incorrect, state publicly what it believes is correct.
- 3) No record that is provided by NSP to Contractor for Contractor's use in executing this Grant Contract and which has been designated as confidential shall be disclosed, unless a court of competent jurisdiction orders disclosure, and Contractor has timely provided NSP with a copy thereof. At the election of the NSP Contract Manager, the Contractor, its employees and any subcontractor shall execute a "Confidentiality Agreement," supplied by the NSP Contract Manager.
- 4) Contractor acknowledges that each of its officers, employees, and subcontractors who are involved in the performance of this Grant Contract will be informed about the restrictions contained herein and will be required to abide by the above terms; and that Contractor will be responsible for any violations by any such individuals.
- F. Copyrights
 - 1) Any copyrightable material first produced under this Grant Contract shall be owned by the Contractor, limited by the license granted to NSP in 2) below.
 - 2) Contractor agrees to grant NSP a royalty-free, no-cost nonexclusive, irrevocable, nontransferable worldwide, perpetual license to produce, translate, publish and use and to authorize others to produce, translate, publish and use all copyrightable material first produced or composed in the performance of this Grant Contract.
 - 3) Contractor will apply copyright notices to all deliverables using the following form or such other form as may be reasonably specified by NSP.

"©[Year of first publication of deliverable], [the Copyright Holder's name]. ALL RIGHTS Reserved."

G. Intellectual Property Indemnity

Contractor warrants that Contractor will not, in the course of its work under this Grant Contract or otherwise, infringe or misappropriate any intellectual property right of a third party, and further warrants and agrees that it will conduct a reasonable investigation of the intellectual property rights of third parties to avoid such infringement. Contractor will defend and indemnify NSP from and against any claim, lawsuit or other proceeding, loss, cost, liability or expense (including court costs and reasonable fees of attorneys and other professionals) to the extent arising out of: (i) any third party claim that a deliverable infringes any patent, copyright, trade secret or other intellectual property right of any third party, or (ii) any third party claim arising out of the negligent or other tortious act(s) or omission(s) by the

Contractor, its employees, subcontractors or agents, in connection with or related to the deliverables or the Contractor's performance thereof under this Grant Contract.

H. Green Tags or Environmental Renewable Energy Credits

Excluding any federal or state tax credits to which Contractor is entitled, such as that granted under Minnesota Statutes, section 216C.41 for the Facility, Contractor hereby grants, assigns, and transfers to NSP any and all rights to and ownership of attributes of an environmental or other nature that are created or otherwise arise from the Facility's generation of energy using renewable fuel (in contrast to the generation of electricity using nuclear or fossil fuels or resources), including, but not limited to all Renewable Energy Credits. For the purposes of this Grant Contract, "Renewable Energy Credits" shall mean all attributes of an environmental or other nature that are created or otherwise arise from the Facility's generation of electrical energy using any renewable fuel in contrast to the generation of electricity using nuclear or fossil fuels or resources, including without limitation, tags, certificates or similar products or rights associated with renewable fuels as a "green" or "renewable" electric generation resource, including any and all environmental air quality credits, emissions reductions, off-sets, allowances or other benefits related to the generation of energy by the Facility that reduces, displaces or offsets emissions from fuel combustion at another location pursuant to any existing or future international, federal, state or local legislation or regulation or voluntary agreement, and the aggregate amount of credits, offsets or other benefits including any rights, attributes or credits arising from or eligible for consideration in the Midwest Renewable Energy Tracking System ("M-RETS") or any similar program pursuant to any international, federal, state or local legislation or regulation or voluntary agreement and any renewable energy certificates issued pursuant to any program, information system or tracking system associated with the renewable electrical energy generated from the Facility.

The provisions of this Section 12.H of this Grant Contract shall: (i) be applicable to all energy produced by the Facility for the life of the Facility, (ii) survive the termination or expiration of this Grant Contract, as provided therein, and (iii) survive the termination or expiration of any agreement between Contractor and NSP or its affiliates for the purchase of the capacity and/or energy produced by the Facility, if any. To the extent Contractor transfers ownership of or other rights in the Facility to a third party, Contractor shall (i) promptly notify NSP of such transfer and (ii) ensure that the provisions of this Section 12.H of this Grant Contract shall be applicable to and enforceable against such third party or any subsequent owner of the Facility. Transfer of ownership of or other rights in the Facility by Contractor shall not relieve Contractor of its obligations under this Section 12.H of this Grant Contract.

The Parties acknowledge and agree that attributes of an environmental or other nature that are created or otherwise arise from the Facility's generation of energy using renewable fuel are unique to the Facility and cannot be replaced by the purchase of replacement Renewable Energy Credits; and NSP shall have the rights to specific performance provided in Section 15.7 hereof.

13. NOTICES TO PARTIES

Notice to either party may be given by certified mail properly addressed, postage fully prepaid, or by overnight carrier providing record of receipt, to the address designated in Exhibit D for each respective party or to such other address as either party shall notify the other in accordance with this section.

14. DISPUTES

A. Dispute Resolution

If NSP and the Contractor cannot resolve a dispute or grievance, Project Manager and NSP Contract Manager shall each prepare a written statement of the issues in dispute, the legal authority or other basis for their respective positions and the remedy sought. The packages must be submitted to the Renewable Development Fund Advisory Group. The Advisory Group shall make a determination within ten working days after receipt of the package. Should Contractor disagree with the Advisory Group's decision, Contractor may appeal to the Commission. Contractor shall continue to perform its responsibilities under this Grant Contract during any dispute.

B. Legal Remedy

The interpretation and performance of this Grant Contract and each of its provisions shall be governed and construed in accordance with the laws of the State of Minnesota. The Parties hereby submit to the exclusive jurisdiction and enforcement authority of the Commission or, in the event the Commission declines jurisdiction, or in the event that NSP is exercising its rights under Sections 12.D or 15.5 hereof, to the exclusive jurisdiction of the courts of the State of Minnesota, and venue is hereby stipulated as Minneapolis, Minnesota.

15. DEFAULT AND TERMINATION

- 15.1 Events of Default of Contractor.
 - (A) Any of the following shall automatically constitute an Event of Default of Contractor upon its occurrence and no notice or cure period shall be applicable:
 - 1) Contractor's dissolution or liquidation;
 - 2) Contractor's assignment of this Grant Contract or any of its rights hereunder;
 - 3) Contractor's sale or other transfer of the Project or any part thereof or interest therein during the Term of this Grant Contract;
 - 4) Contractor's filing of a petition in bankruptcy or insolvency or for reorganization or arrangement under the bankruptcy laws of the

United States or under any insolvency act of any state, or Contractor voluntarily taking advantage of any such law or act by answer or otherwise;

- 5) Contractor's actual or apparent fraud with any funding under this Grant Contract, waste, tampering with any NSP-owned facilities or material, intentional misrepresentation or willful misconduct in connection with this Grant Contract and/or the work on the Project; or
- 6) Contractor's abandonment of the Project;
- (B) Any of the following shall constitute an Event of Default of Contractor upon its occurrence but shall be subject to cure within ninety (90) days after the date of written notice from NSP to Contractor:
 - 1) Contractor's failure to meet the Critical Path Schedule;
 - 2) Contractor's failure to maintain in effect any agreements required to deliver the final product; or
 - 3) Contractor's failure to comply with the Standard of Performance under Section 7 or with any other material obligation under this Grant Contract.
 - 4) Contractor's failure to make any payment required under this Grant Contract;
 - 5) Any direct or indirect change of control of Contractor by sale of majority equity interest, transfer of majority voting rights, merger, consolidation, additional issuance of equity or otherwise);
 - 6) Any representation or warranty made by Contractor in this Grant Contract shall prove to have been false or misleading in any material respect when made or ceases to remain true during the Term if such cessation would reasonably be expected to result in a material adverse impact on the Project or NSP; or
 - 7) The filing of a case in bankruptcy or any proceeding under any other insolvency law against the parent or any other affiliate of Contractor that could materially impact Contractor's ability to perform its obligations hereunder; provided, however, that Contractor does not obtain a stay or dismissal of the filing within the cure period.

15.2 Events of Default of NSP.

(A) Any of the following shall automatically constitute an Event of Default of NSP upon its occurrence and no notice or cure period shall be applicable:

- 1) NSP's dissolution or liquidation provided that division of NSP into multiple entities or any other corporate reorganization or business restructuring shall not constitute dissolution or liquidation; or
- 2) NSP's filing of a petition in bankruptcy or insolvency or for reorganization or arrangement under the bankruptcy laws of the United States or under any insolvency act of any State, or NSP voluntarily taking advantage of any such law or act by answer or otherwise.
- (B) NSP's failure to comply with any other material obligation under this Grant Contract, which would result in a material adverse impact on Contractor, shall constitute an Event of Default of NSP upon its occurrence but shall be subject to cure within ninety (90) days after the date of written notice from Contractor to NSP; or
- (C) NSP's failure to make any undisputed payment shall constitute an Event of Default of NSP upon its occurrence but shall be subject to cure within sixty (60) Days after the date of written notice from Contractor to NSP.
- 15.3 <u>Termination</u>. Upon the occurrence of an Event of Default, which has not been cured within the applicable cure period, if any, the non-defaulting Party shall have the right to immediately terminate this Grant Contract without further notice. Neither Party shall have the right to terminate this Grant Contract except as provided for upon the occurrence of an Event of Default as described above or as otherwise may be explicitly provided for in this Grant Contract. In addition, the Parties may mutually agree in writing to terminate this Grant Contract.
- 15.4 <u>Termination by NSP Due to Event of Default of Contractor</u>. In the event NSP terminates this Grant Contract due to an Event of Default by Contractor, Contractor shall pay to NSP all monies disbursed under this Grant Contract by NSP to Contractor as of the termination of this Grant Contract due to an Event of Default by Contractor. Such payment shall be made by cashier's check or wire transfer no later than ninety (90) days following such termination of this Grant Contract.
- 15.5 <u>Effect of Termination</u>. The Parties acknowledge and agree that NSP and Contractor have entered into this Grant Contract to implement the order of the Commission approving the RDF grant to Contractor for its work on the Project. The Parties further acknowledge and agree that this Grant Contract, by implementing such order, provides the terms and conditions for Contractor's conduct and obligations so that it may receive such grant and the terms and conditions for NSP's administration of the grant. To that end, in the event that this Grant Contract is terminated pursuant to its terms, Contractor agrees that such termination shall also terminate any and all of Contractor's rights to the RDF grant award that may exist separate and apart of this Grant Contract by virtue of the Commission order approving the Project and Contractor hereby explicitly waives and any all of its rights to seek to implement any and all of such rights that may exist through such Commission order

and outside of this Grant Contract. Furthermore, termination of this Grant Contract pursuant to its terms shall act as a withdrawal of Contractor's grant request.

- 15.6 <u>Construction by NSP Following Event of Default of Contractor</u>.
 - (A) Prior to any termination of this Grant Contract due to an Event of Default of Contractor, NSP or its designated representative shall have the right, but not the obligation, to possess, assume control of, and operate the Project facility as agent for Contractor (in accordance with Contractor's rights, obligations, and interest under this Agreement) during the period provided for herein. Contractor shall not grant any person, other than the facility lender, a right to possess, assume control of, and operate the facility that is equal to or superior to NSP's right under this Section.
 - (B) NSP shall give Contractor thirty (30) days notice in advance of the contemplated exercise of NSP's rights under this Section. Upon such notice, Contractor shall collect and have available at a convenient, central location at the Project facility all documents, contracts, books, manuals, reports, and records required to construct, operate, and maintain the facility in accordance with industry engineering practices and procedures. Upon such notice, NSP, its employees, contractors, or designated third parties shall have the unrestricted right to enter the Project site and the facility for the purpose of constructing and/or operating the facility. Contractor hereby irrevocably appoints NSP as Contractor's attorney-in-fact for the exclusive purpose of executing such documents and taking such other actions as NSP may reasonably deem necessary or appropriate to exercise NSP's step-in rights under this Section.
 - (C) NSP shall be entitled to immediately draw upon any remaining RDF Grant Funds awarded for the Project to cover any expenses incurred by NSP in exercising its rights under this Section.
 - (D) During any period that NSP is in possession of and constructing and/or operating the Project facility pursuant to the foregoing paragraphs, NSP shall use commercially reasonable efforts to perform and comply with all of the obligations of Contractor under this Grant Contract and shall use the proceeds from the sale of electricity generated by the facility to first, reimburse NSP for any and all expenses reasonably incurred by NSP (including a return on capital at NSP's authorized return on equity most recently determined by the Minnesota Public Utilities Commission) in taking possession of and completing the Project facility, and to second, remit any remaining proceeds to Contractor.
 - (E) During any period that NSP is in possession of and operating the Project facility, Contractor shall retain legal title to and ownership of the Project facility and NSP shall assume possession and control solely as agent for Contractor:

1) In the event that NSP is in possession and control of the Project facility for an interim period, Contractor may resume operation and NSP shall relinquish its right to operate when Contractor demonstrates to NSP's reasonable satisfaction that it will remove those grounds that originally gave rise to NSP's right to operate the facility, as provided above, in that Contractor (i) will resume construction of the facility in accordance with the provisions of this Grant Contract, and (ii) has cured any Events of Default of Contractor which allowed NSP to exercise its rights under this Section.

2)

- In the event that NSP is in possession and control of the Project facility for an interim period, the facility lender, or any nominee or transferee thereof, may foreclose and take possession of and operate the facility and NSP shall relinquish its right to operate when the facility lender or any nominee or transferee thereof, requests such relinquishment and allows for a reasonable period of time to transition possession and operations.
- (F) NSP's exercise of its rights hereunder to possess and construct the Project facility shall not be deemed an assumption by NSP of any liability attributable to Contractor. If at any time after exercising its rights to take possession of and operate the facility, NSP elects to return such possession and operation to Contractor, NSP shall provide Contractor with at least fifteen (15) days advance notice of the date NSP intends to return such possession and operation, and upon receipt of such notice, Contractor shall take all measures necessary to resume possession, construction and operation of the Project facility on such date.
- (G) In the event NSP assumes construction of the facility under this Section, NSP shall construct the facility in conformance with standard utility practices.
- 15.7 <u>Specific Performance</u>. In addition to the other remedies specified in this Grant Contract, in the event that any Event of Default of Contractor is not cured within the applicable cure period set forth herein, NSP may elect to treat this Grant Contract as being in full force and effect and NSP shall have the right to specific performance. If the breach by Contractor arises from a failure by third party constructing the facility pursuant to a construction agreement entered into with Contractor, and Contractor fails or refuses to enforce its rights under the construction agreement which would result in the cure, or partial cure, of the Event of Default, NSP's right to specific performance shall include the right to obtain an order compelling Contractor to enforce its rights under the construction agreement. Likewise, for any breach of this Grant Contract by NSP, Contractor shall have the right to specific performance

16. GENERAL TERMS & CONDITIONS

A. The following contract provisions, rights and obligations shall survive the completion or termination date of this Grant Contract:

"Standard of Performance	Section 7
"Recordkeeping, Cost Accounting and Auditing"	Section 9
• "Confidentiality"	Section 10
"Rights of Parties Regarding Intellectual Property"	Section 12
• "Disputes"	Section 14
• "Default and Termination"	Section 15
"General Terms and Conditions"	Section 16

- B. Headings have been inserted for the purpose of convenience and ready reference. They do not purport, and shall not be deemed, to define, limit, or extend the scope or intent of this Grant Contract.
- C. Contractor shall make representatives available to testify in the event the Commission or State Legislature hold hearings or conduct an investigation with regard to this Grant Contract.
- D. Contractor shall provide the NSP Contract Manager reasonable access to Contractor's premises and all Project records.
- E. No amendment, alteration or variation of the terms of this Grant Contract shall be valid unless made in writing and signed by the Parties' hereto, and no oral understanding or agreement not incorporated herein, shall be binding on any of the Parties hereto. Other than as specified herein, no document or communication passing between the Parties hereto shall be deemed as part of this Grant Contract.
- F. Contractor shall not assign this Grant Contract, either in whole or in part, without the prior written consent of NSP, such consent may be withheld by NSP for any reason. Consent includes a formal written contract amendment approved by the Commission.
- G. Minnesota law shall govern interpretation of this Grant Contract.
- H. Time is of the essence in this Grant Contract.

J.

- I. Contractor shall indemnify, defend and save harmless NSP, its affiliates, officers, agents and employees and members of the Renewable Development Fund Advisory Group from any and all claims and losses arising out of: (i) Contractor's performance under this Grant Contract regardless of whether such performance is an Event of Default or not and (ii) Contractor's negligence of willful misconduct.
 - Contractor, its agents and employees shall act in an independent capacity and not as officers or employees or agents of NSP or the Advisory Group.

- K. No waiver of any breach of this Grant Contract shall be held to be a waiver of any other or subsequent breach. All remedies afforded in this Grant Contract shall be taken and construed as cumulative, that is, in addition to every other remedy provided therein or by law, except to the extent limited or excluded by the express terms of this Grant Contract. The failure of NSP to enforce at any time any of the provisions of this Grant Contract, or to require at any time performance by Contractor of any of the provisions therefore, shall in no way be construed to be a waiver of such provisions, nor in any way affect the validity of this Grant Contract or any part thereof or the right of NSP to thereafter enforce each and every such provision.
- L. If any provision of this Grant Contract is held invalid, that invalidity shall not affect other provisions of the Contract. In the event that any provision of this Grant Contract is unenforceable or held to be unenforceable, the Parties agree that all other provisions of this Grant Contract have force and effect and shall not be effected thereby.
- M. All Exhibits and Addendums are incorporated into this Grant Contract by this reference and made a part hereof. Contractor represents and warrants that all material statements of fact made in its Grant Application and due diligence responses are true and correct statements as of the Contract Start Date and that such statements do not omit any material facts necessary to make Contractor's Grant Application materially misleading. This Grant Contract contains the entire agreement between the Parties with respect to the subject matter hereof, and supersedes all prior negotiations between the Parties. In the event of any inconsistency between any of the terms and conditions of this Grant Contract and the terms and conditions of any or all Exhibits, the terms and conditions of this Grant Contract shall control. In the event of any inconsistency between the terms and conditions of any or all of Exhibits A, B and C and the terms and conditions of . the Proposal, the terms and conditions of Exhibits A, B and C shall control
- N. Contractor acknowledges and agrees that nothing under this Grant Contract or the Commission order approving the RDF grant to Contractor for the purposes of the Project obligates NSP or its affiliates to enter into any agreement for the purchase by NSP or its affiliates of the energy and/or capacity generated by the Facility or Project.
- O. Contractor acknowledges that NSP manages the RDF and power purchases through different functions of the company or through its affiliates. To that end, Contractor agrees that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement for the purchase of the energy and/or capacity of the Facility or Project ("PPA") or other conduct by NSP related to such PPA shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor additionally agrees that any breach, dispute, or other issue related to this Grant Contract shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and Contractor additionally agrees that any breach, dispute, or other issue related to this Grant Contract shall not be considered a breach by NSP of its obligation of good faith of the state of the s

faith and fair dealing or any other statutory or common law requirement under the PPA and Contractor agrees to waive any and all claims at equity or law related thereto.

P. IN NO EVENT WILL NSP BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND BASED ON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY, INCLUDING, BUT ARE NOT LIMITED TO, LOSS OF PROFIT; LOSS OF SAVINGS OR REVENUE; LOSS OF GOODWILL; LOSS OF USE OF THE PROJECT OR ANY ASSOCIATED PROJECT EQUIPMENT; COST OF CAPITAL; COST OF ANY SUBSTITUTE PROJECT EQUIPMENT, FACILITIES, OR SERVICES; DOWNTIME; THE CLAIMS OF ANY THIRD PARTIES INCLUDING CUSTOMERS; AND INJURY TO PROPERTY REGARDLESS OF THE NUMBER OF CLAIMS OR THE THEORIES OF RELIEF.

In Witness Whereof, the Parties have agreed to this Grant Contract.

Northern States Power Company, a Minnesota corporation By:

Its: **RVP** Rates & Regulatory Affairs

9/22/2017 Date:

Minnesota Renewable Energy Society, Inc., a Minnesota nonprofit corporation,

Bv

MARK WEBER

Its: Board Chairman

7/2017 Date:

EXHIBIT AND SCHEDULE LIST

Exhibit A Work Statement

The work statement in this Exhibit provides the objective of the grant application, the value of performing the Project, anticipated results and the tasks required to complete the Project.

Exhibit B: Critical Path Schedule

Exhibit B includes the critical path schedule for the Project.

Exhibit C: Budget, Project Payment Milestones and Deliverables

This Exhibit includes the approved budget for the Project, the Project payment Milestones and deliverables. The Project payment schedule and limits are intended to reflect anticipated value added by Contractor as a result of the progress on the Project, rather than expenses incurred to the date of a grant partial payment request.

Exhibit D: Project Manager and Contract Manager - Contractor and NSP

This Exhibit includes the names of the Project Manager and Contract Manager along with the necessary information required for continued communication.

Exhibit E: Confidential List

This Exhibit includes the description of any non-public confidential information involved in performance of the Project or to be derived from the Project required to be listed under Article 11.

Exhibit F: Insurance Certificates

This Exhibit includes the coverages, limits and requirements for Certificates of Insurance to be obtained and maintained by the Contractor.

Exhibit G: Special Conditions

This Exhibit includes the special conditions to be included as a part of this Grant Contract.

Exhibit H: Contractor's Balance Sheet

This Exhibit includes the Contractor's balance sheet.

Exhibit I: Notice of Change or Potential Change in RDF Grant Contract Project.

This Exhibit includes the form to be used by the Contractor for a notice of change or potential change to this Grant Contract or the Project.

Exhibit J: Contractor's approved Proposal.
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FIRST AMENDED AND RESTATED GRANT CONTRACT

Schedule 11: Exceptions to Contractor's Representations.

Exhibit A Scope of Work EP4-15

Executive Summary

The Minnesota Renewable Energy Society ("MRES") will install not more than 1,000 kilowatts of direct-current (kW_{DC}) solar capacity with the development of Community Solar Gardens located within Xcel Energy's Minnesota service area. At a minimum, one facility will be installed within a rural setting and one facility will be installed within an urban setting.

A Solar Garden is a form of solar facility tenure in which a specified piece of the solar array is individually owned. Power produced by designated panels is associated with the individual ownership whereby the facility is controlled by the association of owners that jointly represent ownership of the whole. A Community Solar Garden provides the opportunity for those who do not have appropriate space for a solar array on their home or business to actively participate in a renewable energy initiative. Participants will receive an on-bill credit reflecting the kWh energy produced from their portion of the facility in accordance with the applicable tariff approved by the Minnesota Public Utilities Commission. MRES intends to submit the Project for qualification under Xcel Energy's Solar*Rewards Community® program. Subscribers in the Project shall either meet (i) low-income eligibility requirements for individuals/families or (ii) reside in multi-family housing facilities meeting low-income eligibility requirements, in each case as described below. Contractor will be responsible for confirming eligibility outlined below and will report on its verification process and lessons learned as part of its regular reporting requirements under this Grant Contract.

Low-income Eligibility. Individual subscribers will be deemed income eligible for a subscription if they or their family have been determined to be eligible by the applicable government or nonprofit agency for receipt of or participation in the Minnesota Low Income Home Energy Assistance Program; Medical Assistance; Supplemental Nutrition Assistance Program; WIC; Head Start; free or reduced cost school meals; or HUD subsidized housing pursuant to Section 8 or the equivalent (including public housing, Section 202 housing for seniors, or Section 811 housing for persons with disabilities); or equivalent programs where income eligibility requirements as implemented are not greater than 125 percent of the federal poverty guideline.

Multi-family Housing Eligibility. Subscribers who own or operate multi-family housing are income eligible subscribers if (i) the owner/operator of the building is exclusively a nonprofit provider of low-income housing and related services at the applicable premises and (ii) 95 percent or more of the tenants at the applicable building(s) qualify for low-income eligibility as defined above. Nonprofit affiliates of for-profit entities will not be eligible unless it can be demonstrated that the benefits from the subscription will be retained by the nonprofit affiliate only.

The project's total cost is \$1,819,452. RDF grant funds will be applied to the capital costs of the project and result in a long-term energy production facility.

Goals

The goal of the Solar Project is to install up to 1,000 k W_{DC} PV capacity and demonstrate the concept of collective ownership as a way to increase the penetration of solar renewable electric production in Minnesota for customers eligible to qualify under Xcel Energy's low-income home energy assistance program.

Project Objectives

- Establish a replicable system of billing parameters for community solar.
- Develop discounted or no-cost pricing structure for low-income and/or non-profit participants
- Establish a replicable model for developing Community Solar Gardens in Minnesota.
- Increase the penetration of solar energy in Minnesota;
- Provide an increased knowledge of Community Solar Gardens in Minnesota.
- Evaluate rural vs. urban sites for Community Solar Gardens.
- Evaluate the economics associated with developing a Community Solar Garden targeted specifically at low-income home energy assistance program-qualified subscribers.

Project Performance

- Commissioning of not more than 1,000 kW_{DC} solar capacity.
- Recruitment to obligate 95 percent of the total facility capacity by completion of Milestone 3 as identified on Exhibit C.
- Identification of best practices for community solar in Minnesota.
- Make performance measurements available to the public (i.e. efficiency, energy production, etc.).

Exhibit B Critical Path Schedule EP4-15

						<u>P4-15</u>					
L					Project S	chedule (Qu	arters) - 2	016, 2017 8	& 2018		
Т	ask	Task Description	Q3-2016	Q4-2016	Q1-2017	Q2-2017	Q3-2017		Q1-2018	Q2-2018	Q3-2018
1	Agre	ements/Financing	123	1 2 3	123	1 2 3	123	1 2 3	1 2 3	123	123
	1.1	Application to SRC Program									
		Secure Financing									
		Interconnection									
		Agreement								,	
		Conditional use '									
2	Desig		L			L				1	
<u> </u>		Site analysis									
	22	Prepare facility design									
		Prepare facility		1							
L	2.3	specifications									
3		urement									
		Identify suppliers									
		Order PV									
1		panels/equipment Delivery of PV		<u> </u>							
		panels/equipment			i de la companya de la						•
4		nitting		I					L		
Ŀ		Zoning permits		T					1		
		Construction/									
		building permits									
	4.3	Environmental review									
	4.4	On-site safety plan									
	4.5	Construction contract									
5	Cons	struction		1						1	
<u> </u>		Site Preparation									
	5.2	Construction and									
		assembly			• • • • • •						
1	5,3	System testing									
	5.4	Commission PV facility									
	5.5	On-site demonstration									
	15.6	Presentation to RDF advisory group									
6	Perf	formance Assessment	t				• • • • • • • • • • • • • • • • • • • •	· · ·			
Γ		Recruit subscribers									
	6.2	Performance analysis									
	6.3	Onsite Demonstration									
	6.4	Presentation to RDF Advisory Board					,				

Exhibit B – Page 1

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FIRST AMENDED AND RESTATED GRANT CONTRACT

Exhibit C Budget, Project Payment Milestones and Deliverables EP4-15

Total Project Budget Amount: \$1,871,560

Maximum RDF Grant Amount: \$1,283,100

	Y	ear One (2016)	Yea	ar Two (2)17)	Ye	ar Three (20	18)	ТО	TAL PROJ	ECT
Budget Item	RDF Share	Cost Sharing	Total Cost	RDF Share	Cost Sharing	Total Cost	RDF Share	Cost Sharing	Total Cost	RDF Share	Cost Sharing	Total Cos
Direct Costs												
Salaries and Wages Fringe	\$0	\$ 0	\$0	\$0	\$0	\$0	\$126,175	\$54,075	\$180,250	\$126,175	\$54,075	\$180,250
Benefits Equipment	Ş0	\$0	\$ 0	\$0	Ş 0	\$ 0	\$0	\$0	\$0	\$0	\$0	Ş
Consultants/Subcontractor	\$0	\$0	\$0	\$0	\$0	\$ 0	\$647,750	\$277,607	\$925,357	\$647,750	\$277,607	\$925,357
Supplies	\$36,500	\$14,500	\$51,000	\$8,300	\$0	\$8,300	\$338,380	\$145,020	\$483,400	\$383,180	\$159,520	\$542,700
Construction Materials												
Permits & Interconnect	\$0	\$0	\$0	\$0	\$0	\$0	\$8,873	\$3,803	\$12,675	\$8,873	\$3,803	\$12,675
Travel Publicity/Printing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Workshops	\$0	\$0	\$0	\$3,150	\$1,350	\$4,500	\$113,970	\$40,000	\$153,970	\$117,120	\$41,350	\$158,470
Other Direct Costs	\$ 0	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	ŞI
	\$ 0	\$ 0	\$0	\$0	\$0	\$0	\$ 0	\$ 0	\$0	\$0	\$0	ŞI
	\$0	\$0	\$ 0	\$0	\$0	\$0	\$ 0	\$0	\$0	\$0	\$0	\$1
	\$0	\$ 0	Ş0	\$0	\$0	\$0	\$ 0	\$0	\$0	\$0	\$0	\$(
Total direct costs	\$36,500	\$14,500	\$51,000	\$11,450	\$1,350	\$12,800	\$ 1,235,148	\$520,505	\$1,755,652	\$1,283,097	\$536,355	\$1,819,452
Indirect Costs												
Administration				•								
Facilities	•											
Indirect Rate (10%)												
Total indirect costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Ş(
TOTAL COSTS	\$36,500	\$14,500	\$51,000	\$11,450	\$1,350	\$12,800	\$1,235,148	\$520,505	\$1,755,652	\$1,283,097	\$536,355	\$1,819,452

Minnesota Solar Garden Pilot Project

RDF grant approved - \$1,283,100

Milestones, Deliverables and Allowed Grant Payments

Milestone 1 - Commissioning first 500 kW

Develop Community Solar Garden Application for subscribers and obtain all project finances. Obtain site control and necessary permits for urban facility. Design, install, and commission a 500 kW urban solar garden. Facilities in service and producing and selling electricity to NSP through the SRC Program contract. Facility is commissioned and metering requirements have been completed. To be completed approximately 12 months after the Grant Contract Start Date.

Deliverable 1

Deliver copy of SRC Program contract; Certification of project financing; copy of approved SRC Program Application; copies of site control agreements; copy of facility designs and specifications certified by design engineer; copy of Engineering Certificate that the solar facilities have been constructed according to the plans, specifications, interconnection criteria, and all Project construction is complete; copy of final Interconnection Agreement; copy of the Commissioning Checklist signed by the Xcel Energy Area Engineer upon witnessing and approving successful testing and commissioning of system; photographs of completed solar facilities; and a fully executed Manufacturer's Commissioning Certificate. Submission of Milestone Report satisfactory to RDF representative.

Grant Payment 1

Progress payment of \$610,890.

Milestone 2 – Commissioning second 500 kW

Develop Community Solar Garden Application for subscribers and obtain all project finances. Obtain site control and necessary permits for rural facility. Design, install, and commission a 500 kW rural solar garden. Facilities in service and producing and selling electricity to NSP through the SRC Program contract. Facility is commissioned and metering requirements have been completed. To be completed approximately 15 months after the Grant Contract Start Date.

Deliverable 2

Deliver copy of SRC Program contract; Certification of project financing; copy of approved SRC Program Application; copies of site control agreements; copy of facility designs and specifications certified by design engineer; copy of Engineering Certificate that the solar facilities have been constructed according to the plans, specifications, interconnection criteria, and all Project construction is complete; copy of final Interconnection Agreement; copy of the Commissioning Checklist signed by the Xcel Energy Area Engineer upon witnessing and approving successful testing and commissioning of system; photographs of completed solar facilities; and a fully executed

Exhibit C – Page 2

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FIRST AMENDED AND RESTATED GRANT CONTRACT

Manufacturer's Commissioning Certificate. Submission of Milestone Report satisfactory to RDF representative.

Grant Payment 2

Progress payment of \$610,890.

Milestone 3 – Performance Assessment

Assess facility performance. Evaluate recruitment for participation and operations between rural and urban facilities. To be completed approximately 27 months after the Contract Start Date.

Deliverable 3

Submit Solar Garden Analysis including performance assessment and best practices for community solar in Minnesota. On-site demonstration and tour of photovoltaic facility to RDF administration. Present final project results to the RDF advisory group. Submission of Milestone Report satisfactory to RDF representative.

Progress Payment 3

Progress payment of \$61,320.

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FIRST AMENDED AND RESTATED GRANT CONTRACT

Exhibit D Project Manager and Contract Administrator EP4-15

Project Manager

Kitrina Stratton Minnesota Renewable Energy Society 2928 Fifth Avenue S. Minneapolis, MN 55408 Telephone: 612-963-4757 Email: <u>kitrinas99@aol.com</u>

Contract Administrator

Mark Ritter

Northern States Power d/b/a Xcel Energy 414 Nicollet Mall Minneapolis, MN 55401 Telephone: 612-330-6739 Fax: 612-330-7601 Email: <u>mark.g.ritter@xcelenergy.com</u>

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FIRST AMENDED AND RESTATED GRANT CONTRACT

Exhibit E Confidential Intellectual Property List EP4-15

None.

Exhibit E – Page 1

Exhibit F Insurance Requirements EP4-15

ACORD [®] CI	ERTIF		BILITY INS	URANC	E	DATE	мм/dd/үүүү) 017
THIS CERTIFICATE IS ISSUED AS A CERTIFICATE DOES NOT AFFIRMAT BELOW. THIS CERTIFICATE OF INS REPRESENTATIVE OR PRODUCER, A	IVELY O	R NEGATIVELY AMEND, DOES NOT CONSTITUT	EXTEND OR ALT	ER THE CO	VERAGE AFFORDED B	Y THE	POLICIES
IMPORTANT: If the certificate holder If SUBROGATION IS WAIVED, subject this certificate does not confer rights t	to the ter	ms and conditions of the	policy, certain poli	cies may rec			
PRODUCER			CONTACT				
Marsh & McLennan Agency LLC 7225 Northland Dr N #300 Minneapolis MN 55428			NAME: PHONE (A/C, No, Ext): 763-74 E-MAIL ADDRESS:	6-8000	FAX (A/C, No):		
			INS	URER(S) AFFOR			NAIC#
INSURED	MINNE3	3	INSURER A : NSI a di				15350 11000
Minnesota Renewable Energy		, ,	INSURER C :	mouranee	company, eta.		
Society/American Solar Energy 2928 Fifth Ave S			INSURER D :				
Minneapolis MN 55408			INSURER E :				
			INSURER F :				
COVERAGES CER THIS IS TO CERTIFY THAT THE POLICIES INDICATED, NOTWITHSTANDING ANY RI CERTIFICATE MAY BE ISSUED OR MAY EXCLUSIONS AND CONDITIONS OF SUCH	OF INSU Equireme Pertain, Policies	INT, TERM OR CONDITION THE INSURANCE AFFORD LIMITS SHOWN MAY HAVE	OF ANY CONTRACT ED BY THE POLICIE BEEN REDUCED BY	THE INSURE OR OTHER I S DESCRIBED PAID CLAIMS	DOCUMENT WITH RESPEC D HEREIN IS SUBJECT TO	T TO	WHICH THIS
INSR TYPE OF INSURANCE	ADDL SUB	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	3	
A X COMMERCIAL GENERAL LIABILITY		075837110	5/5/2017	5/5/2018	DAMAGE TO RENTED	\$1,000 \$100,0	
X 250					MED EXP (Any one person)	5	
					PERSONAL & ADV INJURY	\$1,000	
GEN'L AGGREGATE LIMIT APPLIES PER POLICY PRO: X LOC					GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	\$2,000	
OTHER:					FRODUCIS: COMPOP AGG	52,000	,000
A AUTOMOBILE LIABILITY		075837110	5/5/2017	5/5/2018	COMBINED SINGLE LIMIT (Ea accident)	\$1,000	,000,
ANY AUTO					BODILY INJURY (Per person)	\$	
AUTOS ONLY AUTOS ONLY X AUTOS ONLY X AUTOS ONLY X AUTOS ONLY X AUTOS ONLY					BODILY INJURY (Per accident) PROPERTY DAMAGE	5 · 5	
X AUTOS ONLY X AUTOS ONLY					(Per accident)	\$ \$	
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EXCESS LIAB CLAIMS-MADE					AGGREGATE	s	
DED RETENTION S						\$	
B WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N		41WECJZ0691	9/20/2016	9/20/2017	X PER OTH-		
ANY PROPRIETOR/PARTNER/EXECUTIVE	N/A				E.L. EACH ACCIDENT	\$500,0	statemen film generative statements
(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	\$500,0	
DESCRIPTION OF OPERATIONS DOW					Care of General - POLICE LIMIT	2000,0	**
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHIC Xcel Energy Inc. and all subsidiaries t or agreement.	•			• •	•	oy writ	ten contract
					· · · ·		
CERTIFICATE HOLDER			CANCELLATION				
Xcel Energy 414 Nicollet Mali Minneapolis MN 55401				J DATE TH	ESCRIBED POLICIES BE C/ EREOF, NOTICE WILL E CY PROVISIONS.		
			AUTHORIZED REPRESE	NTATIVE			
ACORD 25 (2016/03)	The A	CORD name and logo a			ORD CORPORATION.	Ali rigi	hts reserved.

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FIRST AMENDED AND RESTATED GRANT CONTRACT

Exhibit G Special Conditions EP4-15

1. Contractor acknowledges and agrees that nothing under this Grant Contract or other Commission order approving the RDF grant to Contractor for the purposes of the Project obligates NSP or its affiliates to enter into any agreement for the interconnection of the Facility or Project with NSP's electric system. Contractor must obtain written agreement from Greenway, the third-party owner of the Project, that Greenway acknowledges that although Contractor and NSP have entered into this Grant Contract, NSP is under no obligation to enter into any agreement for the interconnection of the Facility or the Project with NSP's electric system and provide proof of such agreement to NSP within thirty (30) days of this Grant Contract Start Date.

2. Contractor acknowledges that NSP manages both the RDF and interconnection through different business functions of NSP or its affiliates. Contractor agrees that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement for the interconnection of its electric system with the Facility or Project or other conduct by NSP related to such interconnection agreement shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor additionally agrees that any breach, dispute, or other issue related to NSP's performance of this Grant Contract or other conduct by NSP or its affiliates related to this Grant Contract shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under the interconnection agreement and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor must obtain written acknowledgement and agreement from Greenway, the third-party owner of the Project, that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement for the interconnection of its electric system with the Facility or Project or other conduct by NSP related to such interconnection agreement shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and that Greenway agrees to waive any and all claims at equity or law related thereto. Contractor agrees to provide proof of such agreement to NSP within thirty (30) days of this Grant Contract Start Date.

Contractor acknowledges and agrees that nothing under this Grant Contract or any Commission order approving the RDF grant to Contractor for the purposes of the Project obligates NSP or its affiliates to enter into any agreement for the Project to be considered or to be classified as qualifying for the Xcel Energy Solar*Rewards Community® program. Contractor must obtain written agreement from Greenway, the third-party owner of the Project, that Greenway acknowledges that although Contractor and NSP have entered into this Grant Contract, NSP is under no obligation under this Grant Contract to determine that the Facility or the Project qualifies or is accepted into the Xcel Energy Solar*Rewards Community® program and provide proof of such agreement to NSP within thirty (30) days of this Grant Contract Start Date.

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FIRST AMENDED AND RESTATED GRANT CONTRACT

4.

5.

Contractor acknowledges and agrees that NSP manages both the RDF and the Solar*Rewards Community® program through different business functions of NSP or its affiliates. Contractor agrees that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement entered into for, or application process for qualification under, the Solar*Rewards Community® program shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor additionally agrees that any breach, dispute, or other issue related to NSP's performance of this Grant Contract or other conduct by NSP or its affiliates related to this Grant Contract shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under the Solar*Rewards Community® program and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor must obtain written acknowledgement and agreement from Greenway, the third-party owner of the Project, that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement entered into, or application process for qualification under, the Solar*Rewards Community® program or other conduct by NSP related to the Solar*Rewards Community® program shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract, and that any breach, dispute, or other issue related to NSP's performance of this Grant Contract or other conduct by NSP or its affiliates related to this Grant Contract shall not be considered a breach by NSP of its obligations of good faith and fair dealing or any other statutory or common law requirement under the Solar*Rewards Community® program and that Greenway agrees to waive any and all claims at equity or law related thereto. Contractor agrees to provide proof of such agreement to NSP within thirty (30) days of this Grant Contract Start Date.

Contractor agrees that failure to provide the written acknowledgements identified in Special Conditions 1 through 4 within thirty (30) days of the Grant Contract Start Date shall be considered an Event of Default of Contractor under Section 15.1(A) of this Grant Contract and no notice or cure period shall be applicable.

6. All Project reports, posters, presentation handouts, publications and public documents are to include the following credit text: "Project funding provided, in part, by customers of Xcel Energy through a grant from the Renewable Development Fund."

7. Contractor and NSP acknowledge that Contractor intends to design, build, and operate the Project for Greenway, and that Greenway will own the two solar PV installations to be commissioned as part of the Project. Contractor attests and represents that it will verify that Greenway has obtained all necessary site control for the installation sites and that Greenway has obtained any and all other permits, orders, authorizations, or other necessary permissions for the Project. before Contractor begins installation of the Project. Contractor agrees to provide copies of Greenway's site control, permits, orders, authorizations, or other permissions to NSP upon NSP's request and failure to provide such documentation shall be considered an event of default under Section 15 of the Grant Contract subject to the cure provisions of Section 15.1(B) but, under no circumstances, shall NSP be required to perform under the Grant Contract until such documentation is provided.

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FIRST AMENDED AND RESTATED GRANT CONTRACT

- 8. Contractor shall provide a copy of the written agreement between Contractor and Greenway, within thirty (30) days of the Grant Contract Start Date in a form reasonably satisfactory to NSP affirming and acknowledging that Greenway will indemnify and hold harmless NSP, its customers, and the RDF should any disputes arise by or against Greenway related to the Project. Failure to provide a copy of such indemnification shall be considered an Event of Default of Contractor under Section 15.1(A) of the Grant Contract, shall not require notice or be subject to cure, and Contractor acknowledges and agrees that NSP may terminate the Grant Contract immediately under Section 15 and reallocate the entire Grant amount.
- 9. Contractor and NSP acknowledge that Greenway, is not a party to this Grant Contract and that NSP is not a party to any agreement between Contractor and Greenway and that NSP owes no obligations to Greenway nor does Greenway have any rights as to NSP's commitments under the Grant Contract. Nothing in this Grant Contract shall be construed to create any duty to, or standard of care with reference to, or any liability to, any person not a party to this Grant Contract. Contractor shall provide a copy of the written agreement between Contractor and Greenway affirming and acknowledging that Greenway is not a third party beneficiary of this Grant Contract within thirty (30) days of the Grant Contract Start Date in a form reasonably satisfactory to NSP. Failure to provide a copy of such indemnification shall be considered an event of default under Section 15.1(A) of the Grant Contract, shall not require notice or be subject to cure, and Contractor acknowledges and agrees that NSP may terminate the Grant Contract immediately under Section 15 and reallocate the entire Grant amount.

10. Contractor acknowledges and agrees that Contractor will not seek NSP approval to assign or transfer this Grant Contract and any such request shall constitute an Event of Default not subject to any cure period. Further, Contractor acknowledges and agrees that should Greenway, attempt to assert any claimed rights under this Grant Contract or against NSP; such assertion shall constitute an Event of Default under Section 15.1(A), shall not require notice or be subject to cure, and Contractor acknowledges and agrees that NSP may immediately, upon written notice to Contractor, terminate the Grant Contract under Section 15 and reallocate the entire Grant amount.

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FIRST AMENDED AND RESTATED GRANT CONTRACT

Exhibit H Contractor's Balance Sheet EP4-15

THE MINNESOTA RENEWABLE ENERGY SOCIETY Statement of Financial Position December 31, 2016

	Amount
ASSETS	
Cash and cash equivalents	\$ 7,740.39
Equipment and vehicles, at cost	24,155.39
Less: Accumulated Depreciation	(11,486.66)
Equipment and vehicles, net	12,668.73
TOTAL ASSETS	\$ 20,409.12
LIABILITIES	
Accounts payable	\$-
NET ASSETS	
Unrestricted Net Assets	20,409.12
TOTAL LIABILITIES AND NET ASSETS	\$ 20,409.12

For Management Use Only

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FIRST AMENDED AND RESTATED GRANT CONTRACT

THE MINNESOTA RENEWABLE ENERGY SOCIETY Statement of Activities For the year ended December 31, 2016

	Amount
INCOME	
Contributions	28,015.70
Member fees	9,710.00
Program services	13,221.61
Interest	0.71
Miscellaneous income	18.14
TOTAL INCOME	50,966.16
EXPENSES	
Payroll	22,248.91
Payroll taxes	5,745.73
Contract services	6,179.95
Travel	1,718.80
Bank fees	233.00
Software	143.62
Insurance	3,713.37
Telephone	1,561.38
Program expenses	11,791.64
Rent	750.00
Supplies	1,608.89
Professional development	5,056.32
Promotional items	1,010.60
Depreciation	3,450.77
Miscellaneous expense	48.26
TOTAL EXPENSES	65,261.24
NET LOSS	(14,295.08)
BEGINNING NET ASSETS	31,704.87
ENDING NET ASSETS	\$ 20,409.12

For Management Use Only

Exhibit I Notice of Change or Potential Change in RDF Grant Contract Project EP4-15

[DATE]

RDF Grant Administrator 414 Nicollet Mall, 7th Floor Minneapolis, MN 55401

RE: RDF Grant Contract No. EP4-15 Notice of Potential Change in RDF Grant Contract Project

Dear RDF Grant Administrator,

Contractor, Minnesota Renewable Energy Society, hereby notifies Northern States Power Company, a Minnesota Corporation ("NSP") of the following potential change in its Project: [Potential Change]. The potential change in the Project is necessary because [Reason for Potential Change].

Should this change to the Project be acceptable to NSP, Contractor requests that NSP prepare an amendment to the Grant Contract executed by Contractor and NSP on **[Date]**.

Sincerely,

[Signature]

[Grant Recipient Representative]

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FIRST AMENDED AND RESTATED GRANT CONTRACT

Exhibit J Contractor's approved Proposal and Notice of Change or Potential Change EP4-15

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MINNESOTA RENEWABLE ENERGY SOCIETY

Minnesota Community Solar Garden

RDF Proposal

Laura Cina 4/1/2013

The Minnesota Renewable Energy Society is requesting funds to develop best practices for community solar in Minnesota by conducting a Community Solar Pilot Project in Xcel Energy Territory.

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Grant Application Form Xcel Energy Renewable Development Fund

Energy Production Project

(All sections of this form must be completed and attached to all Energy Production proposals.)

Applicant Information						
Name and Title of Applicant MN Renewable Energy Society						
Mailing Address 2928 5th Ave S						
(Street number and name) (Suite number) Minneapolis, MN, 55408						
(City, state, zip code)						
Nature of Business Non Profit						
Contact Person Laura Cina 612-963-4757						
Email laurac@mnrenewables.org						
Project Information						
Project Title Minnesota Solar Garden Pilot Project						
Project Site Location To Be Determined						
Project Site Location To Be Determined						
Project Site Location To Be Determined Technology Type: check one(s) that apply						
Project Site Location Technology Type: check one(s) that apply Biomass Hydro Solar PV Solar Thermal-Electric Funding Request and Project Cost						
To Be Determined Technology Type: check one(s) that apply Biomass Hydro Solar PV Solar Thermal-Electric Wind Funding Request and Project Cost Total RDF funding requested: \$2,661,320 Other funding \$1,375,100						
Project Site Location Technology Type: check one(s) that apply Biomass Hydro Solar PV Solar Thermal-Electric Funding Request and Project Cost						
To Be Determined Technology Type: check one(s) that apply Biomass Hydro Solar PV Solar Thermal-Electric Wind Funding Request and Project Cost Total RDF funding requested: \$2,661,320 Other funding \$1,375,100						

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Project Capacity

New Projects - Nameplate Capacity (kW or MW) 1MW

Refurbishment - Existing Capacity (kW or MW)

Incremental Capacity_____

Projected Project Duration

Construction Start Date August 2014	Commissioning Date	November 2014
-------------------------------------	--------------------	---------------

Energy Production

Estimated amount of AC energy (kWh or MWh) to be produced annually for each year of operation for <u>up to</u> a 15-year power purchase contract length. For biomass or biofuel projects that use a portion of renewable fuel (i.e., blended fuel), show the total amount of energy generated in the first column and the amount generated by the renewable fuel in the second column.

<u>Total Energy (kWh)</u>	Renewable Energy (kWh) (fuel blend projects)
2014:	2014:
2015: 1,224,178	2015:
2016: 1,218,057	2016:
_{2017:} 1,211,967	2017:
2018: 1,205,907	2018:
2019: 1,199,877	2019:
2020: 1,193,878	2020:
_{2021:} 1,187,909	2021:
_{2022:} 1,181,969	2022:
_{2023:} 1,176,059	2023:
_{2024:} 1,170,179	2024:
2025: 1,164,328	2025:
_{2026:} 1,158,506	2026:
2027: 1,152,714	2027:

_{2028:} 1,146,950

2028:___

Please estimate the amount of energy in kWh that will be produced in each month of a typical year. The sum of the monthly estimates should total the annual estimates above.

Jan 87,691 Feb 101,498 Mar 107,686 Apr 116,730 May 120,708 June 119,212 July 120,836 Aug 114,402 Sept 105,436 Oct 94,807 Nov 65,198 Dec 69,974

Please estimate the percent of energy that will be produced on-peak and off-peak on a typical year. The on peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. Off Peak is defined as all other hours.

Percent (%)	Generated On-Peak	38%
Percent (%)	Generated Off-Peak	62%

Energy Pricing Narrative (please use additional pages as necessary)

With regards to the construction of the community solar array, below are the major costs associated with the development. Panels - \$864,000 Inverters - \$448,000 Racking - \$320,000 Other direct costs include pre-development,

general conditions, labor, design, engineering, land siting, permitting & approval, wiring, interconnection with Xcel, sales & marketing for the panels, O&M trust fund, long-term tax reporting and administration, ownership registration to

comply with securities laws, etc. These costs are all highly variable and can/will affect the overall cost projections. For the purposes of this proposal, CEC has not yet worked with Xcel to conduct a Power Insertion Analysis and

therefore cannot provide an accurate quote on those costs as part of this proposal.CEC will agree under contract to bear any additional costs associated with the creation and maintenance of the array - for all cost overruns.

Energy Pricing

Annual price schedule (\$/kWh or \$/MWh in 2013 dollars) for each year of operation for up to a 15-year period.

2014 \$______ 2015 \$ 85,692 2016 \$ 85,264 2017 \$ 84,838 2018 \$ 84,413 2019 \$ 83,991 2020 \$ 83,571 2021 \$ 83,154

_{2022 \$} 82,738	
2023 §82,324	
_{2024 \$} 81,913	
_{2025 \$} 81,503	
_{2026 \$} 81,095	
_{2027 \$} 80,690	
2028 \$ 80,286	
0	

Please indicate the percent of total energy produced that you plan to sell Xcel Energy, and the percent you plan to consume on-site:

Estimated % total energy to be sold to Xcel Energy: 100%

Estimated % to be consumed on-site: 0%

Emission Rates

If the proposed project produces any of the following emissions, please provide emission rates in pounds per kWh at full load.

PM-10
NOx
СО
CO2
Pb (lead)

Business Type

Number of Employees <u>1</u>	Year Established 1979
How Long Under Current Ownership Since	ce 1979
Legal Form or Ownership (check one) Sole Proprietorship	Limited Partnership
General Partnership Sub-Chapter S Corporation	<u>xx</u> Corporation Other (identify)
1 1	

Project Team		
Laura Cina	Managing Director	4 years
(Name)	(Title)	(Years with Company)
Brian Ross	Consultant	15 years
(Name)	(Title)	(Years with Company)
Clean Energy Collective		
(Name)	(Title)	(Years with Company)
(Name)	(Title)	(Years with Company

Standard Grant Contract Terms and Conditions Acceptance

I am authorized to act on behalf of the applicant in this matter, and I have received, reviewed and do hereby accept the Standard Terms and Conditions of the Grant Contract included as Appendix C of the Xcel Energy Renewable Development Fund RFP except as shown on the Contract Modification Form enclosed herewith.

Laura Cina	Digitally signed by Laura Cina DN: cn-Laura Cina, o=MRES, ou, email=laurac@mnrenewables.org, c=US Date: 2013.03.31 11:46:33 -05'00'	03/31/13
Signature of Authorized Rep	presentative	Date

Signature of Authorized Representative

I hereby authorize Xcel Energy to make any inquiries and obtain any financial information necessary to evaluate my organization's capability to implement the proposed project. I also authorize Xcel Energy to make any necessary inquiries to verify the information I have presented. I also release all necessary information to Xcel Energy.

Laura Cina	Digitally signed by Laura Cina DN: cn=Laura Cina, o=MRES, ou, email=laurac@mnrenewables.org, c=US Date: 2013.03.31 11:46:52 -05'00'	03/31/13
Signature of Authorized Repre	esentative	Date

I hereby certify that I have read and understand the terms and conditions contained in the Xcel Energy RFP and that the information contained in this proposal is true, correct and complete to the best of my knowledge.

Laura Cina	Digitally signed by Laura Cina DN: cn=Laura Cina, o=MRES, ou, email=laurac@mnrenewabl c=US Date: 2013.03.31 11:47:08 -05'00'	es.org, 03/31/13
Signature of Authorized Represen	tative	Date
Laura Cina		Managing Director
Typed Name	r	Fitle

Section 1: Scope of Work

1.1 Executive Summary

There is a growing consensus that there are many economic, environmental and health reasons to increase the use of solar in Minnesota. While we have made progress growing renewable energy production, there is still a very large untapped solar market in Minnesota, the people who are unable to purchase and install solar on their residence or business. Reasons a solar system on-site may not be viable include many physical siting factors like shading, lack of roof space, poor roof orientation or other barriers such as lack of upfront financing, non-ownership or multi-family units of housing that make it difficult to install a system on a shared roof and meter to the correct household. In addition, participating in a program like this gives freedom from having to maintain or repair a system and the ability to move without a loss of investment.

To overcome these barriers the Minnesota Renewable Energy Society (MRES) proposes to build a Community Solar Garden Pilot Project, modeled after the Solar Gardens in Colorado. This would be a large installation in Xcel Energy Territory that would allow the community to purchase solar panels from a community solar array and receive a discount on their utility bill. Participants receive an on-bill credit reflecting the kWh energy produced from their portion of the project. Being able to aggregate the solar purchases of many people into one large installation reduces the cost to each owner through economies of scale and benefits the utility by providing a complementary distributed energy solution by being installed in an ideal location where Xcel Energy can make immediate use of the energy generated, particularly during peak months in the summer.

1.2 Project Goals

Project Goal #1: A 2008 study by the National Renewable Energy Laboratory found that only 22% to 27% of residential rooftop area is suitable for hosting an on-site photovoltaic (PV) system after adjusting for structural, shading, or ownership issues. As a result, it has been broadly recognized that the on-site solar market comprises only one part of the total market for solar energy. It is our number one goal to address the remaining 70% of the market that is currently unable to purchase solar power.

Through modeling and learning from the successes and failures of Colorado Solar Gardens model, while adapting it to the regulations unique to Minnesota, our goal is to increase market adaption of solar throughout Minnesota by making solar ownership possible and tangible to non-homeowners, as well as homeowners or business owners who cannot have solar on their roofs due to shading, orientation, multi-unit housing or homeowner association rules. Subscribers have an opportunity to participate in the ownership of solar panels without having to install them on their roofs or maintain it themselves. It is our understanding that Xcel Energy is submitting their own RDF Proposal to have Community Solar billing developed for Xcel Energy customers that our Solar Garden would be than able to access. After this initial project is complete and a proven success, community solar in Xcel Energy territory, and possibly within other utility territories, could increase at incremental phases in the future.

This Community Solar Garden will be a utility scale commercial renewable electric project that enhances the delivery of renewable electric energy to the utility and provides multiple solar consumers with economies of scale savings by installing a commercial scale solar installation.

Project Goal #2: We will research and report on what we find to be the best practices for Community Solar in Minnesota through a demonstrable, replicable and scalable pilot project. Research will include: financial and legal structures; siting issues such as cost and desirability of a ground mount versus a roof mount; an urban setting with an active community versus a rural installation; permitting and interconnection difficulties or successes. As of the writing of this proposal, there are multiple bills in the legislation process related to community solar. We would of course adapt our model to fit within whatever legislation develops and passes. Additionally we will analyze said legislation in our best practices report, and make recommendations for suggested changes to that legislation. Through these practices we aim to boost Minnesota's attractiveness to community solar businesses and investors.

1.3 Project Objectives

Objectives for Goal #1:

• Objective #1: Establish a system of billing for Community Solar at Xcel Energy. As the largest utility in Minnesota, Xcel Energy is well positioned to be a role model for other utilities across the State and to act as a testing ground for establishing best practices in the industry. MRES has established a good working relationship with Xcel Energy and we feel would make a good partner developing these best practices together. In order make possible tangible solar ownership to all Xcel Energy ratepayers, a system of billing must be established at Xcel Energy. Such a system will show a solar credit on participating customers' bills for the amount of energy they have purchased.

Xcel Energy is submitting a separate RDF Proposal to adapt the current IT systems that would manage subscribers to our pilot project. Either the acceptance of their proposal or legislation mandating utilities to institute community billing on their own would be key to making our project work. We will assist in any way we can to help this process happen.

• **Objective #2: Establish a contract for turn-key services.** In partnership with the Clean Energy Collective (CEC) we will answer many of the questions surrounding the community ownership model in Minnesota with regards to the private sector. Some of these questions include: third party ownership; the federal tax credit; ownership and securities matters; continued maintenance of the system and long term ownership of the system and management of customers.

In order to leverage funds to the maximum extent possible, CEC has a specialized legal and operating structure which will enable Xcel customers to purchase and benefit from

panels in the array. The model provides a maximum return on investment for Xcel customers who purchase panels in the community array. The CEC team will handle all legal, securities, tax and administration matters for all subscriber ownership and service activities. Most importantly, CEC's Operations &Management (O&M) trust fund provides a fail-safe structure for the long-term operation of the facility, even if CEC is no longer in business. The CEC will also handle launching and managing the website for this community solar program.

Efforts will be made to make the package financially beneficial to investors, land owners, customers and the utility while making the process transparent in order to show the viability of Community Solar after the pilot project is completed.

• **Objective #3: Install Solar Garden.** Our last objective is to install at least one solar garden in a physical location that would best serve Xcel Energy's distributed energy grid. Upon choosing our sites we will confer with Xcel Energy's transmission experts so as to not only reduce interconnection costs but also to best benefit the utility with the energy generated.

In order to ensure utility-grade long-term power to Xcel Energy on behalf of the members, the CEC sets up an independent operations and maintenance trust fund that functions even if the CEC or MRES is no longer in business. This escrow account is seeded through a percentage of the initial sale price and maintained by a percentage of the ongoing power production payments each month. The escrow covers liability insurance, warranty repair, cleaning, billing, maintenance and equipment replacement and is structured for long-term clean energy generation stability 40 years of facility operation.

This trust fund exists without additional funding from the subscribers or the utility and will be managed by either CEC or MRES. CEC believes that a strong O&M fund is the cornerstone of any successful community energy project, because it ensures long-term operation production and preserves the utility's and member's investment in the system. One important tenant of CEC programs is that the utility and its members must contract under an operating structure that protects both parties for the life of the system. The CEC intentionally designed the O&M escrow to operate independently of the Clean Energy Collective. Therefore, the operations and maintenance of the community solar array will not be jeopardized. MRES will have the ability to appoint a new management company using the Escrow Contract and Trust Fund in such an event.

• Objective #4: Recruit community members to purchase energy. Through workshops, press releases, town hall meetings and tabling at events, we will raise awareness, provide education and recruit participants to become purchasers of energy from our Community Solar Garden. We will conduct five workshops a year during the second and third year of the project. CEC, who has extensive relevant experience in Colorado, estimates the entire array should be sold out within two years. We will partner with other environmental groups, neighborhood organizations, cities and any other group with clean energy or clean air goals who will helps us promote the purchasing of a community solar

subscription. MRES has had success in partnering with these groups in the past through the promotion of solar bulk purchasing programs.

CEC has created for MRES a proposal that allows subscribers to purchase a 250 watt panel for a total purchase price of approximately \$405, about \$1.62 per watt. The estimated payback for this purchase is about 12.8 years. Subscribers should be able recognize a simple year one return on their investment of 6%. This much lower cost produces faster payback than would ever be expected for a residential or small scale commercial installation. Current cost per watt for a residential installation in Minnesota is about \$5.00 a watt. The difference renders a savings of over \$3.00 a watt for Xcel Energy ratepayers.

These cost estimates are based on installing one large ground mount system. If a roof top system is chosen in order to keep the system in an urban setting, specifically the Energy Innovation Corridor, this cost may be higher to the consumers in order to make the financing work. Yet still, with economies of scale, this project would still be a solid investment in renewable energy for the ratepayers. MRES has currently identified rooftop sites in the Energy Innovation Corridor if this was desirably to the RDF Advisory Board and Xcel Energy, then MRES would target this area as our installation site.

The \$1.62 a watt price is the all-in cost for the customer, including discounts, the requested funding from the RDF to support this program and the 30% Federal Income Tax Credit (ITC). CEC has created a special business structure to support community-owned solar and achieve these goals. The structure results in the maximum amount of value to the member over the life of the system, while complying with various regulations such as securities and tax laws.

Using the CEC model, subscribers will have options unseen in the "on-site" solar market. These options encourage new members to purchase renewable energy and recognize excellent value in their investment. Subscribers have several options for selling or transferring their panel(s). Through CEC's RemoteMeter® software platform, CEC or MRES would handle every aspect of administration, billing and customer service for the life of the system, including transfers and sales.

Subscribers have many options for transfer of ownership:

- 1. Resell panels to another Xcel utility member. The CEC or MRES will help connect members with new buyers and, since the system is being maintained in excellent condition, resale value could possibly even be improved.
- 2. Stay within the Xcel network and simply transfer credits to a new meter number.
- 3. Donate panels to a local, in-network church or non-profit. The grantee gets the gift of power for years to come and members may be able to claim a tax deduction.
- 4. Transfer to family members who live in Xcel territory.

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Objectives for Goal #2

- **Objective #1:** Research all new legislation for Community Solar and in partnership with CEC, make sure the pilot project will be compliant.
- Objective #2: Establish best practices for siting issues. The Solar Gardens in Colorado are reporting a large amount of difficulty in establishing sites for projects. MRES proposes investigating the benefits and drawbacks of different types of solar garden installations, rural vs. ground mount and urban versus roof mount. This will give us a range of siting issues to research including; permitting and zoning for solar, land/roof ownership versus leasing issues and marketing to local versus distant communities.

Although the RDF puts a slightly higher value on projects that have secured sites, MRES believes it is in the greater interest of this pilot project to be able to provide due diligence to site selection process. The Colorado Solar Gardens projects have all largely been delayed due to siting issues and since MRES strives to build a working, scalable model for Community Solar in Minnesota, it would like to take some time to identify the potential problems (i.e. land use issues, leasing/ownership factors, EIS) and identifying the key factors that make a site favorable. MRES would also like to identify from the consumer market if the location of their off-site panels matters to them. Do consumers want their panels in the community or can they be an hour away in a rural location? Of highest priority, however, is making sure the solar facility is located in an area where Xcel can utilize the power readily. This will maximize the effectiveness of the solar energy for Xcel, especially during peak summer months. Finding a site should correlate in the timeline with the work Xcel Energy will need to do to build the IT infrastructure needed for billing, thus not delaying the project at all.

1.4 Performance Measurements (Tangible and measurable outcomes)

Two outcomes that need to be completed in order to ensure a successful project are under the jurisdiction of the Xcel Energy proposal which was submitted to the RDF Fund separately.

- "Community Billing" established at Xcel Energy
- Regulations heeded at the PUC

While Xcel Energy is establishing billing and working with the PUC to make sure the regulations are being followed, MRES will work to complete the following tasks.

• Contract signed with turn-key services provider. A Letter of Intent has been signed with CEC based on a proposal developed by them for this project.

- Site secured with either a donation of land or a lease signed for 20 years (with an option to renew for another 20 years or more.
- Installer RFP is issued and installer is hired
- 1 MW DC of solar electric panels installed in Xcel Energy Territory
- 10 workshops/town hall meetings completed
- 1MW of solar sold to customers

1.5 Project Schedule (major tasks, milestones)

February 2014: Contract signed with turn-key services provider

It is currently the assumption of MRES that turn-key services will be provided by the Clean Energy Collective based in Colorado. Assuming that all contracts can be agreed upon MRES will begin work with CEC as the proposal is accepted and a contract is signed for the RDF.

March 2014: Installer RFP developed and issued by MRES

As the local partner on this proposal it will be the duty of MRES to develop and issue the RFP for an installer. It is important to MRES that a reliable, knowledgeable local company be hired to build this installation. The knowledge and expertise of MRES within the solar industry in Minnesota makes MRES the best part of the team to tackle this task. This will be done in consultation with the turn-key services provider to make sure all criteria are met for a successful project.

June 2014: Installer hired, site secured and costumers recruitment begins

MRES will lead the sales to subscribers under direction from CEC. MRES is the leader in Minnesota for on-the-ground solar education. MRES tables at over 40 events a year, reaching over 350,000 Minnesotans with the largest outreach event at the Minnesota State Fair where MRES runs the Solar Education area at the Eco Experience Building. There are over 9,000 people on MRES's email list and over 2,000 on social media sites including Twitter, Facebook and LinkedIn. MRES will use all of these venues to educate people on what Community Solar is and how they can participate in it.

Workshops and Town Hall meetings will be developed to educate Minnesotans on how Community Solar works, benefits of participating and how to sign up. **July 2014:** Permitting and zoning issues will be addressed by the installer with the assistance of Brian Ross with CR Planning who is an expert in working with local governments on land use issues.

August 2014: Ground is broken for installation

November 2014: Project is commissioned.

January 2015: Community billing IT Infrastructure and tariff regulation is completed at Xcel Energy.

Once the installation goes live, Xcel Energy will have some more work to do to make sure the billing process is working smoothly. MRES is committed to working with Xcel Energy in partnership to make a successful community solar pilot project.

Section 2 – Technical Aspects

2.1 Project Description

MRES will be building a new 1MW solar electric generation facility that will consist of approximately 4,000 250 watt panels. Equipment details such as the panel manufacturer will be determined upon award of this project.

CEC community-based solar facilities are operated and managed to certain standards of service including the following, panels will have 90% of rated power for years 1-10 of the facility, 80% thereafter and the inverters, wiring, power box will have a non-failure guarantee. CEC also follows a maintenance guarantee that when the efficiency as compared to irradiance drops more than 3% from the baseline cleaning will occur.

2.1.2 EP Detailed Project Overview

All aspects of equipment that will be used are technically proven and built to industry standards and have undergone the testing needed to ensure safety. There is nothing new about the type of technology in this proposal. Rather, what makes this project innovative is the ownership structure that allows consumers to have a more flexible relationship with owning renewable energy. MRES anticipates no technical difficulties as a grid tied, 1 MW system has become fairly standard.

However, there may be one possible barrier to market acceptance - the psychology of owning solar. Solar can be seen as a status symbol to some people. For example, some may put a solar array on their house to show their affluence or to indicate how much they care for the environment. The project we are proposing would take the panels from the private residence to a possibly remote location, so removing the ability of the subscriber to "show off" their solar system. Other community solar projects have tried to emotionally attach consumers to their solar

power by allowing people to put their family names on panels "they themselves own" or have picnic days where people visit their panels and have group picnics.

Part of the reason why MRES would like to explore the urban versus rural aspect of this project is to determine what barriers to market acceptance arise when the panels get more distanced from a large market. Investigating if this is a barrier, and if so, how to overcome this barrier will be a large part of our work as the first large scale community solar project in Minnesota. We will first do surveys of people interested in community solar to see if what presents itself as barriers and as solutions. Some turn-key service providers have developed phone applications where consumers can monitor the energy produced by their panels and broadcast the news via social media outlets.

Geographic location

MRES has already begun the search for a suitable site, but due to the planned research to establish best practices for siting Community Solar projects, choosing a site will wait until after the proposal has been chosen. MRES has had many interesting options presented, including rooftop sites in the Energy Innovation Corridor in Minneapolis. MRES has also received a letter of support from the City of Minneapolis which indicates serious interest in having a Community Solar project sited within city limits and assuring continued support in finding and promoting a properly sited project to citizens of Minneapolis. You will find that letter at the end of this proposal. MRES very interested in Minneapolis as an option but is leaving options open to areas other than Minneapolis; Xcel Energy territory is a limiting factor.

Current guidelines for site selection include:

- 1. Site must be in Xcel Energy territory
- 2. A determination whether the new legislation has restrictions on where the subscriber lives in relation to where the installation is sited. Currently Colorado legislation requires that the subscriber must live in the same county as the installation, in an attempt to keep the "community" in Community Solar. This requirement would make populated counties more desirable.
- 3. A low interconnection cost
- 4. The Distributed Energy load benefit to Xcel Energy

2.1.3 EP Project Development Details

CEC will control initial ownership of the installation and the energy produced by it before it is sold to the public. As the subscribers begin to buy-in, ownership will transfer to the individual purchasers of energy, so the project will truly be a cooperative ownership system. As subscribers wish, they may resell their panels to other Xcel Energy customers or donate them so continuing the cooperative ownership model.

CEC will financially back the project through internal capital and debt services through wellestablished banks. This plan assumes funding of \$2.4M will go towards the purchasing of the panels and construction equipment. Receiving this funding at the beginning of the project, instead of at the end, allows CEC to offset costs of the solar facility without incurring excessive interest charges from the on-going debt service with the bank, which would then raise the participation costs for ratepayers and make investment by CEC less likely.

All risks associated with the pre-development, site planning, engineering & design, physical construction of the array, interconnection with Xcel, and operations & maintenance of the facility will remain with CEC. This funding simply allows CEC to offset expenses, reduce debt with the bank and offers a more compelling price for solar panels to the program participants. It also allows CEC to keep the PPA rate for the energy produced at a level that Xcel should find acceptable.

Since the project development site has not been chosen we are still unsure as to whether the land or rooftop will be owned (if donated) by MRES or whether the space will be leased. CEC has figured into their costing model the average lease cost they have been paying at other Community Solar Gardens across the country and will cover that cost themselves. Having not identified a site yet, we also are unsure of the point of connection but we intend on working in partnership with Xcel Energy, as we have been, to make sure the proposed point of delivery of the 1MW system is in a desirable location for Xcel Energy and has a low interconnection cost. CEC has experienced significant success with interconnections that are less than ½ a mile from the utility's facility or a desired point of insertion, such as a substation.

Regulatory approvals and permits will include local government approvals and permits for siting one or more solar arrays on one or more sites. The local government permits could include any or all of the following: building and electric permits, land use permit, rezoning, conditional use, variance, subdivision, NPDES permit, wetland permit, and possibly other permits related to specific environmental or cultural components of the site. At a minimum, the solar development will require, from the local government, a land use permit, a conditional use or variance, and an NPDES permit and building and electric permits during the construction phase.

As the sites have not been selected, no permitting activities have been completed to date.

The required development and environmental permits will be dependent on the site or sites selected, and the requirements of the local jurisdiction in which the array(s) are located. The permit requirements associated with any particular site will be considered as part of the site selection process, in order to minimize regulatory delays and expenses. Within the metropolitan area the array site must be consistent with both the local government's comprehensive plan and the zoning ordinance. The solar energy array will be a principal use, and few local governments have incorporated solar arrays as a principal use into their zoning code. The project team will have early discussions with local officials during the site selection process to identify the process and time frame for regulatory approvals.

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2.1.4 Electrical Generation

Nameplate capacity = 1 MW DC (~770 kW AC)

The energy delivered to Xcel during the first year will be approximately 1,224,178 kWh according to PVWatts.

We will work with Xcel Energy on a Power Insertion Assessment which will determine the construction site for the array to ensure that the energy produced is consumed within the immediate proximity.

Estimated total kWh to be generated and delivered annually over the 15 years that follow the initial commercial operation of the proposed facility is as follows. Note: This assumes a degradation of the array's production of 0.5% per year for the first 15 years. CEC's maintenance plan will ensure that production will never drop below 80% of the nameplate capacity for the life of the solution.

Estimated Annual Results		
	Solar	AC
	Radiation	Energy
Year	(kWh/m²/day)	(kWh)
1	4.54	1,224,178
2	4.54	1,218,057
3	4.54	1,211,967
4	4.54	1,205,907
5	4.54	1,199,877
6	4.54	1,193,878
7	4.54	1,187,909
8	4.54	1,181,969
9	4.54	1,176,059
10	4.54	1,170,179
11	4.54	1,164,328
12	4.54	1,158,506
13	4.54	1,152,714
14	4.54	1,146,950
15	4.54	1,141,216

Estimated amount of kWh to be generated each month of the year are as follows.

Note: These results are estimates only (based on research using PVWATTS) and will fluctuate depending upon the solar radiation received per year and the location of the physical array.

CEC's maintenance plan will ensure that production will never drop below 80% of the nameplate capacity for the life of the solution.

Estimated Results for Year 1		
	Solar	AC
Month	Radiation	Energy
	(kWh/m²/day)	(kWh)
1	3.39	87,691
2	4.49	101,498
3	4.42	107,686
4	5.25	116,730
5	5.48	120,708
6	5.75	119,212
7	5.70	120,836
8	5.34	114,402
9	4.93	105,436
10	4.13	94,807
11	2.85	65,198
12	2.79	69,974
Year	4.54	1,224,178

Estimated Results for Year 3		
	Solar	AC
Month	Radiation	Energy
	(kWh/m²/day)	(kWh)
1	3.39	86,816
2	4.49	100,486
3	4.42	106,612
4	5.25	115,566
5	5.48	119,504
6	5.75	118,023
7	5.70	119,631
8	5.34	113,261
9	4.93	104,384
10	4.13	93,861
11	2.85	64,548
12	2.79	69,276
Year	4.54	1,211,967

Estimated Results for Year 2		
	Solar	AC
Month	Radiation	Energy
	(kWh/m²/day)	(kWh)
1	3.39	87,253
2	4.49	100,991
3	4.42	107,148
4	5.25	116,146
5	5.48	120,104
6	5.75	118,616
7	5.70	120,232
8	5.34	113,830
9	4.93	104,909
10	4.13	94,333
11	2.85	64,872
12	2.79	69,624
Year	4.54	1,218,057

Estim	Estimated Results for Year 4		
	Solar	AC	
Month	Radiation	Energy	
	(kWh/m²/day)	(kWh)	
1	3.39	86,382	
2	4.49	99,983	
3	4.42	106,079	
4	5.25	114,988	
5	5.48	118,906	
6	5.75	117,433	
7	5.70	119,033	
8	5.34	112,695	
9	4.93	103,862	
10	4.13	93,392	
11	2.85	64,225	
12	2.79	68,930	
Year	4.54	1,205,907	

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Estim	Estimated Results for Year 5		
	Solar	AC	
Month	Radiation	Energy	
	(kWh/m²/day)	(kWh)	
1	3.39	85,950	
2	4.49	99,483	
3	4.42	105,548	
4	5.25	114,413	
5	5.48	118,312	
6	5.75	116,846	
7	5.70	118,437	
8	5.34	112,131	
9	4.93	103,343	
10	4.13	92,925	
11	2.85	63,904	
12	2.79	68,585	
Year	4.54	1,199,877	

Estimated Results for Year 7		
	Solar	AC
Month	Radiation	Energy
	(kWh/m²/day)	(kWh)
1	3.39	85,093
2	4.49	98,491
3	4.42	104,496
4	5.25	113,272
5	5.48	117,132
6	5.75	115,680
7	5.70	117,256
8	5.34	111,013
9	4.93	102,312
10	4.13	91,998
11	2.85	63,266
12	2.79	67,901
Year	4.54	1,187,909

Estim	Estimated Results for Year 6		
Month	Solar Radiation (kWh/m ² /day)	AC Energy (kWh)	
1	3.39	85,521	
2	4.49	98,986	
3	4.42	105,021	
4	5.25	113,841	
5	5.48	117,720	
6	5.75	116,261	
7	5.70	117,845	
8	5.34	111,570	
9	4.93	102,826	
10	4.13	92,460	
11	2.85	63,584	
12	2.79	68,242	
Year	4.54	1,193,878	

Estimated Results for Year 8								
	Solar	AC						
Month	Radiation	Energy						
	(kWh/m²/day)	(kWh)						
1	3.39	84,667						
2	4.49	97,998						
3	4.42	103,973						
4	5.25	112,705						
5	5.48	116,546						
6	5.75	115,102						
7	5.70	116,670						
8	5.34	110,457						
9	4.93	101,801						
10	4.13	91,538						
11	2.85	62,950						
12	2.79	67,561						
Year	4.54	1,181,969						
Estimated Results for Year 9								
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	Solar	AC						
Month	Radiation	Energy						
	(kWh/m²/day)	(kWh)						
1	3.39	84,244						
2	4.49	97,508						
3	4.42	103,453						
4	5.25	112,142						
5	5.48	115,963						
6	5.75	114,526						
7	5.70	116,086						
8	5.34	109,905						
9	4.93	101,292						
10	4.13	91,080						
11	2.85	62,635						
12	2.79	67,224						
Year	4.54	1,176,059						

Estimated Results for Year									
11									
Month	Solar Radiation (kWh/m²/day)	AC Energy (kWh)							
1	3.39	83,404							
2	4.49	96,536							
3	4.42	102,421							
4	5.25	111,023							
5	5.48	114,807							
6	5.75	113,384							
7	5.70	114,928							
8	5.34	108,809							
9	4.93	100,281							
10	4.13	90,172							
11	2.85	62,010							
12	2.79	66,553							
Year	4.54	1,164,328							

Estir	Estimated Results for Year									
	10									
	Solar	AC								
Month	Radiation	Energy								
	(kWh/m²/day)	(kWh)								
1	3.39	83,823								
2	4.49	97,021								
3	4.42	102,936								
4	5.25	111,581								
5	5.48	115,384								
6	5.75	113,954								
7	5.70	115,506								
8	5.34	109,356								
9	4.93	100,785								
10	4.13	90,625								
11	2.85	62,322								
12	2.79	66,887								
Year	4.54	1,170,179								

Estir	Estimated Results for Year									
	12									
	Solar	AC								
Month	Radiation	Energy								
	(kWh/m²/day)	(kWh)								
1	3.39	82,987								
2	4.49	96,053								
3	4.42	101,909								
4	5.25	110,468								
5	5.48	114,233								
6	5.75	112,817								
7	5.70	114,354								
8	5.34	108,265								
9	4.93	99,780								
10	4.13	89,721								
11	2.85	61,700								
12	2.79	66,220								
Year	4.54	1,158,506								

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Estimated Results for Year									
13									
Month	Solar Radiation (kWh/m²/day)	AC Energy (kWh)							
1	3.39	82,572							
2	4.49	95,573							
3	4.42	101,400							
4	5.25	109,916							
5	5.48	113,661							
6	5.75	112,253							
7	5.70	113,782							
8	5.34	107,724							
9	4.93	99,281							
10	4.13	89,272							
11	2.85	61,392							
12	2.79	65,889							
Year	4.54	1,152,714							

Estimated Results for Year									
15									
Month	Solar Radiation (kWh/m²/day)	AC Energy (kWh)							
1	3.39	81,748							
2	4.49	94,619							
3	4.42	100,388							
4	5.25	108,819							
5	5.48	112,528							
6	5.75	111,133							
7	5.70	112,647							
8	5.34	106,649							
9	4.93	98,291							
10	4.13	88,382							
11	2.85	60,780							
12	2.79	65,232							
Year	4.54	1,141,216							

Estir	Estimated Results for Year									
	14									
Month	Solar Radiation (kWh/m²/day)	AC Energy (kWh)								
1	3.39	82,159								
2	4.49	95,095								
3	4.42	100,893								
4	5.25	109,366								
5	5.48	113,093								
6	5.75	111,691								
7	5.70	113,213								
8	5.34	107,185								
9	4.93	98,785								
10	4.13	88,826								
11	2.85	61,085								
12	2.79	65,560								
Year	4.54	1,146,950								

The average estimated energy production is shown below on an hourly basis. Compare these can be compared to Xcel's on-peak and off-peak hours, so as to determine where the energy can be most effectively utilized. Note that these percentages will vary and fluctuate depending upon the time of year and atmospheric conditions such as cloud cover, snow fall, etc.

Estimated Production							
Per Hour							
7:00 AM	0.08%						
8:00 AM	3.41%						
9:00 AM	8.42%						
10:00 AM	12.19%						
11:00 AM	13.96%						
12:00 PM	16.63%						
1:00 PM	14.38%						
2:00 PM	12.95%						
3:00 PM	8.03%						
4:00 PM	6.16%						
5:00 PM	3.69%						
6:00 PM	0.08%						

Furthermore, the on-peak demand months for Xcel are June through September according to the MN Electric Rate Book – MPUC NO. 2 found at:

www.xcelenergy.com/staticfiles/xe/Regulatory/Regulatory%20PDFs/Me_Section_5.pdf.

This means that, on average, **38%** of the overall energy produced by the solar array will occur during on-peak months for Xcel energy.

The specific breakdown is shown below:

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Production Months							
	Solar	Percent					
Month	Radiation	of					
	(kWh/m²/day)	Production					
1	3.39	7%					
2	4.49	8%					
3	4.42	9%					
4	5.25	10%					
5	5.48	10%					
6	5.75	10%					
7	5.70	10%					
8	5.34	9%					
9	4.93	9%					
10	4.13	8%					
11	2.85	5%					
12	2.79	6%					
Year	4.54	100%					

The system will be operated and maintained under contract for a period of 40 years to achieve maximum production over the life of the system.

- Estimated Annual Energy Production: 1,224,178 kWh
- Expected Accredited Capacity: 770kW (AC)
- Installed Cost/kW: \$4,600 (including maintenance reserves, all customer contracting and management, billing information, sales, marketing and lifetime administration and operations)
- Energy Production On Peak 38%
- Energy Production Off Peak 62%

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2.2 Project Team

Minnesota Renewable Energy Society (MRES)

The Minnesota Renewable Energy Society (MRES) is a member-run, 501(c)(3) non-profit organization founded in Minneapolis in 1978 and incorporated in Minnesota in 1979 to promote the use of, and to engage in advocacy for, renewable energies in Minnesota through education and through the demonstration of practical applications. MRES is involved in education, awareness, and advocacy efforts for all forms of renewable energy, with a particular emphasis on solar technologies.

MRES will serve as the grant manager and administrator under the guidance of Managing Director Laura Cina. She has been with MRES for four years and has managed many different grant funded projects including the Minnesota piece of the federally funded, multi-year, Midwest Solar Training Network project, the MN Solar Challenge in partnership with the MN Department of Commerce and many other successful projects. Many of the projects she has worked on have been in partnership with Brian Ross of CR Planning. Laura has also managed two separate solar bulk purchasing projects that involved managing installers, site assessors and structural engineers as well as recruiting customer participation through workshops and events.

CR Planning

CR Planning is a frequent collaborator with MRES, currently working with MRES on the Minnesota Solar Challenge project providing local government outreach and technical assistance. Brian Ross, Principal, has extensive experience in energy policy, planning and zoning, and solar energy technologies. He served as program manager for the Minneapolis Saint Paul Solar Cities program from 2008 - 2012. He has worked closed with many metropolitan area cities, including Minneapolis and Saint Paul, on solar energy planning, zoning, and permitting. He also works nationally on solar energy development issues for local governments. Brian is closely familiar with Minnesota regulatory processes and the ongoing statewide discussion on community solar, net metering, and policy alternatives being considered that might affect the community solar pilot.

Brian will assist MRES in technical elements of site selection, the siting process, working with local and regional governments, and in other facets of implementing the project.

Clean Energy Collective

CEC's expertise in community solar management is unparalleled in the nation, having already implemented many MW of community solar programs spanning 9 utilities currently under design or construction (17 projects in all). Furthermore, CEC has already worked extensively with Xcel Energy on community solar projects in the state of Colorado proving that the model is viable and the program highly successful. CEC has been identified as having the only scalable and replicable community solar program that maximizes customer benefits in the country in addition

to winning the Department of Energy's 2011 Innovative Green Power Program of the Year Award.

2.3 Final Project Reporting

MRES will ensure that the final project findings and conclusions to the RDF advisory group are presented and provide public access to information and findings from project activity including but not limited to; executive summary of the project, the methodology used for the project, the project benefits, lessons learned, an evaluation of the project's financial, environmental, and other benefits to the state and the public utility's ratepayers. This report will acknowledge that the project was made possible in whole or part by the Minnesota Renewable Development Fund, noting that the fund is financed by the public utility's ratepayers.

Section 3 – Project Benefits

3.1 Economics

According to 13 different studies renewable energy both has significant positive impact on employment and creates more overall jobs per megawatt than a coal plant. Upfront, in the first one to two years, a 1MW solar installation will create about 33 jobs for a short term period of time in construction, manufacturing and installation positions. ¹ The ongoing physical maintenance for a 1MW Community Solar installation and the management of customers and escrow account will create one long term job per year for the next 25 to 30 years. The community solar program in Colorado sold out 9 MW in 30 minutes. With the correct awareness campaign, there is no reason to see any less demand from Minnesotans. After this program is launched MRES and CEC expect to see commercial scale community solar projects, and the jobs associated with them, grow exponentially in Minnesota.

3.2 Environmental

A 1 MW solar power plant has the capacity to generate more than 1,500 MWh of electricity per year, which would require the equivalent of approximately 830 tons of coal to be generated by traditional US grid sources or roughly enough energy to power 3,700 U.S. homes for one year.

This project would offset more than 47 million pounds of carbon dioxide over the next 20 years, which is roughly the equivalent of taking 4,600 cars off the road for one year. A reduction in the amount of carbon dioxide in the air is beneficial to Minnesota and Wisconsin ratepayers as it will decrease the likelihood of experiencing the ill effects of climate change, which is being caused by the growing amount of carbon dioxide in the Earth's atmosphere. The process of burning coal for energy produces greenhouse gases and other harmful pollutants, including carbon dioxide, mercury compounds, sulfur dioxide and nitrogen oxides. Per unit of electricity, coal produces

¹ Putting Renewables to work: How many jobs can the clean energy industry generate? Kammen, Kapadia and Fripp, 2004, University of California, Berkeley.

more pollution than any other fuel source, according to the U.S. Environmental Protection Agency.²

This type of pollution from coal plants not only increases the effects of climate change but also impacts the health of Minnesota and Wisconsin ratepayers. The American Lung Association of the Upper Midwest (ALA-UM) supports the use of clean energy, such as solar power, wind energy and geothermal energy technologies; these sources of energy can greatly reduce the amount of unhealthy air pollution released into the atmosphere each year.³

Additionally, the installation could save between 1.1 million and 1.6 million gallons of water needed for equivalent, conventional electrical generation. This is a savings of a limited natural resource that should be considered as well.

3.3 Xcel Energy Electric Ratepayers

First, this project will benefit to Xcel Energy ratepayers by developing best practices around community solar gardens in Minnesota and by making those best practices public knowledge. Future community solar entrepreneurs will spring up from this experience. This project will be the first community solar project in Xcel Energy territory, and only the second community solar project in the State. The first community solar project in the state is a project of 40 kW brought about by Wright Hennepin Utility and managed by CEC. Since the MRES project would be the first of its kind in Xcel Energy territory working towards smart solutions for issues that could arise with the utility, with land leasing issues and with public awareness will be the mission of this pilot project. We will overcome any barrier through partnership with Xcel Energy, access to knowledgeable consultants, MRES Board Members and through the extensive outreach capabilities that only an organization like ours could offer.

With these best practices in hand MRES hopes to start a new flood of Community Solar arrays being built across the State. This new and innovative idea, once proven and shown successful here in Minnesota, could grow in scale to fit the demands of the ratepayers and could help fulfill the goals set by State for the growth of renewable energy use in MN. CEC has already indicated interest in pursuing more community solar projects in Minnesota once this one is sold out. Some local installers are building their own legal structure to allow for group panel ownership. These developments indicate increasing market competiveness in the solar industry. Installers of individual residential and small scale commercial systems will need to become even more competitive to compete with the low cost that a large installation of community solar could provide due to the economies of scale and cooperative nature. This competition would lead to even lower prices for small scale solar and ratepayers.

Ratepayers that choose to participate in the program will receive the very direct benefit of low cost renewable energy, beyond the indirect benefit to all ratepayers of increased market competition. This project will provide customers a subsidized price for their subscription in this Community Solar Garden thanks to the Renewable Development Fund. The current estimate of \$1.62 a watt is the lowest seen around the country for community solar.

² U.S. Environmental Protection Agency; Glossary -- Coal; December 2007

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Section 4: Use of Project Funds

4.1 Project Budget

The Project Budget attached is based on staffing a half time person at \$20 an hour the first year with a \$1.00 an hour raise every year after that for three years. The10% fringe rate is to cover workers compensation, insurance and taxes. Due to being a small organization, MRES has a fairly low Indirect Rate of 10% to cover general administration and expenses such as phones, accounting, legal and IT support. We have reserved some funds for the last year to developing the best practices and distributing that information publicly through public presentations with interested groups and conferences within Minnesota and nationally. Please find the project budget at the end of this proposal.

4.2 Project Cost Narrative

Community Solar is a not only a new and developing concept to Minnesota, but also across the country. Pursuing community solar will put Minnesota ahead of the curve in the solar market by opening up a new type of ownership possibility to the large market formerly unable to participate. This pilot project will help develop this new business model and help make it successful in our State, with our utilities, our regulations and our local governments that are all unique to Minnesota. If successful, this community solar project will draw new businesses here and with it new jobs, making this funding very beneficial to ratepayers.

CEC will be providing the upfront costs, staff time, legal support for the sale of the panels and negotiations with Xcel Energy. They have committed to covering all other expenses not covered by the funding as described in energy pricing narrative below. CEC will recoup their investment by selling panels to subscribers. They have a vested interest in seeing this project succeed in Minnesota and hope to conduct future business here.

An explanation for the RDF funded and cost sharing items in the budget spreadsheet are as follows:

Subcontractors

Brian Ross of CR Planning will serve on the project team as a siting expert as well as a general consultant. His rates are \$100 an hour and will work an estimated 1500 hours in year one and 1000 hours in year two for a total of \$25,000.

Hire an attorney at \$250 an hour to assist MRES with the contract to hire a turn-key services provider for 40 hours for a total of \$10,000 in year one.

EPC labor to construct the array - \$840,000

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CEC shared costs

Pre-development - \$80,000

Sales - \$210,000 (expectation is \$100,000 year 1, \$110,000 year 2)

Facilities - Operation & Maintenance (O&M) seed funding - \$300,000

Financing - \$90,000

Community solar infrastructure (securities, tax, and consumer protection compliance) - \$75,000 year 1, \$40,000 year 2

CEC Project oversight wages, fringe and travel - \$100,000

Other direct costs include pre-development, general conditions, labor, design, engineering, land siting, permitting & approval, wiring, interconnection with Xcel, sales & marketing for the panels, O&M trust fund, long-term tax reporting and administration, ownership registration to comply with securities laws, etc. These costs are all highly variable and can/will affect the overall cost projections. For the purposes of this proposal, CEC has not yet worked with Xcel to conduct a Power Insertion Analysis and therefore cannot provide an accurate quote on those costs as part of this proposal. However, provided the requested funds are awarded for this project, CEC will agree under contract to bear any additional costs associated with the creation and maintenance of the array – for all cost overruns.

4.3 Energy Pricing Narrative

With regards to the construction of the community solar array, below are the major costs associated with the equipment.

<u>Equipment</u> Panels - \$864,000 Inverters - \$448,000 Racking - \$320,000

RemoteMeter - \$150,000

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment A 69 of 78

4.3.1 Energy Pricing

This project will sell energy to Xcel at a rate of \$0.07 / kWh under a PPA, which shall be paid via an on-bill credit to the Xcel consumers that choose to participate in this program. The PPA does not permit excess credits on a long-term basis by any individual consumer of Xcel. The \$0.07 rate shall inflate yearly to match Xcel's retail energy inflation and the PPA shall be for 20 years with subsequent auto-renewal provisions for up to an aggregate of 40 years or 50 years (the full life of the project).

The grant requested by MRES is used to directly lower the cost of the solar panels to result in a successful program with the \$0.07 energy rate. These dollars offset the expenses associated with the project allowing this project to offer Xcel this discounted rate for the power.

Docket No. E002/M-12-1	278
Change in RDF Grant Contract Scope of W	ork

Attachment A

70 of 78

PROPOSED BUDGET SUMMARY

TOTAL CO	TOTAL INDIRECT COSTS		Facilities (if not a direct cost)	Administration	Indirect Costs (Not to Exceed 25%)	TOTAL DIRECT COSTS \$2,460,490 \$1,065,100		Other Direct Costs (explain in narrative)	Workshops	Publicity/Printing/Duplicating	П	Facilities	Construction Materials	Sup	Consultants/Subcontracts	Equip	Fringe Benefits	Salaries and Wages	Direct Costs	Budget Item		
TOTAL COSTS \$2,548,039 \$1,065,100 \$3,613,139	ISTS \$87,549		cost)	ation \$87,549		STS \$2,460,4		tive)	hops	ating \$5,000	Travel	lities \$7,500	rials	Supplies	racts \$865,000	Equipment \$1,560,000	efits \$2,090	ages \$20,900		RDF Sh		
39 \$1,065,1	549			549		190 \$1,065,		\$165,000		000 \$35,000	5(500 \$300,000			000 \$248,100		315,000	900 \$75,000		RDF Share Sharing	Cost	Year One
100 \$3,613,1	\$0 \$87,549			\$87,549		100 \$3,525,590		000 \$165,000		000 \$40,000	5000 \$5,000	000 \$307,500			100 \$1,113,100	\$222,000 \$1,782,000	000 \$17,090	000 \$95,900				ne
39 \$54,296	49 \$4,936		\$0	49 \$4,936		90 \$49,360		00	\$0 \$5,000	00 \$2,000	00	00 \$7,500	\$0	0\$	00 \$10,000	00	90 \$2,260	00 \$22,600		Total Cost RDF Share Sharing		
96 \$210,000	36 \$40,000			36 \$40,000		50 \$170,000		\$40,000	00	315,000	\$5,000	00			50 \$110,000		50	00		re Sharing	Cost	Year Two
0 \$264,296	0 \$44,936		3(0 \$44,936		0 \$219,360		0 \$40,000	\$5,000	0 \$17,000	0 \$5,000	\$7,500	\$0	0\$	0 \$120,000	0\$	\$2,260	\$22,600		Total Cost		0
6 \$44,167	6 \$4,015		0	6 \$4,015		0 \$40,152		0	0 \$5,000	0 \$2,000	0	0 \$7,500	0	0	0	0	0 \$2,332	0 \$23,320		Total Cost RDF Share Sharing		
* \$30,000	\$30,000			5 \$30,000		30	-			<u> </u>		<u> </u>			-		2			e Sharing	Cost	Year Three
\$74,167	\$34,015		0\$	\$34,015		\$40,152		\$0	\$5,000	\$2,000	\$0	\$7,500	\$0	0\$	\$0	0\$	\$2,332	\$23,320		Total Cost		
\$14,818	\$1,347			\$1,347		\$13,471					\$2,000	\$1,875					\$736	\$7,360		RDF Share Sharing		
\$20,000	\$20,000			\$20,000		\$0														Sharing	Cost	Year Four
\$34,818	\$21,347		\$0	\$21,347		\$13,471		\$0	\$0	\$1,500	\$2,000	\$1,875	\$0	0\$	\$0	\$0	\$736	\$7,360		Total Cost		
\$0	\$0					\$0														Share	RDF	
\$20,000	\$20,000			\$20,000		\$0														Sharing	Cost	Year Five
\$20,000	\$20,000		\$0	\$20,000		\$0		\$0	\$0	\$0	\$0	\$0	\$0	0\$	\$0	\$0	\$0	\$0		Total Cost		
\$20,000 \$2,661,320	\$97,847	\$0	\$0	\$97,847		\$2,563,473		\$0	\$10,000	\$10,500	\$2,000	\$24,375	\$0	0\$	\$875,000	\$1,560,000	\$7,418	\$74,180		RDF Share		
\$1,375,100	\$110,000	\$0	\$0	\$110,000		\$1,265,100		\$205,000	\$0	\$50,000	\$40,000	\$300,000	\$0	\$0	\$358,100	\$222,000	\$15,000	\$75,000		Total Cost RDF Share Cost Sharing		TOTAL PROJECT
\$4,036,420	\$207,847	\$0	\$0	\$207,847		\$3,828,573		\$205,000	\$10,000	\$60,500	\$42,000	\$324,375	\$0	0\$	\$1,233,100	\$1,782,000	\$22,418	\$149,180		Total Cost		CT

Budget Year - Indicate annual project costs, itemized by source of funding. Indicate in budget narrative the source of cost sharing. Salaries and Wages - Includes compensation for the time and effort dedicated to the grant. Indicate in budget narrative billing rate and FTE's proportionate to the effort. Fringe Benefits - Includes additional labor costs (i.e. insurance, withholdings, retirement plans, etc.) Summarize benefits in budget narrative. Consultant Services - Indicate costs for professional services (Engineering, Design, Fabrication, etc.) and sub-contracts with vendors.

Publicity/Communications - include provincion www waverance. Administration - Include administrative costs that are not included in Salary and Wages Administration - Include administrative costs that are not included in Salary and Wages Administration - Fourier Review Publicity/Communications - Include promotional costs associated with dissemination of project findings (i.e. conferences)



Office of the Mayor

R.T. Rybak Mayor

350 South 5th Street – Room 331 Minneapolis MN 55415-1393

612	673-2100
612	673-2305
612	673-3187
	612

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March 27, 2013

Mark Ritter Xcel Energy – Renewable Energy Fund 414 Nicollet Mall – GO 7 Minneapolis, MN 55401-1993

Dear Mr. Ritter:

The City of Minneapolis is pleased to provide this letter of support for the Minnesota Renewable Energy Society's (MRES) Renewable Development Fund grant application that would pilot community solar - a solar power installation that lets participants receive an estimated or actual kWh credit for their portion of the installation on their utility bill for the energy subscription they purchased at a one-time cost, while also receiving the 30% federal income tax credit.

We believe this project will ultimately provide lessons that will benefit the entire state. The City is confident that MRES is a strong project lead because of their non-profit status, incredible knowledge within their membership, and their experience working on various state and federal solar grants.

Minneapolis believes the option of community solar would greatly benefit residents by opening up solar ownership to the many people who rent, live in multifamily housing, do not have solar access on their home, or while supportive of solar for various reasons, find the process of installing solar unmanageable. Being a fully built out city with a large urban forest, there are many homes and businesses where solar simply is not feasible on-site. We have had many organizations and residents question why community solar currently is not an option.

Minneapolis is interested in at least one solar installation within the city's geographical boundaries. The City of Minneapolis is willing to help MRES find potential sites and assist in the permitting process. The City can also offer support in promoting the project and educating Minneapolis residents on the community solar concept.

Through the assistance of a federal Solar America Cities grant, Minneapolis, along with our other partners (including Xcel Energy), has been instrumental in improving state and local policy to support the phenomenal growth of solar photovoltaic (PV) capacity. While we have come a long way, Minnesota has only about thirteen megawatts of total solar PV capacity throughout the state. We have our work cut out for us. This proposal can help demonstrate a key way of bringing solar capacity to scale in Minnesota.



www.ci.minneapolis.mn.us Affirmative Action Employer This innovative project is consistent with the City's vision of clean, affordable and local energy supply, most recently articulated in our draft Climate Action Plan. It is also consistent with legislative initiatives to:

- Increase the market penetration of renewable electric energy resources in Minnesota at reasonable costs.
- Promote the start-up, expansion, and attraction of renewable electric energy projects and companies within Minnesota.
- Develop near-commercial and demonstration scale renewable electric projects or near-commercial and demonstration scale electric infrastructure delivery projects if those delivery projects enhance the delivery of renewable electric energy.

If you have any questions, please contact Minneapolis Sustainability Director Gayle Prest at (612) 673-2931 or Gayle.Prest@minneapolismn.gov.

Sincerely,

Mayor R.T. Rybak City of Minneapolis

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment A 73 of 78

Paulson Law Office, Ltd. 4445 W. 77th Street Suite 224 Edina, MN 55435-5135

> Telephone (952)835-0055 Facsimile (952)835-2984 e-mail jeff.jcplaw@comcast.net

March 8, 2017

Mark Ritter RDF Grant Administrator 414 Nicollet Mall, 7th Floor Minneapolis, MN 55401

Re: RDF Grant Contract No. EP4-15 Notice of Potential Changes in RDF Grant Contract Project

Dear Mr. Ritter:

Minnesota Renewable Energy Society ("MRES"), the Contractor in the above RDF Grant Contract, through its developer, Greenway Solar, LLC, hereby notifies Northern States Power Company ("NSP") of the following potential and requested changes to the Project and Grant Contract terms. The reasons for each proposed change are set forth below.

<u>Background</u>. The grant awarded with respect to the above Grant Contract is meant to support development and operation of a community solar garden (CSG) with both a rural and urban component ("Project"), with the experience of development and operation being used more generally with respect to additional potential CSGs for NSP. Since the grant award, NSP has been required to implement a large community solar garden program, and after substantial effort, NSP has devised and implemented all applicable program details and hundreds of megawatts are under development. In hearings last year before the Minnesota Public Utilities Commission ("MPUC"), comments were received noting that such projects were largely not attracting low-income subscribers, and NSP was directed to explore opportunities to improve access of such customers to CSGs. Rather than simply replicate CSG program details which NSP has already created, MRES proposed to dedicate the Project to low-income subscribers and to focus programmatic research on the aspects of CSGs which most affect low-income participation and benefits. Page 2

In addition, the original developer for the Project proved to be unwilling to operate on reasonable economic terms. MRES instead contracted with Greenway Solar, LLC ("Greenway") to finish development and arrange financing, including tax equity financing needed for financial viability. Greenway identified and leased a rural site east of Northfield and an urban site at 4600 Lyndale Avenue North, Minneapolis, to host the Project. Each site was submitted to NSP's SRC program as a CSG project prior to December 31, 2016. Interconnection applications have been submitted to NSP as well.

1. <u>Project Schedule</u>. The decision to utilize the existing SRC CSG process for both arrays in the Project means that the schedule for interconnection and SRC approval is largely driven by the SRC and interconnection timelines for processing. An initial response to our interconnection application is due in February, followed by such studies as are required by NSP. While we will be obtaining a conditional use permit for the Northfield array and otherwise preparing for construction of each portion of the Project, until interconnection studies are done, agreements executed, and NSP's interconnection construction schedule determined, we will not be able to actually commence physical construction. Based on other projects in the SRC interconnection queue, we do not expect the interconnection process to be completed to allow construction for perhaps seven months at the Minneapolis site and may be longer in Northfield.

As a result, we propose to amend the Project construction schedule to provide for completion four months after the dates scheduled by NSP (in its capacity as interconnection provider) for completion of its interconnection work at the respective site, as established in the applicable interconnection agreement. We will keep NSP apprised of progress in interconnection studies, agreements and construction.

A revised Exhibit B showing a Contract Path Schedule with updated milestones and time periods will be provided. In addition, in the Milestones, Deliverables and Allowed Grant Payments exhibit, references in the last sentence under each of milestone 1 and milestone 2 would be revised to reflect "completion within four months after NSP's scheduled interconnection completion", and under milestone 3 the reference to "27 months" in the last sentence would be revised to "36 months".

2. Low-Income Subscribers/Use of CSG Program.

MRES proposes to process each portion of the Project as a separate CSG under NSP's SRC program. Low-income customers would be the primary focus of subscriber recruitment, either through direct residential subscriptions, or indirectly through subscriptions with owners of low-income housing. Instead of a PPA at wholesale with NSP, the Project would enter into the standard SRC contract for each location, and subscribers would be eligible to receive bill credits from NSP at ARR rates applicable to their customer class. Subscription payments for subscribers to the Project would be set at a substantial discount to the ARR, offering meaningful benefits to subscribers. Page 3

NSP has taken the position that the estimated differential between Bill Credit value and the expected PPA price under the original grant award needs to be funded from the grant proceeds. Using 2016 ARR rates as reflected in prior emails, the NPV of the differential was approximately \$1,366,901, leaving a grant balance available to MRES for construction and development of the Project of \$1,283,099. The grant contract needs to be revised accordingly. We have attached a revised Exhibit C (Budget) based on the revised amounts and updated pricing for Project elements.

3. <u>Financing Structure</u>. Especially with the reduced grant funds available for development and construction costs, it will be critical to capture the value of the tax credits available to solar facilities under Section 48 and other sections of the Internal Revenue Code. To accomplish this, we propose to have the Project owned by Greenway Solar, LLC (the developer) whose member(s) can utilize the tax benefits from the Project. Greenway Solar, LLC is a Minnesota limited liability company formed to develop and own the Project. Greenway has an agreement with MRES to develop, own and operate the Project, while MRES retains responsibility for RDF grant compliance. Greenway has funded all development and construction activities since last spring and will continue to do so.

To effectuate this arrangement, we request the use of the "IPS" model previously approved by NSP and its regulators for RDF projects wishing to capture such tax benefits.

Thank you for your consideration.

Yours truly,

Jeffrey C. Paulson

JCP/pat

cc: MRES Greenway

EXHIBIT B CRITICAL PATH SCHEDULE

Minnesota Renewable Energy Society Critical Path Schedule (EP4-15)

		Project Schedule (Quarters) - 2017														
Tas	Task Description	Q1			Q2			Q3			Q4			Q5		
1 A	greements/Financing	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1.	1 Power Purchase Agreement	3.30		24573	Con the	1										
1.	2 Secure Financing															
1.	3 Interconnection Agreement															
1.	4 Conditional use agreements															
2 D	esign	1				land the second										
2.	1 Site analysis		ful of													
2.	2 Prepare facility design				12281											
2.	3 Prepare facility specifications			the second	3.6											
3 P	rocurement	_					_									
3.	1 Identify suppliers				A STATE	10.01-255 										
3.	2 Order PV panels/equipment															
3.	3 Delivery of PV panels/equipment							a she								
4 P	ermitting															
4.	1 Zoning permits					100	-18									
4.	2 Construction/ building permits															
4.	3 Environmental review		N/A													
4.	4 On-site safety plan															
4.	5 Construction contract							Salar I								
5 C	onstruction															
5.	1 Site Preparation															
5.	2 Construction and assembly							24 20		- Delta	ELS.					
5.	.3 System testing															
5.	.4 Commission PV facility												1			
5.	.5 On-site demonstration															
5.	.6 Presentation to RDF advisory group												To they			

Construction start contingent on NSP interconnection work

EXHIBIT C BUDGET, PROJECT PAYMENT MILESTONES AND DELIVERABLES

	1						
Budget Item		F Share	Co	st Sharing	Total Cost		
Direct Costs						1'	
Salaries and Wages	\$	109,450	\$	43,500	\$	152,950	
Fringe Benefits	\$	-	\$	-	\$	-	
Equipment	\$	684,960	\$	322,100	\$	1,007,060	
Consultants/Subcontracts	\$	430,387	\$	202,500	\$	632,887	
Supplies	\$	12,675	\$	-	\$	12,675	
Construction Materials	\$	-	\$	-	\$	-	
Permitting and interconnection	\$	43,265	\$	20,360	\$	63,625	
Travel	\$	-	\$	-	\$	-	
Publicity/Printing/Duplicating	\$	-	\$	-	\$	· _	
Workshops	\$	-	\$	-	\$	· _	
Garbage/Recycling	\$	2,363	\$	-	\$	2,363	
TOTAL DIRECT COSTS		\$1,283,100		\$588,460		\$1,871,560	
Indirect Costs		2017) 11					
Administration		\$0		\$0		\$0	
Facilities (if not a direct cost)						\$0	
Indirect Rate (%)					ð . :	\$0	
TOTAL INDIRECT COSTS		a					
TOTAL COSTS	sa	\$1,283,100		\$588,460		\$1,871,560	

FIRST AMENDED AND RESTATED GRANT CONTRACT

Schedule 11 Exceptions to Contractor's Representations EP4-15

- 1. Contractor represents, warrants and covenants that it has entered or will enter into all contracts or agreements, in a form satisfactory to NSP, necessary for the services, supplies, materials, equipment, and other products necessary for performance of the Project and qualified suppliers and will promptly pay and discharge all such obligations upon receipt of conforming goods and services provided for the Project.
- 2. Contractor represents, warrants and covenants that it has obtained or will obtain all necessary permits, orders, authorization or any other necessary permission in place for the performance of this Grant Contract, including, but not limited to, emissions permits, transportation permits, conditional use permits, and waste permits.
- 3. Contractor and any contractors employed by Contractor for purposes of this Project will maintain the liability coverage required by Exhibit F hereof and any other insurance required for the Project and name Xcel Energy Inc. and all subsidiaries thereof and the RDF advisory group as additional insureds, even if not maintained at the time of execution of the Grant Contract. Contractor agrees to promptly notify NSP of any notice of cancellation received from the current insurer or Contractor or any of Contractor's contractors and who the replacement insurer will be without allowing any gap or lapse in such insurance. Contractor will provide copies of proof of any contractor's insurance within fifteen (15) days of any request for such proof made by NSP after the Grant Contract Start Date.

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 1 of 44

GRANT CONTRACT TERMS AND CONDITIONS <u>EP4-15</u> [PRODUCTION]

THIS GRANT CONTRACT is made this ______ day of ______, 20___, 2017, by and between Northern States Power Company, a Minnesota corporation ("NSP"), with its principal place of business at 414 Nicollet Mall, Minneapolis, Minnesota 55401 and the Minnesota Renewable Energy Society, Inc. ("Contractor"), a Minnesota nonprofitnon-profit corporation, with its principal place of business at 2928 Fifth Avenue South, Minneapolis, MN 55408. NSP and Contractor are sometimes individually referred to as a "Party" or collectively as the "Parties".

WHEREAS, Contractor intends to design, build, own-and operate an electric generating facility project, on behalf of a third party project owner, Greenway Solar, LLC, a Minnesota limited liability company ("Greenway"), to be located within the vicinity of Xcel Energy's Minnesota service area, consisting of at least two generators with a total nameplate capacity of not more than 1.0 megawatts ("MWs"), which will be interconnected with NSP's electric system and will produce renewable energy which may be sold to NSP. A description of the Project, which is the subject of this Grant Contract, is provided in this Grant Contract and Exhibits hereto;

WHEREAS, NSP and Contractor intend to fund the Contractor's electric generating Project utilizing Renewable Development Fund ("RDF") grant funds pursuant to Minnesota Statutes Section 116C.779 in accordance with the terms and conditions of this Grant Contract and Exhibits hereto; and

WHEREAS, Contractor may choose to enter into a power purchase agreement with NSP for the sale of the output of such facility or choose to otherwise utilize the output from the generating facility all as more fully described in the applicable Renewable Development Fund Request for Proposals.

WHEREAS, the Contractor has determined that while it intended to be able to lease the Project to a third party for purposes of utilizing federal investment tax credits associated with the operation of the solar photovoltaic installation portion of the Project, the only mechanism available at this time for this Project is to partner with a third-party owner, requiring changes to the grant contract originally effective between the Parties as of February 19, 2015, and amended on December 1, 2015, April 21, 2016, and January 30, 2017 ("Original Grant Contract").

WHEREAS, since the time the Contractor submitted its proposal, the Minnesota Public Utilities Commission has approved the tariff and application requirements for the Xcel Energy Solar*Rewards Community® program ("SRC Program"), setting the rate for community solar gardens, like the Project. Contractor has elected to participate in the SRC Program. To account for the change between the amount included in Contractor's Approved Proposal (Exhibit J) and the bill credit under the SRC Program, while maintaining the same total resource cost for the Project, Contractor and NSP have agreed to a reduction in the RDF grant amount under the Original Grant Contract pavable to Contractor to the amount set forth in this Grant Contract.

WHEREAS, the Parties desire to amend and restate the Original Grant Contract to allow the Contractor, as part of the Project, to partner with a third-party owner of the Project for the purpose of being able to utilize tax credits associated with the operation of the Project.

NOW, THEREFORE, in consideration of the premises and mutual obligations set forth herein, the Parties agree as follows:

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 2 of 44

1. DEFINITIONS

- A. **Contractor** has the meaning set forth in the opening paragraph of this Grant Contract.
- B. Date.
 - Grant Contract Start Date shall be the date first listed above, the date on which the Department of Commerce completes its compliance review of the Grant Contract identifying no issues that require action by the Minnesota Public Utilities Commission, or the date the Minnesota Public Utilities Commission approves the Grant Contract, whichever occurs later.
 - 2) **Grant Contract End Date** is the last date reimbursable expenses can be incurred, and shall be the earliest of 1) completion of the Project; 2) the Scheduled Completion Date indicated on Exhibit C; or 3) the date on which the Grant Contract has been terminated in accordance with this Grant Contract.
- C. *Facility* is the physical generator and all appurtenant equipment and facilities necessary for the production of energy and capacity and delivery of such energy and capacity that is being developed, constructed and placed into service as part of the Project.
- D. **Project** refers to the scope of work arising from the selected proposal as described in Exhibit A. The scope of work to be included in Exhibit A is derived from the scope of work described in the proposal. Exhibit A may be modified only by mutual agreement between authorized representatives of both Parties.

E. Terms Relating to Data

1) Technical Data or Data as used in this Grant Contract means recorded information regardless of form or characteristic, of a scientific or technical nature. It may, for example, document research; document experimental, developmental, demonstration, or engineering work; or be usable or used to define a design or process; or to procure, produce, support, maintain, or operate material. The Data may be graphic or pictorial delineation in media such as drawings or photographs, test specifications or related performance or design type documents or computer software (including computer programs, computer software databases, and computer software Examples of Technical Data include manufacturing documentation). techniques and methods, machinery, devices such as tools, products, or components, research and engineering, engineering drawings and associated lists, specifications, engineering calculations, standards, process sheets, manuals, technical reports, catalog item identification, and related information. Technical Data as used herein does not include financial reports, cost analyses and other information incidental to Grant Contract administration.

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 3 of 44

- 2) **Business Information** is information about the operation of a specific business. It includes information concerning the cost and pricing of goods, supply sources, cost analyses, characteristics of customers, books and records of the business, sales information including mailing lists, customer lists, business opportunities, information regarding the effectiveness and performance of personnel, and information incidental to Grant Contract administration.
- 3) **Public Information** is information previously published, generally available from more than one source, or information in the public domain. All air monitoring and emission Data included in a proposal or requested through a Grant Contract are public information.
- 4) **Confidential Information** is Technical Data or Business Information Contractor has satisfactorily identified, which is not otherwise public and which the Parties agree is appropriately treated as confidential.
- 5) **Proprietary Data** is such Data Contractor has identified in a satisfactory manner as being under Contractor's control prior to commencement of performance of this Grant Contract or produced by Contractor or its subcontractors at its own expense, and which Contractor has reasonably demonstrated as being of a proprietary nature either by reason of copyright, patent or trade secret doctrines in full force and effect at the time when performance of this Grant Contract is commenced.
- 6) **Trade Secret** is any formula, plan, pattern, process, tool, mechanism, compound, procedure, source code, software, database, production Data, or compilation of information which is not patented and which is generally known only to certain individuals with a commercial concern who may be using it to fabricate, produce or compound an article of trade or a service having commercial value and which gives its owner or user an opportunity to obtain a business advantage over competitors who do not know or use it.
- 7) Generated Data is that Data that Contractor collects, collates records, deduces, reads out or postulates for use in the performance of this Grant Contract. In addition, any electronic Data processing program, model or software system developed or substantially modified by Contractor in the performance of this Grant Contract using RDF funds, together with complete documentation thereof, shall be treated as Generated Data.
- 8) **Deliverable Data** is that Data which, under the terms of this Grant Contract, is required to be delivered to NSP.
- F. **Project Manager** shall be designated by the Contractor as the administrator of the Project, and who will be responsible, on behalf of Contractor, for managing the completion of task deliverables and milestones as set forth in Exhibit C. Project Manager is also the designate to be noticed as provided in Exhibit D.

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 4 of 44

- G. *Proposal* shall mean Contractor's proposal as approved by the Commission and attached hereto as Exhibit J.
- H. **Renewable Development Fund Advisory Group** or **Advisory Group** shall mean the current advisory group to the Renewable Development Fund as constituted from time to time.

Certain other terms are defined elsewhere in this Grant Contract.

2. CONTRACT TERM

The term of this Grant Contract shall be from the Contract Start Date to the Contract End Date. This Grant Contract is of no force or effect until it has been signed by both Parties. In the event that the Project has not been completed within three (3) years of the originally scheduled Contract End Date, this Grant Contract shall automatically be terminated, subject to the provisions of Section 16 hereof, and further subject to the rights of NSP hereunder to exercise all rights and remedies hereunder for any Event of Default by Contractor that may have occurred prior thereto at any time as permitted by this Grant Contract. Contractor and NSP acknowledge that this Grant Contract shall be effective as of the Original Grant Contract Start Date but that any obligation to disburse grant funds remains subject to NSP's receipt of all jurisdictional regulatory approvals of this Grant Contract.

3. PAYMENTS TO CONTRACTOR

Subject to the conditions in this Grant Contract and Exhibits hereto, NSP agrees to reimburse Contractor for actual and allowable expenses incurred in accordance with Exhibit C subject to the limitations herein and therein, and the milestone progress or final payment limitations in Exhibit C. The total amount of this Grant Contract shall not exceed the maximum grant amount stated in Exhibit C or Contractor's total actual and allowable costs, whichever is less-, and reimbursable expenses shall not have been incurred prior to the Original Grant Contract Start Date.

- A. A request for payment shall consist of:
 - 1) An invoice that lists actual and allowable expenses incurred up to the milestone payment amounts indicated in Exhibit C; and
 - 2) Substantiation of such expenses in a form reasonably acceptable to NSP; and
 - 3) Documentation of the deliverables as detailed in Exhibit C satisfactory to NSP.
 - 4) Each request for payment shall constitute a representation and warranty by Contractor that: (a) all representations and warranties set forth in this Grant Contract remain true and correct in all material respects, (b) Contractor has complied with all obligations contained in this Agreement through the date of the request for payment and (c) Contractor has fully disclosed to NSP all facts and other information known to Contractor which reasonably may affect Contractor's ability to complete the Project on schedule.

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- B. Contractor shall submit all invoices to the NSP Contract Manager.
- C. Payments shall be made to Contractor only for undisputed invoices. An undisputed invoice is an invoice for amounts that appear to the NSP Contract Manager to be consistent with and allowed under this Grant Contract. In the event the invoice contains expenses that the NSP Contract Manager believes have not been incurred, are inconsistent, or inappropriate, the NSP Contractor shall attempt to provide notice of identified issues to the Project Manager within fifteen (15) working days after receipt the invoice. Invoices paid remain subject to audit and verification.
- D. Payment shall be made to Contractor no later than 30 calendar days from the date a correct, undisputed invoice is received by the NSP Contract Manager.
- E. Contractor shall retain all records relating to all expenses reimbursed to Contractor, and to hours of employment on this Grant Contract by all employees of Contractor for which NSP is billed. Such records shall be maintained for a period of three (3) years after final payment of this Grant Contract, or until audited by the State, whichever occurs first, and shall be available for inspection or audit at any reasonable time by NSP or its designee.

4. PROJECT SCHEDULE AND BUDGET REVISIONS

- A. Contractor shall meet the critical path schedule set forth on Exhibit B and meet the Project budget set forth on Exhibit C. Contractor shall provide reasonable advance notification to NSP of any anticipated schedule deviations or budget reallocations. Contractor may reallocate an element, or task in the budget of up to fifteen (15) percent of the total budget without prior written notice to NSP. Reallocations of more than fifteen (15) percent of the total budget require prior written approval of NSP.
- B. Contractor shall provide sixty (60) days advance written notification to NSP for any request to make a reallocation as contemplated by Section 4.A of more than fifteen (15) percent. Along with any such request, Contractor shall submit any supporting documentation as NSP may request.
- C. Contractor must report (i) changes in the scope, timing, use of equipment, use of suppliers, vendors, budgets, Project Managers and Project key assistants, location, Milestones or changes or potential changes that could affect the Milestones of the Project, and similar changes, events or conditions that could affect the Project and (ii) the occurrence of any event which could, with the giving of notice or the passage of time or both, constitute an Event of Default by Contractor under this Agreement, as soon as possible, but in no event later than five (5) business days after their occurrence or the knowledge of their potential occurrence. Such information shall be provided on the Notice of Change or Potential Change Form in Exhibit I to this Grant Contract. The NSP Contract Manager shall review such Change forms. Administrative changes may be allowed by the NSP Contract Manager and the NSP Contract Manager and shall be memorialized in a written amendment to this Grant

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Contract. Material changes must be approved by NSP in the form of a written amendment to this Grant Contract, which the Parties acknowledge may be subject to approval of the Minnesota Public Utilities Commission ("Commission") as deemed appropriate by NSP, in NSP's sole discretion. A change is material if it results in changes in deliverables, moves due dates beyond the term of the Contract or modifies the scope of work reasonably beyond that approved by the Commission (any of such changes being a "Change"), and may require regulatory approval. If NSP determines appropriate, it may approve, modify, reject or refer the Change to the Advisory Group and/or the Commission for consideration. NSP anticipates providing to the Commission any Changes that are deemed to represent significant Project scope changes. All information relating to any Change may be provided to the Commission or otherwise publicly disclosed.

5. CONTRACT MANAGEMENT

A. Project Manager

The Project Manager on behalf of Contractor is designated in Exhibit D. Such Project Manager may not be replaced without NSP's prior written approval, such approval not to be unreasonably withheld. The Project Manager is responsible for the day-to-day Project status, decisions and communications with the NSP Contract Manager.

B. NSP Contract Manager

The NSP Contract Manager is designated in Exhibit D. The NSP Contract Manager is responsible for the day-to-day contract status, decisions and communications with the Project Manager. The NSP Contract Manager will review all deliverables, reports and invoices as provided for in Section 8, and notify Project Manager of any reporting deficiencies.

6. ANNUAL EVALUATION

NSP may annually evaluate all reporting, as required in Section 8, as well as any other information collected in accordance with this Grant Contract, to determine whether the Contractor is in compliance with the Standards of Performance as stated in Section 7. Contractor shall fully cooperate with NSP in any such evaluations. Any such annual evaluation may be presented to the Advisory Group and/or the Commission.

7. STANDARD OF PERFORMANCE

A. Standard of Performance shall mean Contractor, its subcontractors and their employees and agents in the performance of Contractor's work shall exercise the degree of skill and care required by customarily accepted good professional practices and procedures used in designing and building energy production facilities and (i) shall comply with all applicable federal, state and local laws, regulations and Project permit conditions, (ii) shall not infringe upon any intellectual property rights of any third parties and (iii) shall meet or exceed all performance standards and matrices set forth in the Proposal.

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- B. In the event that Contractor or its subcontractor(s) fail to perform in accordance with the Standard of Performance as defined in Section 7.A above, and in the event that the NSP Contract Manager becomes aware of any such failure, the NSP Contract Manager may notify the Project Manager who shall identify and propose an appropriate remedy for the failure. No failure of the NSP Project Manager to notify the Project Manager of any such failure shall relieve Contractor from any of its duties or obligations under this Grant Contract. In the event NSP determines the proposed remedy is not satisfactory, the NSP Contract Manager and the Project Manager shall seek to negotiate an appropriate resolution given the circumstances. If NSP determines such a resolution cannot be reached, it may refer the matter to the Advisory Group, who may choose to recommend an appropriate resolution. NSP shall retain all its rights under this contract should no mutual resolution be reached.
- C. Nothing contained in this section is intended to limit any of the rights or remedies, which NSP may have under law or under other sections of this Grant Contract.

8. REPORTING

- A. Once a month, beginning after the Contract Start Date, Project Manager shall prepare and provide to the NSP Contract Manager a progress report in form and detail acceptable to NSP that documents evidence of progress and deliverables as detailed in Exhibit C. Summary reports are to include a general overview of how the Project is progressing; summary of the work activity for the past period; identification of active milestone(s) and estimate percent or Project work completed; specific/unforeseen problems encountered that need to be overcome that may be expected to affect the milestones, timeline of deliverables, or costs and Contractor's efforts to comply with the Project critical path schedule; and significant Project accomplishments. All such reports will be posted by Xcel Energy on a public website approved by the Commission.
- B. At the conclusion of the Contractor's work, Contractor shall prepare a comprehensive written Final Report in form and detail acceptable to NSP, including an executive summary. The Final Report is to include a summary of what the project was intended to do and what was discovered or accomplished, the usefulness and benefits of the project's discovery or accomplishments, and a summary of lessons learned or project outcomes. Such Final Report must contain sufficient detail for technical readers and a clearly written summary for non-technical readers. The non-technical summary should be one-and-a-half to two pages in length including an executive summary of the project, the methodology used for the project, ratepayer benefits from the project and any lessons learned. The Final Report must include an evaluation of the Project's financial, environmental, and other benefits to the State of Minnesota and to NSP's ratepayers.

The NSP Contract Manager will review and approve the Final Report, or in the event the Final Report is not satisfactory to NSP, shall identify deficiencies, which Contractor shall resolve within 30 days. Contractor shall also meet with the Advisory Group to present the findings, conclusions, and recommendations. The Contractor shall present the Final Report to the Advisory Group on or before the

Contract End Date. All Final Reports will be posted by Xcel Energy on a public website approved by the Commission.

C. All reports, including reprints, shall include the following legend:

LEGAL NOTICE

THIS REPORT WAS PREPARED AS A RESULT OF WORK SPONSORED BY THE RENEWABLE DEVELOPMENT FUND AS MANAGED BY XCEL ENERGY. IT DOES NOT NECESSARILY REPRESENT THE VIEWS OF XCEL ENERGY, ITS EMPLOYEES, OR THE RENEWABLE DEVELOPMENT FUND ADVISORY GROUP. XCEL ENERGY, ITS EMPLOYEES, CONTRACTORS, AND SUBCONTRACTORS MAKE NO WARRANTY, EXPRESS OR IMPLIED, AND ASSUME NO LEGAL LIABILITY FOR THE INFORMATION IN THIS REPORT; NOR DOES XCEL ENERGY, ITS EMPLOYEES OR THE RENEWABLE DEVELOPMENT FUND ADVISORY GROUP REPRESENT THAT THE USE OF THIS INFORMATION WILL NOT INFRINGE UPON PRIVATELY OWNED RIGHTS. THIS REPORT HAS NOT BEEN APPROVED OR DISAPPROVED BY NSP NOR HAS NSP PASSED UPON THE ACCURACY OR ADEQUACY OF THE INFORMATION IN THIS REPORT.

D. Contractor shall provide annual, public electric generation reports to document RDF benefits for the ten (10) years subsequent to Project completion. Reports are to include power generated, net sales, and economic indicators and shall be provided to the RDF Advisory Group. NSP may require adequate assurance or withhold final payment of funds until this reporting covenant has been completed.

9. RECORDKEEPING, COST ACCOUNTING AND AUDITING

A. Cost Accounting

Contractor agrees to keep separate, complete, and correct accounting of the costs involved in developing, installing, constructing, and testing of the Facility, the work on the Project or rights under this Grant Contract.

B. Accounting Procedures

The Contractor's costs shall be determined on the basis of the Contractor's accounting system procedures and practices employed as of the effective date of this Grant Contract. The Contractor's cost accounting practices used in accumulating and reporting costs during the performance of this Grant Contract shall be consistent with the practices used in estimating costs for any proposal to which this Grant Contract relates; provided that such practices are consistent with the other terms of this Grant Contract and provided, further, that such costs may be accumulated and reported in greater detail during performance of this Grant Contract. The Contractor's accounting system shall distinguish between direct costs and indirect costs. All costs incurred for the same purpose, in like circumstances, are

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either direct costs only or indirect costs only with respect to costs incurred under this Grant Contract.

C. Allowability of Costs

1) Allowable Costs

The costs for which the Contractor shall be reimbursed under this Grant Contract include all direct costs incurred in the performance of the work that is identified in Exhibit C, subject to the limitations and cap of the Grant Amount in this Grant Contract and Exhibit C. Costs must be incurred within the term of the Contract.

2) Unallowable Costs

Contingency costs, imputed costs, fines and penalties, losses on contracts, liabilities from failure to comply with applicable laws, rules and regulations, costs, settlements and judgments under any litigation or arbitration, expenses not incurred, and excess profit taxes are unallowable, as well as costs determined inappropriate or inconsistent with Exhibit C, by the NSP Contract Manager.

D. Audit Rights

Contractor shall maintain books, records, documents, and other evidence, based on the procedures set forth above, sufficient to reflect properly all costs claimed to have been incurred in performing this Grant Contract. NSP, or at NSP's option, a public accounting firm designated by NSP, may audit such accounting records at all reasonable times with prior notice by NSP. Contractor agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Contractor agrees to include a similar right of NSP to audit records and interview staff in any subcontract related to performance of this Grant Contract.

10. CONFIDENTIALITY

A. NSP agrees to work with Contractor to make reasonable efforts to keep confidential the items listed in Exhibit E. Designation of trade secrets and justification for trade secret information before the Commission and other agencies shall be the responsibility of the Contractor.

B. Public and Confidential Deliverables

Deliverables including, but not limited to, progress reports, task deliverables and the Final Report shall not contain confidential information except when the NSP Contract Manager and the Contractor deem it necessary to include confidential information in a deliverable. In such event, the Contractor shall prepare the deliverable in two separate volumes, one for public distribution and one to be maintained in NSP's confidential records. Only those items specifically listed in

Exhibit E or in a subsequent determination of confidentiality qualify as confidential deliverables.

C. Identifying and Submitting Confidential Information

All confidential information submitted by the Contractor shall be marked "Confidential" on each document containing the confidential information.

D. Future Confidential Information

During the term of this Grant Contract, Contractor may develop additional Data or information that the Contractor considers to be nonpublic confidential information not listed on Exhibit E. Contractor must list all items and information along with justification for confidentiality and submit a proposed revision of Exhibit E to the NSP Contract Manager. Exhibit E may be amended by mutual agreement, however any amendment to Exhibit E shall not affect NSP's rights under section 12 as to the additional Data and information by amending Exhibit E. In the event there is a disagreement over the items to be delivered under the Contract, the Parties shall use the "Disputes" clause found at section 14.A. Such subsequent determinations will be added to Exhibit E.

E. General Right to Use Information

Except for Confidential Information identified on, or added by amendment to, Exhibit E, NSP shall have the right to use all information and data delivered by Contractor or derived from the Project or this Grant Contract: (i) in the course of providing goods or services to customers of NSP whether or not affected by the Project, and (ii) for purposes of research, development, marketing and producing energy and energy systems and processes. Contractor hereby also consents to release of its customer information with regard to the foregoing.

11. REPRESENTATIONS OF CONTRACTOR

Contractor represents, warrants and covenants that, except as set forth on Schedule 11 hereto:

- A. It is duly authorized to conduct business in all jurisdictions necessary to perform this Grant Contract, and it has the power and authority to enter into and perform this Grant Contract; and
- B. The execution and performance of this Grant Contract and the construction and operation of the Facility and implementation of the Project hereunder will not conflict with or constitute a breach of or a default under any contract, license or other agreement applicable to Contractor or its property; and
- C. The execution and performance of this Grant Contract and the construction and operation of the Facility and the implementation of the Project hereunder will not require any consent, license, permit or approval that has not been obtained from the appropriate governmental authority; and

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- D. It has taken all actions necessary and advisable to authorize this Grant Contract and the construction and operation of the Project hereunder, and this Grant Contract is the legal, valid and binding obligation of Contractor, fully enforceable in accordance with its terms; and
- E. It has all internalinterim financing and co-funding resources available for the Project as required to complete the Project to be funded under this Grant Contract; and
- F. It has entered into all contracts, in a form satisfactory to NSP, necessary for the services, supplies, materials, equipment and other products necessary for performance of the Project with qualified suppliers and will promptly pay and discharge all such obligations upon receipt of conforming goods and services provided for the Project; and all such orders and contracts may be assigned to NSP if NSP exercises its right, in its sole discretion, under this Grant Contract to complete the performance of the Grant Contract, and contractor hereby authorizes any monies paid by NSP on such order or contracts to be offset and deducted from the Grant Amount of this Grant Contract; and
- G. It has all the necessary permits, orders, authorization or any other necessary permission in place for the performance of this Grant Contract, including, but not limited to, emissions permits, transportation permits, conditional use permits and waste permits; and
- H. It will provide true and correct copies of all contracts and agreements related to the performance of this Grant Contract to NSP upon execution; and
- I. It will not terminate any contract with any Minnesota-based institution, supplier or service provider involved in the performance of this Project without consultation with NSP; and
- J. It and/or its contractors will maintain the liability insurance coverage required by Exhibit F hereof and any other insurance required for the Project and name Xcel Energy, NSP and the Advisory Group as additional insureds. Contractor agrees to promptly notify NSP of any notice of cancellation received from Contractor's current insurer and who the replacements insurer will be without allowing any gap in such insurance.

12. RIGHTS OF PARTIES REGARDING INTELLECTUAL PROPERTY

A. NSP's Rights in Deliverables

Subject to Section 12.B of this Grant contract, Deliverables, reports and Deliverable Data specified for delivery to NSP under this Grant Contract shall become the property of NSP. NSP may use, publish, and reproduce the deliverables and reports subject to the provisions of subparagraph C in accordance with the goals and policies of NSP and jurisdictional regulatory authorities for public information and renewable energy development educational purposes.

B. Rights in Technical Data, Generated Data, and Deliverable Data

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1) Contractor's Rights

All Data, including Technical Data, Generated Data and Deliverable Data, produced under this Grant Contract shall be the property of the Contractor, limited by the license retained by the NSP in paragraph 12.B.2 below, and the rights NSP has in deliverables specified above in section 12.A.

2) NSP's Rights

For Technical Data, Generated Data and Deliverable Data produced under this Grant Contract, NSP retains a no-cost, non-exclusive, non-transferable, irrevocable, royalty-free, worldwide, perpetual license to use, publish, translate, produce and to authorize others to produce, translate, publish and use all such Data, subject to the provisions of subparagraph C.

- C. Limitations on NSP Disclosure of Contractor's Confidential Records
 - Data provided to NSP by Contractor, which Data the Parties have agreed to keep confidential and which Contractor seeks to have designated as confidential, or is the subject of a pending application for confidential designation, shall not be disclosed by NSP, unless disclosure is required such as by order of a court of competent jurisdiction or determination by regulatory agency.
 - 2) NSP agrees not to disclose Confidential Data or the contents of reports containing information considered by Contractor as confidential, without first providing a copy of the disclosure document for review and comment by Contractor. Contractor may make an application for confidential designation on some or all of the Data, and shall be responsible for all costs and expenses thereof.
- D. Exclusive Remedy

In the event NSP intends to publish or has disclosed Data the Contractor considers confidential, the Contractor's sole and exclusive remedy shall be a civil court action for injunctive relief, which shall be filed in Hennepin County, Minnesota. This provision shall not prevent Contractor from attempting to prevent disclosure by any government agencies under the Minnesota Government Data Practices Act provisions of Minnesota Statutes, Chapter 13 or otherwise.

- E. Limitations on Contractor Disclosure of Contract Data, Information, Reports and Records
 - 1) Contractor will not disclose the contents of the final or any preliminary deliverable or report without first providing a copy of the disclosure document for review and comment to the NSP Contract Manager. The Contractor shall incorporate the comments of the NSP Contract Manager, unless, based upon professional judgment, Contractor and NSP agree otherwise.

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- 2) Notwithstanding the foregoing, in the event any public statement is made by NSP as to the role of Contractor or the content of any preliminary or Final Report of Contractor hereunder, Contractor may, if it believes such statement to be incorrect, state publicly what it believes is correct.
- 3) No record that is provided by NSP to Contractor for Contractor's use in executing this Grant Contract and which has been designated as confidential shall be disclosed, unless a court of competent jurisdiction orders disclosure, and Contractor has timely provided NSP with a copy thereof. At the election of the NSP Contract Manager, the Contractor, its employees and any subcontractor shall execute a "Confidentiality Agreement," supplied by the NSP Contract Manager.
- 4) Contractor acknowledges that each of its officers, employees, and subcontractors who are involved in the performance of this Grant Contract will be informed about the restrictions contained herein and will be required to abide by the above terms; and that Contractor will be responsible for any violations by any such individuals.
- F. Copyrights
 - 1) Any copyrightable material first produced under this Grant Contract shall be owned by the Contractor, limited by the license granted to NSP in 2) below.
 - 2) Contractor agrees to grant NSP a royalty-free, no-cost nonexclusive, irrevocable, nontransferable worldwide, perpetual license to produce, translate, publish and use and to authorize others to produce, translate, publish and use all copyrightable material first produced or composed in the performance of this Grant Contract.
 - 3) Contractor will apply copyright notices to all deliverables using the following form or such other form as may be reasonably specified by NSP.

"©[Year of first publication of deliverable], [the Copyright Holder's name]. ALL RIGHTS Reserved."

G. Intellectual Property Indemnity

Contractor warrants that Contractor will not, in the course of its work under this Grant Contract or otherwise, infringe or misappropriate any intellectual property right of a third party, and further warrants and agrees that it will conduct a reasonable investigation of the intellectual property rights of third parties to avoid such infringement. Contractor will defend and indemnify NSP from and against any claim, lawsuit or other proceeding, loss, cost, liability or expense (including court costs and reasonable fees of attorneys and other professionals) to the extent arising out of: (i) any third party claim that a deliverable infringes any patent, copyright, trade secret or other intellectual property right of any third party, or (ii) any third party claim arising out of the negligent or other tortious act(s) or omission(s) by the

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Contractor, its employees, subcontractors or agents, in connection with or related to the deliverables or the Contractor's performance thereof under this Grant Contract.

H. Green Tags or Environmental Renewable Energy Credits

Excluding any federal or state tax credits to which Contractor is entitled, such as that granted under Minnesota Statutes, section 216C.41 for the Facility, Contractor hereby grants, assigns, and transfers to NSP any and all rights to and ownership of attributes of an environmental or other nature that are created or otherwise arise from the Facility's generation of energy using renewable fuel (in contrast to the generation of electricity using nuclear or fossil fuels or resources), including, but not limited to all Renewable Energy Credits. For the purposes of this Grant Contract, "Renewable Energy Credits" shall mean all attributes of an environmental or other nature that are created or otherwise arise from the Facility's generation of electrical energy using any renewable fuel in contrast to the generation of electricity using nuclear or fossil fuels or resources, including without limitation, tags, certificates or similar products or rights associated with renewable fuels as a "green" or "renewable" electric generation resource, including any and all environmental air quality credits, emissions reductions, off-sets, allowances or other benefits related to the generation of energy by the Facility that reduces, displaces or offsets emissions from fuel combustion at another location pursuant to any existing or future international, federal, state or local legislation or regulation or voluntary agreement, and the aggregate amount of credits, offsets or other benefits including any rights, attributes or credits arising from or eligible for consideration in the Midwest Renewable Energy Tracking System ("M-RETS") or any similar program pursuant to any international, federal, state or local legislation or regulation or voluntary agreement and any renewable energy certificates issued pursuant to any program, information system or tracking system associated with the renewable electrical energy generated from the Facility.

The provisions of this Section 12.H of this Grant Contract shall: (i) be applicable to all energy produced by the Facility for the life of the Facility, (ii) survive the termination or expiration of this Grant Contract, as provided therein, and (iii) survive the termination or expiration of any agreement between Contractor and NSP or its affiliates for the purchase of the capacity and/or energy produced by the Facility, if any. To the extent Contractor transfers ownership of or other rights in the Facility to a third party, Contractor shall (i) promptly notify NSP of such transfer and (ii) ensure that the provisions of this Section 12.H of this Grant Contract shall be applicable to and enforceable against such third party or any subsequent owner of the Facility. Transfer of ownership of or other rights in the Facility by Contractor shall not relieve Contractor of its obligations under this Section 12.H of this Grant Contract.

The Parties acknowledge and agree that attributes of an environmental or other nature that are created or otherwise arise from the Facility's generation of energy using renewable fuel are unique to the Facility and cannot be replaced by the purchase of replacement Renewable Energy Credits; and NSP shall have the rights to specific performance provided in Section 15.7 hereof.

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13. NOTICES TO PARTIES

Notice to either party may be given by certified mail properly addressed, postage fully prepaid, or by overnight carrier providing record of receipt, to the address designated in Exhibit D for each respective party or to such other address as either party shall notify the other in accordance with this section.

14. DISPUTES

A. Dispute Resolution

If NSP and the Contractor cannot resolve a dispute or grievance, Project Manager and NSP Contract Manager shall each prepare a written statement of the issues in dispute, the legal authority or other basis for their respective positions and the remedy sought. The packages must be submitted to the Renewable Development Fund Advisory Group. The Advisory Group shall make a determination within ten working days after receipt of the package. Should Contractor disagree with the Advisory Group's decision, Contractor may appeal to the Commission. Contractor shall continue to perform its responsibilities under this Grant Contract during any dispute.

B. Legal Remedy

The interpretation and performance of this Grant Contract and each of its provisions shall be governed and construed in accordance with the laws of the State of Minnesota. The Parties hereby submit to the exclusive jurisdiction and enforcement authority of the Commission or, in the event the Commission declines jurisdiction, or in the event that NSP is exercising its rights under Sections 12.D or 15.5 hereof, to the exclusive jurisdiction of the courts of the State of Minnesota, and venue is hereby stipulated as Minneapolis, Minnesota.

15. DEFAULT AND TERMINATION

15.1 Events of Default of Contractor.

- (A) Any of the following shall automatically constitute an Event of Default of Contractor upon its occurrence and no notice or cure period shall be applicable:
 - 1) Contractor's dissolution or liquidation;
 - 2) Contractor's assignment of this Grant Contract or any of its rights hereunder;
 - 3) Contractor's sale or other transfer of the Project or any part thereof or interest therein during the Term of this Grant Contract;
 - 4) Contractor's filing of a petition in bankruptcy or insolvency or for reorganization or arrangement under the bankruptcy laws of the

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United States or under any insolvency act of any state, or Contractor voluntarily taking advantage of any such law or act by answer or otherwise;

- 5) Contractor's actual or apparent fraud with any funding under this Grant Contract, waste, tampering with any NSP-owned facilities or material, intentional misrepresentation or willful misconduct in connection with this Grant Contract and/or the work on the Project; or
- 6) Contractor's abandonment of the Project;
- (B) Any of the following shall constitute an Event of Default of Contractor upon its occurrence but shall be subject to cure within ninety (90) days after the date of written notice from NSP to Contractor:
 - 1) Contractor's failure to meet the Critical Path Schedule;
 - 2) Contractor's failure to maintain in effect any agreements required to deliver the final product; or
 - 3) Contractor's failure to comply with the Standard of Performance under Section 7 or with any other material obligation under this Grant Contract.
 - 4) Contractor's failure to make any payment required under this Grant Contract;
 - Any direct or indirect change of control of Contractor by sale of majority equity interest, transfer of majority voting rights, merger, consolidation, additional issuance of equity or otherwise);
 - 6) Any representation or warranty made by Contractor in this Grant Contract shall prove to have been false or misleading in any material respect when made or ceases to remain true during the Term if such cessation would reasonably be expected to result in a material adverse impact on the Project or NSP; or
 - 7) The filing of a case in bankruptcy or any proceeding under any other insolvency law against the parent or any other affiliate of Contractor that could materially impact Contractor's ability to perform its obligations hereunder; provided, however, that Contractor does not obtain a stay or dismissal of the filing within the cure period.

15.2 Events of Default of NSP.

(A) Any of the following shall automatically constitute an Event of Default of NSP upon its occurrence and no notice or cure period shall be applicable:

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- NSP's dissolution or liquidation provided that division of NSP into multiple entities or any other corporate reorganization or business restructuring shall not constitute dissolution or liquidation; or
- 2) NSP's filing of a petition in bankruptcy or insolvency or for reorganization or arrangement under the bankruptcy laws of the United States or under any insolvency act of any State, or NSP voluntarily taking advantage of any such law or act by answer or otherwise.
- (B) NSP's failure to comply with any other material obligation under this Grant Contract, which would result in a material adverse impact on Contractor, shall constitute an Event of Default of NSP upon its occurrence but shall be subject to cure within ninety (90) days after the date of written notice from Contractor to NSP; or
- (C) NSP's failure to make any undisputed payment shall constitute an Event of Default of NSP upon its occurrence but shall be subject to cure within sixty (60) Days after the date of written notice from Contractor to NSP.
- 15.3 <u>Termination</u>. Upon the occurrence of an Event of Default, which has not been cured within the applicable cure period, if any, the non-defaulting Party shall have the right to immediately terminate this Grant Contract without further notice. Neither Party shall have the right to terminate this Grant Contract except as provided for upon the occurrence of an Event of Default as described above or as otherwise may be explicitly provided for in this Grant Contract. In addition, the Parties may mutually agree in writing to terminate this Grant Contract.
- 15.4 <u>Termination by NSP Due to Event of Default of Contractor</u>. In the event NSP terminates this Grant Contract due to an Event of Default by Contractor, Contractor shall pay to NSP all monies disbursed under this Grant Contract by NSP to Contractor as of the termination of this Grant Contract due to an Event of Default by Contractor. Such payment shall be made by cashier's check or wire transfer no later than ninety (90) days following such termination of this Grant Contract.
- 15.5 <u>Effect of Termination</u>. The Parties acknowledge and agree that NSP and Contractor have entered into this Grant Contract to implement the order of the Commission approving the RDF grant to Contractor for its work on the Project. The Parties further acknowledge and agree that this Grant Contract, by implementing such order, provides the terms and conditions for Contractor's conduct and obligations so that it may receive such grant and the terms and conditions for NSP's administration of the grant. To that end, in the event that this Grant Contract is terminated pursuant to its terms, Contractor agrees that such termination shall also terminate any and all of Contractor's rights to the RDF grant award that may exist separate and apart of this Grant Contract by virtue of the Commission order approving the Project and Contractor hereby explicitly waives and any all of its rights to seek to implement any and all of such rights that may exist through such Commission order
and outside of this Grant Contract. Furthermore, termination of this Grant Contract pursuant to its terms shall act as a withdrawal of Contractor's grant request.

15.6 Construction by NSP Following Event of Default of Contractor.

- (A) Prior to any termination of this Grant Contract due to an Event of Default of Contractor, NSP or its designated representative shall have the right, but not the obligation, to possess, assume control of, and operate the Project facility as agent for Contractor (in accordance with Contractor's rights, obligations, and interest under this Agreement) during the period provided for herein. Contractor shall not grant any person, other than the facility lender, a right to possess, assume control of, and operate the facility that is equal to or superior to NSP's right under this Section.
- (B) NSP shall give Contractor thirty (30) days notice in advance of the contemplated exercise of NSP's rights under this Section. Upon such notice, Contractor shall collect and have available at a convenient, central location at the Project facility all documents, contracts, books, manuals, reports, and records required to construct, operate, and maintain the facility in accordance with industry engineering practices and procedures. Upon such notice, NSP, its employees, contractors, or designated third parties shall have the unrestricted right to enter the Project site and the facility for the purpose of constructing and/or operating the facility. Contractor hereby irrevocably appoints NSP as Contractor's attorney-in-fact for the exclusive purpose of executing such documents and taking such other actions as NSP may reasonably deem necessary or appropriate to exercise NSP's step-in rights under this Section.
- (C) NSP shall be entitled to immediately draw upon any remaining RDF Grant Funds awarded for the Project to cover any expenses incurred by NSP in exercising its rights under this Section.
- (D) During any period that NSP is in possession of and constructing and/or operating the Project facility pursuant to the foregoing paragraphs, NSP shall use commercially reasonable efforts to perform and comply with all of the obligations of Contractor under this Grant Contract and shall use the proceeds from the sale of electricity generated by the facility to first, reimburse NSP for any and all expenses reasonably incurred by NSP (including a return on capital at NSP's authorized return on equity most recently determined by the Minnesota Public Utilities Commission) in taking possession of and completing the Project facility, and to second, remit any remaining proceeds to Contractor.
- (E) During any period that NSP is in possession of and operating the Project facility, Contractor shall retain legal title to and ownership of the Project facility and NSP shall assume possession and control solely as agent for Contractor:

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- 1) In the event that NSP is in possession and control of the Project facility for an interim period, Contractor may resume operation and NSP shall relinquish its right to operate when Contractor demonstrates to NSP's reasonable satisfaction that it will remove those grounds that originally gave rise to NSP's right to operate the facility, as provided above, in that Contractor (i) will resume construction of the facility in accordance with the provisions of this Grant Contract, and (ii) has cured any Events of Default of Contractor which allowed NSP to exercise its rights under this Section.
- 2) In the event that NSP is in possession and control of the Project facility for an interim period, the facility lender, or any nominee or transferee thereof, may foreclose and take possession of and operate the facility and NSP shall relinquish its right to operate when the facility lender or any nominee or transferee thereof, requests such relinquishment and allows for a reasonable period of time to transition possession and operations.
- (F) NSP's exercise of its rights hereunder to possess and construct the Project facility shall not be deemed an assumption by NSP of any liability attributable to Contractor. If at any time after exercising its rights to take possession of and operate the facility, NSP elects to return such possession and operation to Contractor, NSP shall provide Contractor with at least fifteen (15) days advance notice of the date NSP intends to return such possession and operation, and upon receipt of such notice, Contractor shall take all measures necessary to resume possession, construction and operation of the Project facility on such date.
- (G) In the event NSP assumes construction of the facility under this Section, NSP shall construct the facility in conformance with standard utility practices.
- 15.7 <u>Specific Performance</u>. In addition to the other remedies specified in this Grant Contract, in the event that any Event of Default of Contractor is not cured within the applicable cure period set forth herein, NSP may elect to treat this Grant Contract as being in full force and effect and NSP shall have the right to specific performance. If the breach by Contractor arises from a failure by third party constructing the facility pursuant to a construction agreement entered into with Contractor, and Contractor fails or refuses to enforce its rights under the construction agreement which would result in the cure, or partial cure, of the Event of Default, NSP's right to specific performance shall include the right to obtain an order compelling Contractor to enforce its rights under the construction agreement. Likewise, for any breach of this Grant Contract by NSP, Contractor shall have the right to specific performance

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16. GENERAL TERMS & CONDITIONS

A. The following contract provisions, rights and obligations shall survive the completion or termination date of this Grant Contract:

٠	"Standard of Performance	Section 7
٠	"Recordkeeping, Cost Accounting and Auditing"	Section 9
٠	"Confidentiality"	Section 10
٠	"Rights of Parties Regarding Intellectual Property"	Section 12
٠	"Disputes"	Section 14
٠	"Default and Termination"	Section 15
٠	"General Terms and Conditions"	Section 16

- B. Headings have been inserted for the purpose of convenience and ready reference. They do not purport, and shall not be deemed, to define, limit, or extend the scope or intent of this Grant Contract.
- C. Contractor shall make representatives available to testify in the event the Commission or State Legislature hold hearings or conduct an investigation with regard to this Grant Contract.
- D. Contractor shall provide the NSP Contract Manager reasonable access to Contractor's premises and all Project records.
- E. No amendment, alteration or variation of the terms of this Grant Contract shall be valid unless made in writing and signed by the Parties hereto, and no oral understanding or agreement not incorporated herein, shall be binding on any of the Parties hereto. Other than as specified herein, no document or communication passing between the Parties hereto shall be deemed as part of this Grant Contract.
- F. Contractor shall not assign this Grant Contract, either in whole or in part, without the prior written consent of NSP, such consent may be withheld by NSP for any reason. Consent includes a formal written contract amendment approved by the Commission.
- G. Minnesota law shall govern interpretation of this Grant Contract.
- H. Time is of the essence in this Grant Contract.
- I. Contractor shall indemnify, defend and save harmless NSP, its affiliates, officers, agents and employees and members of the Renewable Development Fund Advisory Group from any and all claims and losses arising out of: (i) Contractor's performance under this Grant Contract regardless of whether such performance is an Event of Default or not and (ii) Contractor's negligence of willful misconduct.
- J. Contractor, its agents and employees shall act in an independent capacity and not as officers or employees or agents of NSP or the Advisory Group.

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- K. No waiver of any breach of this Grant Contract shall be held to be a waiver of any other or subsequent breach. All remedies afforded in this Grant Contract shall be taken and construed as cumulative, that is, in addition to every other remedy provided therein or by law, except to the extent limited or excluded by the express terms of this Grant Contract. The failure of NSP to enforce at any time any of the provisions of this Grant Contract, or to require at any time performance by Contractor of any of the provisions therefore, shall in no way be construed to be a waiver of such provisions, nor in any way affect the validity of this Grant Contract or any part thereof or the right of NSP to thereafter enforce each and every such provision.
- L. If any provision of this Grant Contract is held invalid, that invalidity shall not affect other provisions of the Contract. In the event that any provision of this Grant Contract is unenforceable or held to be unenforceable, the Parties agree that all other provisions of this Grant Contract have force and effect and shall not be effected thereby.
- M. All Exhibits and Addendums are incorporated into this Grant Contract by this reference and made a part hereof. Contractor represents and warrants that all material statements of fact made in its Grant Application and due diligence responses are true and correct statements as of the Contract Start Date and that such statements do not omit any material facts necessary to make Contractor's Grant Application materially misleading. This Grant Contract contains the entire agreement between the Parties with respect to the subject matter hereof, and supersedes all prior negotiations between the Parties. In the event of any inconsistency between any of the terms and conditions of this Grant Contract and the terms and conditions of any or all Exhibits, the terms and conditions of this Grant Contract shall control. In the event of any inconsistency between the terms and conditions of the Proposal, the terms and conditions of Exhibits A, B and C and the control
- N. Contractor acknowledges and agrees that nothing under this Grant Contract or the Commission order approving the RDF grant to Contractor for the purposes of the Project obligates NSP or its affiliates to enter into any agreement for the purchase by NSP or its affiliates of the energy and/or capacity generated by the Facility or Project.
- O. Contractor acknowledges that NSP manages the RDF and power purchases through different functions of the company or through its affiliates. To that end, Contractor agrees that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement for the purchase of the energy and/or capacity of the Facility or Project ("PPA") or other conduct by NSP related to such PPA shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor additionally agrees that any breach, dispute, or other issue related to this Grant Contract shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor additionally agrees that any breach, dispute, or other issue related to this Grant Contract shall not be considered a breach by NSP of its obligation of good

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faith and fair dealing or any other statutory or common law requirement under the PPA and Contractor agrees to waive any and all claims at equity or law related thereto.

P. IN NO EVENT WILL NSP BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY TYPE OR KIND BASED ON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY, INCLUDING, BUT ARE NOT LIMITED TO, LOSS OF PROFIT; LOSS OF SAVINGS OR REVENUE; LOSS OF GOODWILL; LOSS OF USE OF THE PROJECT OR ANY ASSOCIATED PROJECT EQUIPMENT; COST OF CAPITAL; COST OF ANY SUBSTITUTE PROJECT EQUIPMENT, FACILITIES, OR SERVICES; DOWNTIME; THE CLAIMS OF ANY THIRD PARTIES INCLUDING CUSTOMERS; AND INJURY TO PROPERTY REGARDLESS OF THE NUMBER OF CLAIMS OR THE THEORIES OF RELIEF.

In Witness Whereof, the Parties have agreed to this Grant Contract.

Northern States Power Company, a Minnesota corporation

By:		Date:	
Its:	RVP Rates & Regulatory Affairs		

Minnesota Renewable Energy Society, Inc., a Minnesota nonprofit corporation,

By: _____

Date: _____

Its: Managing DirectorBoard Chairman

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EXHIBIT AND SCHEDULE LIST

Exhibit A Work Statement

The work statement in this Exhibit provides the objective of the grant application, the value of performing the Project, anticipated results and the tasks required to complete the Project.

Exhibit B: Critical Path Schedule

Exhibit B includes the critical path schedule for the Project.

Exhibit C: Budget, Project Payment Milestones and Deliverables

This Exhibit includes the approved budget for the Project, the Project payment Milestones and deliverables. The Project payment schedule and limits are intended to reflect anticipated value added by Contractor as a result of the progress on the Project, rather than expenses incurred to the date of a grant partial payment request.

Exhibit D: Project Manager and Contract Manager - Contractor and NSP

This Exhibit includes the names of the Project Manager and Contract Manager along with the necessary information required for continued communication.

Exhibit E: Confidential List

This Exhibit includes the description of any non-public confidential information involved in performance of the Project or to be derived from the Project required to be listed under Article 11.

Exhibit F: Insurance Certificates

This Exhibit includes the coverages, limits and requirements for Certificates of Insurance to be obtained and maintained by the Contractor.

Exhibit G: Special Conditions

This Exhibit includes the special conditions to be included as a part of this Grant Contract.

Exhibit H: Contractor's Balance Sheet

This Exhibit includes the Contractor's balance sheet.

Exhibit I: Notice of Change or Potential Change in RDF Grant Contract Project.

This Exhibit includes the form to be used by the Contractor for a notice of change or potential change to this Grant Contract or the Project.

Exhibit J: Contractor's approved Proposal.

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Schedule 11: Exceptions to Contractor's Representations.

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Exhibit A Scope of Work EP4-15

Executive Summary

The Minnesota Renewable Energy Society ("MRES") will install not more than 1,000 kilowatts of direct-current (kW_{DC}) solar capacity with the development of Community Solar Gardens located within Xcel Energy's Minnesota service area. At a minimum, one facility will be installed within a rural setting and one facility will be installed within an urban setting.

A Solar Garden is a form of solar facility tenure in which a specified piece of the solar array is individually owned. Power produced by designated panels is associated with the individual ownership whereby the facility is controlled by the association of owners that jointly represent ownership of the whole. A Community Solar Garden provides the opportunity for those who do not have appropriate space for a solar array on their home or business to actively participate in a renewable energy initiative. Participants will receive an on-bill credit reflecting the kWh energy produced from their portion of the facility. MRES intends to sell energy generated to Xeel Energy through a Power Purchase Agreement_submit the Project for qualification under Xeel Energy's Solar*Rewards Community® program. Subscribers in the Project shall either meet (i) low-income eligibility requirements, in each case as described below. Contractor will be responsible for confirming eligibility outlined below and will report on its verification process and lessons learned as part of its regular reporting requirements under this Grant Contract.

Low-income Eligibility. Individual subscribers will be deemed income eligible for a subscription if they or their family have been determined to be eligible by the applicable government or nonprofit agency for receipt of or participation in the Minnesota Low Income Home Energy Assistance Program; Medical Assistance; Supplemental Nutrition Assistance Program; WIC; Head Start; free or reduced cost school meals; or HUD subsidized housing pursuant to Section 8 or the equivalent (including public housing, Section 202 housing for seniors, or Section 811 housing for persons with disabilities); or equivalent programs where income eligibility requirements as implemented are not greater than 125 percent of the federal poverty guideline.

Multi-family Housing Eligibility. Subscribers who own or operate multi-family housing are income eligible subscribers if (i) the owner/operator of the building is exclusively a nonprofit provider of low-income housing and related services at the applicable premises and (ii) 95 percent or more of the tenants at the applicable building(s) qualify for low-income eligibility as defined above. Nonprofit affiliates of for-profit entities will not be eligible unless it can be demonstrated that the benefits from the subscription will be retained by the nonprofit affiliate only.

The project's total cost is \$3,966,4201,819,452. RDF grant funds will be applied to the capital costs of the project and result in a long-term energy production facility.

Goals

The goal of the Solar Project is to install <u>up to 1,000 kW_{DC}</u> PV capacity and demonstrate the concept of collective ownership as a way to increase the penetration of solar renewable electric production in Minnesota for customers eligible to qualify under Xcel Energy's low-income home energy assistance program.

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Project Objectives

- Establish a replicable system of billing parameters for community solar.
- Develop discounted or no-cost pricing structure for low-income and/or non-profit participants
- Establish a replicable model for developing Community Solar Gardens in Minnesota.
- Increase the penetration of solar energy in Minnesota;
- Provide an increased knowledge of Community Solar Gardens in Minnesota.
- Evaluate rural vs. urban sites for Community Solar Gardens.
- Evaluate the economics associated with developing a Community Solar Garden targeted specifically at low-income home energy assistance program-qualified subscribers.

Project Performance

- Commissioning of not more than 1,000 kW $_{\rm DC}$ solar capacity.
- Recruitment to obligate 95% percent of the total facility capacity by October 2016 completion of Milestone 3 as identified on Exhibit C.
- Identification of best practices for community solar in Minnesota.
- <u>Make</u> Pperformance measurements available to the public (i.e. efficiency, energy production, etc.).

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Exhibit B Critical Path Schedule <u>EP4-15</u>

					Pro	ject Sche	dule			
Task	Task Description	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
1 Agr	eements/Financing									
1.1	Power Purchase Agreement									
1.2	Secure Financing									
1.3	Interconnection Agreement									
1.4	Conditional use agreements									
2 De	sign									
2.1	Site analysis									
2.2	Prepare facility design									
2.3	Prepare facility specifications									
3 Pro	ocurement									
3.1	Identify suppliers									
3.2	Order PV equipment									
3.3	RFP for EPC									
3.4	EPC Selection									
4 Per	rmitting									
4.1	Obtain zoning permits									
4.2	Obtain construction/building permits									
4.3	Environmental review									
4.4	Preparation of on-site safety plan									
4.5	Costruction contracts for installation									
5 Con	nmissioning									
5.1	Delivery of PV panels and equipment									
5.2	Site Preparation									
5.3	Construction and assembly									
5.4	System testing									
5.5	Commission PV facility									
6 Per	rformance Assessment									
6.1	Recruit participants									
6.2	Performance analysis									
6.3	On-site demonstration									
6.4	Presentation to RDF Advisory Board									

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									Pro	iect	Sche	dule	(0	nar	ters)	- 2	016	5. 20	17 8	2 2	018						_	
т	ask	Task Description	03	-201	6	04	-2016	1	1-20		1	-201			-201			2017	1		-201		O ^r	2_20)18	0	3-20	18
1		eements/Financing	1	201	3	1		1	· · · · · · · · · · · · · · · · · · ·		1				2 3		<u>`</u>	2017			201		1	2 20		`	2	
1		Application to SRC		2	3	1	2 3		2	3		2	3	1	2 3	5	1	2 3	>		2	3	1	2	3	-		3
	1.1	Program																										
	1.2	Secure Financing		-	-					1		_			_												-	
		Interconnection		_	_							_			_	Г					_				-		_	
	1.3	Agreement														I.												
	1.4	Conditional use														Т												
	1.4	permit																										
2	Desi																											
	2.1	Site analysis																										
	2.2	Prepare facility														I.												
	2.2	design		_													_				_						_	
	2.3	Prepare facility														I.												
		specifications																									_	
3		curement		_					_		1				-				-			_			-	\vdash	_	
	3.1	Identify suppliers		_			_	\vdash	-		-	-		H	_	+					_	_		_		\vdash	_	
	3.2	Order PV panels/equipment																										
		Delivery of PV		-	_	_	_		-			-	_		_	+	-	_			-	_		_			-	
	3.3	panels/equipment																										
4	Perr	nitting						<u> </u>								_				_							-	
-		Zoning permits														Т											_	
		Construction/		_	_				-			-			_	Т					_				-		-	
	4.2	building permits																										
	4.3	Environmental																						_				
	4.3	review																										
	4.4	On-site safety plan																										
	4.5	Construction																										
		contract																									_	
5		struction			_			_	_		-					_				_		_					_	
	5.1	Site Preparation		-	_			\vdash	-		<u> </u>		_	\square	_	+											_	
	5.2	Construction and																										
	5.3	assembly System testing		_				_	-						_	+	_	_			_					_	_	
		Commission PV		-			_		-			-			-	+	-	-	_	-	_					-		
	5.4	facility																										
		On-site		-	_	-	_		-			-	_		-	+				-	-	-						
	5.5	demonstration																										
		Presentation to					_																	_				
	5.6	RDF advisory																										
		group																										
6	Per	formance Assessmen	t		_								_								_							
	6.1	Recruit subscribers																										
	6.2	Performance analysis																										
	6.3	Onsite									1																	
	5.5	Demonstration		_	_		_							Ц			_			4	_						_	
	6.4	Presentation to RDF									1																	
		Advisory Board																										_

Field Code Changed

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Exhibit C Budget, Project Payment Milestones and Deliverables <u>EP4-15</u>

Total Project Budget Amount: \$3,966,4201,871,560

Maximum RDF Grant Amount: \$2,661,3201,283,100

Project Milestones, Deliverables and Allowed Grant Partial Payments- See Attached Schedule

	Mi	nnesota	Renew	able E	nergy S	Society	Budge	et (EP4	-15)			
		Year One			Year Two			Year Three	:	TO	TAL PROJ	ECT
	RDF	Cost		RDF	Cost	Total	RDF	Cost	Total	RDF	Cost	
Budget Item	Share	Sharing	Total Cost	Share	Sharing	Cost	Share	Sharing	Cost	Share	Sharing	Total Cost
Direct Costs												
Salaries and Wages	\$65,000	\$75,000	\$140,000	\$42,600		\$42,600	\$23,320		\$23,320	\$130,920	\$75,000	\$205,920
Fringe Benefits	\$6,500	\$15,000	\$21,500	\$4,260		\$4,260	\$2,332		\$2,332	\$13,092	\$15,000	\$28,092
Equipment	\$1,560,000	\$272,000	\$1,832,000			\$ 0			\$ 0	\$1,560,000	\$272,000	\$1,832,000
Consultants/Subcontracts	\$755,000	\$298,100	\$1,053,100	\$20,000	\$110,000	\$130,000	\$10,000		\$10,000	\$785,000	\$408,100	\$1,193,100
Supplies			\$0			\$ 0			\$0	\$0	\$0	\$0
Construction Materials			\$0			\$ 0			\$0	\$0	\$0	\$0
Facilities	\$7,500	\$300,000	\$307,500	\$7,500		\$7,500	\$3,750		\$3,750	\$18,750	\$300,000	\$318,750
Travel		\$5,000	\$5,000	\$2,000	\$5,000	\$7,000			\$ 0	\$2,000	\$10,000	\$12,000
Publicity/Printing/Duplicating	\$5,000	\$35,000	\$40,000	\$2,000	\$15,000	\$17,000			\$0	\$7,000	\$50,000	\$57,000
Workshops	\$5,000		\$5,000	\$5,000		\$5,000			\$0	\$10,000	\$0	\$10,000
Other Direct Costs		\$65,000	\$65,000		\$40,000	\$40,000			\$0	\$0	\$105,000	\$105,000
TOTAL DIRECT COSTS	\$2,404,000	\$1,065,100	\$3,469,100	\$83,360	\$170,000	\$253,360	\$39,402	\$0	\$39,402	\$2,526,762	\$1,235,100	\$3,761,862
Indirect Costs												
Administration			\$0			\$ 0			\$0	\$0	\$0	\$0
Facilities (if not a direct cost)			\$0			\$ 0			\$0	\$0	\$0	\$0
Indirect Rate (10%)	\$122,288		\$122,288	\$8,330	\$40,000	\$48,330	\$3,940	\$30,000	\$33,940	\$134,558	\$70,000	\$204,558
TOTAL INDIRECT COSTS	\$122,288	\$0	\$122,288	\$8,330	\$40,000	\$48,330	\$3,940	\$30,000	\$33,940	\$134,558	\$70,000	\$204,558
TOTAL COSTS	\$2,526,288	\$1,065,100	\$3,591,388	\$91,690	\$210,000	\$301,690	\$43,342	\$30,000	\$73,342	\$2,661,320	\$1,305,100	\$3,966,420

		Year One	(2016)	Ye	ar Two (2017)	Y	ear Three (2018)	TC	TAL PRC	JECT
Budget Item	<u>RDF</u> <u>Share</u>	Cost Sharing	<u>Total</u> <u>Cost</u>	RDF Share	Cost Sharing	Total Cost	RDF Share	Cost Sharing	Total Cost	RDF Share	Cost Sharing	Total Cos
Direct Costs												
Salaries and Wages	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$126,175</u>	<u>\$54,075</u>	<u>\$180,250</u>	<u>\$126,175</u>	<u>\$54,075</u>	\$180,2
Fringe Benefits	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	
Equipment	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$647,750</u>	<u>\$277,607</u>	<u>\$925,357</u>	<u>\$647,750</u>	<u>\$277,607</u>	\$925,3
Consultants/Subcontrac	<u>\$36,500</u>	<u>\$14,500</u>	<u>\$51,000</u>	<u>\$8,300</u>	<u>\$0</u>	<u>\$8,300</u>	<u>\$338,380</u>	<u>\$145,020</u>	<u>\$483,400</u>	<u>\$383,180</u>	<u>\$159,520</u>	<u>\$542,7</u>
tor Supplies												
Construction Materials	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$8,873</u>	\$3,803	\$12,675	<u>\$8,873</u>	\$3,803	<u>\$12,0</u>
Permits & Interconnect	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	
<u>Fravel</u>	<u>\$0</u>	<u>\$0</u> \$0	<u>\$0</u>	\$3,150	<u>\$1,350</u>	<u>\$4,500</u>	<u>\$113,970</u>	<u>\$40,000</u>	<u>\$153,970</u>	<u>\$117,120</u>	<u>\$41,350</u>	<u>\$158,4</u>
Publicity/Printing	<u>\$0</u> \$0	<u>\$0</u> \$0	<u>\$0</u> \$0	<u>\$0</u> \$0	<u>\$0</u> \$0	<u>\$0</u> \$0	<u>\$0</u> \$0	S 0	<u>\$0</u> \$0	<u>\$0</u> \$0	<u>\$0</u> \$0	
Workshops	<u>50</u> \$0	<u>50</u> \$0	<u>30</u> \$0	<u>50</u> \$0	<u>50</u> \$0	<u>50</u> \$0	<u>\$0</u> \$0	<u>50</u> \$0	<u>30</u> \$0	<u>30</u> \$0	<u>50</u> \$0	
Other Direct Costs	<u>50</u> \$0	<u>50</u> \$0	<u>30</u> \$0	<u>50</u> \$0	<u>50</u> \$0	<u>50</u> \$0	<u>\$0</u> \$0	<u>50</u> \$0	<u>50</u> \$0	<u>30</u> \$0	<u>50</u> \$0	
		<u>30</u>	<u>30</u>	30	30	30	<u> </u>	30	30	<u>30</u>	30	
Total direct costs	<u>\$36,500</u>	<u>\$14,500</u>	<u>\$51,000</u>	<u>\$11,450</u>	<u>\$1,350</u>	<u>\$12,800</u>	<u>\$ 1,235,148</u>	<u>\$520,505</u>	<u>\$1,755,652</u>	<u>\$1,283,097</u>	<u>\$536,355</u>	<u>\$1,819,4</u>
Indirect Costs												
Administration												
Facilities												
Indirect Rate (10%)												
<u>Fotal indirect costs</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	
TOTAL COSTS	\$36,500	\$14,500	\$51,000	\$11,450	\$1,350	\$12,800	\$1,235,148	\$520,505	\$1,755,652	\$1,283,097	\$536,355	\$1,819,4

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 30 of 44

Minnesota Solar Garden Pilot Project

RDF grant approved - \$2,661,3201,283,100

Milestones, Deliverables and Allowed Grant Payments

Milestone 1 - Commissioning first 500 kW

Develop Community Solar Garden Application for subscribers and obtain all project finances. Obtain site control and necessary permits for urban facility. Design, install, and commission <u>a</u> 500 <u>kW_{DC}kW</u> urban facility. Facilitysolar garden. Facilities in service and producing and selling electricity to NSP and solar garden subscribers through <u>a MPUC approved agreement for purchase of</u> <u>power-the SRC Program contract</u>. Facility is commissioned and metering requirements have been completed. To be completed approximately <u>1512</u> months after the <u>Grant</u> Contract Start Date.

Deliverable 1

Deliver copy of MPUC-approved agreement for purchase of powerSRC Program contract; Certification of project financing; copy of approved Community Solar GardenSRC Program Application; copies of site control agreements; copy of facility designs and specifications certified by design engineer; copy of Engineering Certificate that the solar facilities have been constructed according to the plans, specifications, interconnection criteria, and all Project construction is complete; copy of final Interconnection Agreement; copy of the Commissioning Checklist signed by the Xcel Energy Area Engineer upon witnessing and approving successful testing and commissioning of system; photographs of completed solar facilities; and a fully executed Manufacturer's Commissioning Certificate. Submission of Milestone Report satisfactory to RDF representative.

Grant Payment 1

Progress payment of \$1,300,000610,890.

Milestone 2 - Commissioning second 500 kW

Develop Community Solar Garden Application for subscribers and obtain all project finances. Obtain site control and necessary permits for rural facility. Design, install, and commission <u>a</u> 500 <u>kW_{DC}kW</u> rural <u>facility</u>. <u>Facilitysolar garden</u>. <u>Facilities</u> in service and producing and selling electricity to NSP and solar garden subscribers through <u>a MPUC-approved agreement for purchase of</u> <u>power-the SRC Program contract</u>. Facility is commissioned and metering requirements have been completed. To be completed approximately <u>2415</u> months after the <u>Grant</u> Contract Start Date.

Deliverable 2

Deliver copy of <u>MPUC-approved agreement for purchase of powerSRC Program contract</u>; Certification of project financing; copy of approved <u>Community Solar GardenSRC Program</u> Application; copies of site control agreements; copy of facility designs and specifications certified by design engineer; copy of Engineering Certificate that the solar facilities have been constructed

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 31 of 44

according to the plans, specifications, interconnection criteria, and all Project construction is complete; copy of final Interconnection Agreement; copy of the Commissioning Checklist signed by the Xcel Energy Area Engineer upon witnessing and approving successful testing and commissioning of system; photographs of completed solar facilities; and a fully executed Manufacturer's Commissioning Certificate. Submission of Milestone Report satisfactory to RDF representative.

Grant Payment 2

Progress payment of \$1,300,000610,890.

Milestone 3 – Performance Assessment

Assess facility performance. Evaluate recruitment for participation and operations between rural and urban facilities. To be completed approximately 27 months after the Contract Start Date.

Deliverable 3

Submit Solar Garden Analysis including performance assessment and best practices for community solar in Minnesota. On-site demonstration and tour of photovoltaic facility to RDF administration. Present final project results to the RDF advisory group. Submission of Milestone Report satisfactory to RDF representative.

Progress Payment 3

Progress payment of \$61,320.

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 32 of 44

Exhibit D Project Manager and Contract Administrator EP4-15

Project Manager

Kitrina Stratton Minnesota Renewable Energy Society 2928 Fifth Avenue S. Minneapolis, MN 55408 Telephone: 612-963-4757 Email: <u>kitrinas99@aol.com</u>

Contract Administrator

Mark Ritter Northern States Power d/b/a Xcel Energy 414 Nicollet Mall Minneapolis, MN 55401 Telephone: 612-330-6739 Fax: 612-330-7601 Email: mark.g.ritter@xcelenergy.com

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 33 of 44

Exhibit E Confidential Intellectual Property List <u>EP4-15</u>

To be supplied by Grantee, if any.

None.

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Exhibit F Insurance Requirements

EP4-15	
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225	& McLennan Agency LLC Northland Dr N #300				PHONE (AIC. No. Ext: 763-74	6-8000	AX (A/C, No):	
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<u>, CNI</u>	Xcel Energy 414 Nicollet Mall Minneapolis MN 55401				SHOULD ANY OF THE EXPIRATIO ACCORDANCE W	THE ABOVE D N DATE TH ITH THE POLIS		elled Befo Delivered
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Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 35 of 44

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				INSURER A : NSI a d				15350
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	ety/American Solar Energy			INSURER C :				
92	8 Fifth Ave S			INSURER D : INSURER E :				
IIN	neapolis MN 55408			INSURER F :				
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EF	RTIFICATE HOLDER			CANCELLATION				
	Xcel Energy 414 Nicollet Mall Minneapolis MN 55401			SHOULD ANY OF THE EXPIRATIO ACCORDANCE W	N DATE TH	ESCRIBED POLICIES BE C EREOF, NOTICE WILL CY PROVISIONS.	BE DE	ED BEFC
	Minneapoils MiN 55401			AUTHORIZED REPRESE	ENTATIVE			
				Mog-Grack				

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Exhibit G Special Conditions Minnesota Renewable Energy Society EP4-15

- Contractor acknowledges and agrees that nothing under this Grant Contract or other Commission order approving the RDF grant to Contractor for the purposes of the Project obligates NSP or its affiliates to enter into any agreement for the interconnection of the Facility or Project with NSP's electric system. <u>Contractor must obtain written agreement</u> from Greenway, the third-party owner of the Project, that Greenway acknowledges that although Contractor and NSP have entered into this Grant Contract, NSP is under no obligation to enter into any agreement for the interconnection of the Project with NSP's electric system and provide proof of such agreement to NSP within thirty (30) days of this Grant Contract Start Date.
- 2. -Contractor acknowledges that NSP manages both the RDF and interconnection 2 through different business functions of NSP or its affiliates. Contractor agrees that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement for the interconnection of its electric system with the Facility or Project or other conduct by NSP related to such interconnection agreement shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor additionally agrees to waive<u>that</u> any and all claims at equitybreach, dispute, or lawother issue related to NSP's performance of this Grant Contract or other conduct by NSP or its affiliates related to this Grant Contract shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under the interconnection agreement and Contractor agrees to waive any and all claims at equity or law related thereto. To be determined from due diligence review processContractor must obtain written acknowledgement and agreement from Greenway, the third-party owner of the Project, that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement for the interconnection of its electric system with the Facility or Project or other conduct by NSP related to such interconnection agreement shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and that Greenway agrees to waive any and all claims at equity or law related thereto. Contractor agrees to provide proof of such agreement to NSP within thirty (30) days of this Grant Contract Start Date.
 - 3. Contractor acknowledges and agrees that nothing under this Grant Contract or any Commission order approving the RDF grant to Contractor for the purposes of the Project obligates NSP or its affiliates to enter into any agreement for the Project to be considered or to be classified as qualifying for the Xcel Energy Solar*Rewards Community® program. Contractor must obtain written agreement from Greenway, the third-party owner of the Project, that Greenway acknowledges that although Contractor and NSP have entered into this Grant Contract, NSP is under no obligation under this Grant Contract to determine that the Facility or the Project qualifies or is accepted into the Xcel Energy Solar*Rewards

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 37 of 44

<u>Community® program and provide proof of such agreement to NSP within thirty (30) days of this Grant Contract Start Date.</u>

Contractor acknowledges and agrees that NSP manages both the RDF and the 4 Solar*Rewards Community® program through different business functions of NSP or its affiliates. Contractor agrees that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement entered into for, or application process for qualification under, the Solar*Rewards Community® program shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor additionally agrees that any breach, dispute, or other issue related to NSP's performance of this Grant Contract or other conduct by NSP or its affiliates related to this Grant Contract shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under the Solar*Rewards Community® program and Contractor agrees to waive any and all claims at equity or law related thereto. Contractor must obtain written acknowledgement and agreement from Greenway, the third-party owner of the Project, that any breach, dispute, or other issue related to NSP's or its affiliates' performance under any agreement entered into, or application process for qualification under, the Solar*Rewards Community® program or other conduct by NSP related to the Solar*Rewards Community® program shall not be considered a breach by NSP of its obligation of good faith and fair dealing or any other statutory or common law requirement under this Grant Contract, and that any breach, dispute, or other issue related to NSP's performance of this Grant Contract or other conduct by NSP or its affiliates related to this Grant Contract shall not be considered a breach by NSP of its obligations of good faith and fair dealing or any other statutory or common law requirement under the Solar*Rewards Community® program and that Greenway agrees to waive any and all claims at equity or law related thereto. Contractor agrees to provide proof of such agreement to NSP within thirty (30) days of this Grant Contract Start Date.

- 5. Contractor agrees that failure to provide the written acknowledgements identified in Special Conditions 1 through 4 within thirty (30) days of the Grant Contract Start Date shall be considered an Event of Default of Contractor under Section 15.1(A) of this Grant Contract and no notice or cure period shall be applicable.
- 6. All Project reports, posters, presentation handouts, publications and public documents are to include the following credit text: "Project funding provided, in part, by customers of Xcel Energy through a grant from the Renewable Development Fund."
- 7. Contractor and NSP acknowledge that Contractor intends to design, build, and operate the Project for Greenway, and that Greenway will own the two solar PV installations to be commissioned as part of the Project. Contractor attests and represents that it will verify that Greenway has obtained all necessary site control for the installation sites and that Greenway has obtained any and all other permits, orders, authorizations, or other necessary permissions for the Project. before Contractor begins installation of the Project. Contractor agrees to provide copies of Greenway's site control, permits, orders, authorizations, or other permissions to NSP upon NSP's request and failure to provide such documentation shall be considered an event of default under Section 15 of the Grant Contract subject to the cure

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provisions of Section 15.1(B) but, under no circumstances, shall NSP be required to perform under the Grant Contract until such documentation is provided.

- 8. Contractor shall provide a copy of the written agreement between Contractor and Greenway, within thirty (30) days of the Grant Contract Start Date in a form reasonably satisfactory to NSP affirming and acknowledging that Greenway will indemnify and hold harmless NSP, its customers, and the RDF should any disputes arise by or against Greenway related to the Project. Failure to provide a copy of such indemnification shall be considered an Event of Default of Contractor under Section 15.1(A) of the Grant Contract, shall not require notice or be subject to cure, and Contractor acknowledges and agrees that NSP may terminate the Grant Contract immediately under Section 15 and reallocate the entire Grant amount.
- 9. Contractor and NSP acknowledge that Greenway, is not a party to this Grant Contract and that NSP is not a party to any agreement between Contractor and Greenway and that NSP owes no obligations to Greenway nor does Greenway have any rights as to NSP's commitments under the Grant Contract. Nothing in this Grant Contract shall be construed to create any duty to, or standard of care with reference to, or any liability to, any person not a party to this Grant Contract. Contractor shall provide a copy of the written agreement between Contractor and Greenway affirming and acknowledging that Greenway is not a third party beneficiary of this Grant Contract within thirty (30) days of the Grant Contract Start Date in a form reasonably satisfactory to NSP. Failure to provide a copy of such indemnification shall be considered an event of default under Section 15.1(A) of the Grant Contract, shall not require notice or be subject to cure, and Contractor acknowledges and agrees that NSP may terminate the Grant Contract immediately under Section 15 and reallocate the entire Grant amount.
- 10. Contractor acknowledges and agrees that Contractor will not seek NSP approval to assign or transfer this Grant Contract and any such request shall constitute an Event of Default not subject to any cure period. Further, Contractor acknowledges and agrees that should Greenway, attempt to assert any claimed rights under this Grant Contract or against NSP; such assertion shall constitute an Event of Default under Section 15.1(A), shall not require notice or be subject to cure, and Contractor acknowledges and agrees that NSP may immediately, upon written notice to Contractor, terminate the Grant Contract under Section 15 and reallocate the entire Grant amount.

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Exhibit H Contractor's Balance Sheet <u>EP4-15</u> Balance Sheet As of May 12, 2014

	May 12, 14
ASSETS	
Current Assets	
Checking/Savings Savings	870.09
Pavpal	1,599.81
Wells Fargo Checking	2,941.26
Total Checking/Savings	5,411.16
Accounts Receivable Accounts Receivable	-3.827.60
Total Accounts Receivable	-3.827.60
Total Current Assets	1,583.56
Fixed Assets Fixed Assets	
DLP Projector	613.46
Solar Trailer-Aluminum Rails	6,764.00
Solar Trailer-Solar Panels	8,515.00
Solar Trailer	4,000.00
Total Fixed Assets	19,892.46
Accumulated Depreciation	
DLP Projector	-122.69
Solar Trailer-Aluminum Rails Solar Trailer-Solar Panels	-449.95 -582.14
Solar Trailer-Solar Panels Solar Trailer	-002.14 -433.29
Total Accumulated Depreciation	-1.588.07
Vehicles / Trailers	4,262.93
Total Fixed Assets	
Total Fixed Assets	22,567.32
TOTAL ASSETS	24,150.88
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities Accounts Payable	
Accounts Payable	860.49
Total Accounts Payable	860.49
Total Current Liabilities	860.49
Total Liabilities	860.49
Equity	
Prior Years Adjustment	3,074.88
Opening Bal Equity	1,652.70
Unrestricted Net Assets	22,129.86
Net Income	-3,567.05
Total Equity	23,290.39

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THE MINNESOTA RENEWABLE ENERGY SOCIETY Statement of Financial Position December 31, 2016

	Amo	unt
ASSETS		
Cash and cash equivalents	\$ 7,7	40.39
Equipment and vehicles, at cost	24,1	55.39
Less: Accumulated Depreciation	(11,4	86.66)
Equipment and vehicles, net	12,6	68.73
TOTAL ASSETS	\$ 20,4	09.12
LIABILITIES		
Accounts payable	\$	
NET ASSETS		
Unrestricted Net Assets	20.4	09.12
on contect net houses		ODILL
TOTAL LIABILITIES AND NET ASSETS	\$ 20,4	09.12
	+	

For Management Use Only

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 41 of 44

THE MINNESOTA RENEWABLE ENERGY SOCIETY Statement of Activities

For the year ended December 31, 2016

	Amount
INCOME	
Contributions	28,015.70
Member fees	9,710.00
Program services	13,221.61
Interest	0.71
Miscellaneous income	18.14
TOTAL INCOME	50,966.16
EXPENSES	
Payroll	22,248.91
Payroll taxes	5,745.73
Contract services	6,179.95
Travel	1,718.80
Bank fees	233.00
Software	143.62
Insurance	3,713.37
Telephone	1,561.38
Program expenses	11,791.64
Rent	750.00
Supplies	1,608.89
Professional development	5,056.32
Promotional items	1,010.60
Depreciation	3,450.77
Miscellaneous expense	48.26
TOTAL EXPENSES	65,261.24
NET LOSS	(14,295.08)
BEGINNING NET ASSETS	31,704.87
ENDING NET ASSETS	\$ 20,409.12

For Management Use Only

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 42 of 44

Exhibit I Notice of Change or Potential Change in RDF Grant Contract Project <u>EP4-15</u>

[DATE]

RDF Grant Administrator 414 Nicollet Mall, 7th Floor Minneapolis, MN 55401

RE: RDF Grant Contract No. EP4-15 Notice of Potential Change in RDF Grant Contract Project

Dear RDF Grant Administrator,

Contractor, Minnesota Renewable Energy Society, hereby notifies Northern States Power Company, a Minnesota Corporation ("NSP") of the following potential change in its Project: **[Potential Change]**. The potential change in the Project is necessary because **[Reason for Potential Change]**.

Should this change to the Project be acceptable to NSP, Contractor requests that NSP prepare an amendment to the Grant Contract executed by Contractor and NSP on **[Date]**.

Sincerely,

[Signature]

[Grant Recipient Representative]

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 43 of 44

Exhibit J Contractor's approved Proposal and Notice of Change or Potential Change <u>EP4-15</u>

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment B Page 44 of 44

Schedule 11 Exceptions to Contractor's Representations EP4-15

- Contractor represents, warrants and covenants that it has entered or will enter into all contracts or agreements, in a form satisfactory to NSP, necessary for the services, supplies, materials, equipment, and other products necessary for performance of the Project and qualified suppliers and will promptly pay and discharge all such obligations upon receipt of conforming goods and services provided for the Project.
- 2. Contractor represents, warrants and covenants that it has obtained or will obtain all necessary permits, orders, authorization or any other necessary permission in place for the performance of this Grant Contract, including, but not limited to, emissions permits, transportation permits, conditional use permits, and waste permits.
- 3. Contractor and any contractors employed by Contractor for purposes of this Project will maintain the liability coverage required by Exhibit F hereof and any other insurance required for the Project and name Xcel Energy Inc. and all subsidiaries thereof and the RDF advisory group as additional insureds, even if not maintained at the time of execution of the Grant Contract. Contractor agrees to promptly notify NSP of any notice of cancellation received from the current insurer or Contractor or any of Contractor's contractors and who the replacement insurer will be without allowing any gap or lapse in such insurance. Contractor will provide copies of proof of any contractor's insurance within fifteen (15) days of any request for such proof made by NSP after the Grant Contract Start Date.

FIRST AMENDED AND RESTATED GRANT CONTRACT AMENDMENT No. 1 EP4-15

THIS AMENDMENT No. 1 ("Amendment No. 1") to the First Amended and Restated Grant Contract Between Northern States Power Company, a Minnesota corporation ("NSP"), with its principal place of business at 414 Nicollet Mall, Minneapolis, Minnesota 55401 and Minnesota Renewable Energy Society, Inc. ("Contractor"), a Minnesota non-profit corporation, with its principal place of business at 2928 Fifth Avenue South, Minneapolis, MN 55408 is made this ______ day of ______, 2017, by and between NSP and Contractor. NSP and Contractor are sometimes individually referred to as a "Party" or collectively as the "Parties". Capitalized terms used herein but not defined herein shall have the meanings set forth in the Grant Contract.

WHEREAS, the Parties have entered into a Grant Contract for NSP to reimburse Contractor in accordance with Exhibit C to the First Amended and Restated Grant Contract, from the RDF, for Contractor's Project identified as EP4-15.

WHEREAS, Contractor and NSP desire to modify the scope, budget, an milestones identified in the First Amended and Restated Grant Contract.

NOW, THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound thereby, the Parties hereby agree as follows:

1. The total nameplate capacity in the recitals of the First Amended and Restated Grant Contract is revised as follows:

 \dots of not more than $1.9\frac{1}{2}$ megawatts \dots

2. The following WHEREAS clause is added to the recitals of the First Amended and Restated Grant Contract:

WHEREAS, Contractor and the City of Minneapolis have identified a third location for an installation under the SRC Program that is added to the Project while maintaining the same total resource cost for the Project, that will increase the RDF grant amount from the amount stated in the First Amended and Restated Grant Contract but still within the amount identified in the Original Grant Contract and approved by the Commission.

3. Exhibit A to the First Amended and Restated Grant Contract is revised as follows:

... will install not more than $1,000\overline{700}$ kilowatts The project's total cost is 1,819,451.... The goal of the Solar Project is to install up to 1, $000\overline{700}$ kW_{DC}.... Commissioning of not more than 1, $000\overline{700}$ kW_{DC}....

4. Exhibit C to the First Amended and Restated Grant Contract is deleted in its entirety and replaced with the following:

Exhibit C Budget, Project Payment Milestones and Deliverables EP4-15

Total Project Budget Amount: \$1,871,560

Maximum RDF Grant Amount: \$1,283,100

	Year One (2016)			Ye2	Year Two (2017)			ar Three (20	<mark>18)</mark>	TOTAL PROJECT		
Budget Item	RDF Share	Cost Sharing	Total Cost	RDF Share	Cost Sharing	<mark>Total</mark> Cost	RDF Share	Cost Sharing	Total Cost	RDF Share	Cost Sharing	Total Cost
Direct Costs	<u>onur</u>	g	0000	<u>onuro</u>	Chang	Cool	<u>cinate</u>	B		<u>onare</u>	g	
Salaries and Wages Fringe	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	\$126,175	<mark>\$54,075</mark>	<mark>\$180,250</mark>	<mark>\$126,175</mark>	<mark>\$54,075</mark>	<mark>\$180,250</mark>
Benefits Equipment	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>
Consultants/Subcontractor	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$647,750</mark>	<mark>\$277,607</mark>	<mark>\$925,357</mark>	<mark>\$647,750</mark>	<mark>\$277,607</mark>	<mark>\$925,357</mark>
Supplies	<mark>\$36,500</mark>	<mark>\$14,500</mark>	<mark>\$51,000</mark>	<mark>\$8,300</mark>	<mark>\$0</mark>	<mark>\$8,300</mark>	<mark>\$338,380</mark>	<mark>\$145,020</mark>	<mark>\$483,400</mark>	<mark>\$383,180</mark>	<mark>\$159,520</mark>	<mark>\$542,700</mark>
Construction Materials												
Permits & Interconnect	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$8,873</mark>	<mark>\$3,803</mark>	<mark>\$12,675</mark>	<mark>\$8,873</mark>	<mark>\$3,803</mark>	<mark>\$12,675</mark>
Travel Publicity/Printing	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>
Workshops	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$3,150</mark>	<mark>\$1,350</mark>	<mark>\$4,500</mark>	<mark>\$113,970</mark>	<mark>\$40,000</mark>	<mark>\$153,970</mark>	<mark>\$117,120</mark>	<mark>\$41,350</mark>	<mark>\$158,470</mark>
Other Direct Costs	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>		<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$</mark> 0	<mark>\$0</mark>
	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>		<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>
	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>
	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$</mark> 0	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$</mark> 0	<mark>\$0</mark>
Total direct costs	<mark>\$36,500</mark>	<mark>\$14,500</mark>	<mark>\$51,000</mark>	<mark>\$11,450</mark>	<mark>\$1,350</mark>	<mark>\$12,800</mark>	<mark>\$ 1,235,148</mark>	\$520,505	<mark>\$1,755,652</mark>	\$1,283,097	<mark>\$536,355</mark>	<mark>\$1,819,452</mark>
Total direct costs	\$30,500	\$14,500	\$31,000	\$11,450	\$1,330	\$12,000	\$ 1,233,140	9520,505	\$1,755,052	\$1,203,097	\$330,333	\$1,019,432
Indirect Costs												
Administration												
Facilities												
Indirect Rate (10%)												
Total indirect costs	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>	<mark>\$0</mark>
TOTAL COSTS	<mark>\$36,500</mark>	<mark>\$14,500</mark>	<mark>\$51,000</mark>	<mark>\$11,450</mark>	<mark>\$1,350</mark>	<mark>\$12,800</mark>	<mark>\$1,235,148</mark>	<mark>\$520,505</mark>	<mark>\$1,755,652</mark>	<mark>\$1,283,097</mark>	<mark>\$536,355</mark>	<mark>\$1,819,452</mark>
l												

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Minnesota Solar Garden Pilot Project

RDF grant approved - \$1,283,100

Milestones, Deliverables and Allowed Grant Payments

Milestone 1 – Commissioning first 500 kW

Develop Community Solar Garden Application for subscribers and obtain all project finances. Obtain site control and necessary permits for urban facility. Design, install, and commission a 500 kW urban solar garden. Facilities in service and producing and selling electricity to NSP through the SRC Program contract. Facility is commissioned and metering requirements have been completed. To be completed approximately 12 months after the Grant Contract Start Date.

Deliverable 1

Deliver copy of SRC Program contract; Certification of project financing; copy of approved SRC Program Application; copies of site control agreements; copy of facility designs and specifications certified by design engineer; copy of Engineering Certificate that the solar facilities have been constructed according to the plans, specifications, interconnection criteria, and all Project construction is complete; copy of final Interconnection Agreement; copy of the Commissioning Checklist signed by the Xcel Energy Area Engineer upon witnessing and approving successful testing and commissioning of system; photographs of completed solar facilities; and a fully executed Manufacturer's Commissioning Certificate. Submission of Milestone Report satisfactory to RDF representative.

Grant Payment 1

Progress payment of \$610,890.

Milestone 2 - Commissioning second 500 kW

Develop Community Solar Garden Application for subscribers and obtain all project finances. Obtain site control and necessary permits for rural facility. Design, install, and commission a 500 kW rural solar garden. Facilities in service and producing and selling electricity to NSP through the SRC Program contract. Facility is commissioned and metering requirements have been completed. To be completed approximately 15 months after the Grant Contract Start Date.

Deliverable 2

Deliver copy of SRC Program contract; Certification of project financing; copy of approved SRC Program Application; copies of site control agreements; copy of facility designs and specifications certified by design engineer; copy of Engineering Certificate that the solar facilities have been constructed according to the plans, specifications, interconnection criteria, and all Project construction is complete; copy of final Interconnection Agreement; copy of the Commissioning Checklist signed by the Xcel Energy Area Engineer upon witnessing and approving successful testing and commissioning of system; photographs of completed solar facilities; and a fully executed

Docket No. E002/M-12-1278 Change in RDF Grant Contract Scope of Work Attachment C 4 of 6

Manufacturer's Commissioning Certificate. Submission of Milestone Report satisfactory to RDF representative.

Grant Payment 2

Progress payment of \$610,890.

Milestone 3 – Commissioning third 700 kW

Develop Community Solar Garden Application for subscribers and obtain all project finances. Obtain site control and necessary permits for urban facility. Design, install, and commission a700 kW urban solar garden in south Minneapolis. Facilities in service and producing and selling electricity to NSP through the SRC Program contract. Facility is commissioned and metering requirements have been completed. To be completed approximately 12 months after the Grant Contract Start Date.

Deliverable 3

Deliver copy of SRC Program contract; Certification of project financing; copy of approved SRC Program Application; copies of site control agreements; copy of facility designs and specifications certified by design engineer; copy of Engineering Certificate that the solar facilities have been constructed according to the plans, specifications, interconnection criteria, and all Project construction is complete; copy of final Interconnection Agreement; copy of the Commissioning Checklist signed by the Xcel Energy Area Engineer upon witnessing and approving successful testing and commissioning of system; photographs of completed solar facilities; and a fully executed Manufacturer's Commissioning Certificate. Submission of Milestone Report satisfactory to RDF representative.

Grant Payment 3

Progress payment of \$_____.

Milestone 4 – Performance Assessment

Assess facility performance. Evaluate recruitment for participation and operations between rural and urban facilities. To be completed approximately 27 months after the Contract Start Date.

Deliverable 4

Submit Solar Garden Analysis including performance assessment and best practices for community solar in Minnesota. On-site demonstration and tour of photovoltaic facility to RDF administration. Present final project results to the RDF advisory group. Submission of Milestone Report satisfactory to RDF representative.

Progress Payment 4

Progress payment of \$61,320.

- 5. The terms and provisions contained in this Amendment No. 1 to the First Amended and Restated Grant Contract constitute the entire agreement between NSP and Contractor with respect to the amendment of the Grant Contract and shall supersede all previous communications, representations, or agreements, either oral or written, between NSP and Contractor regarding amendment of the Grant Contract. This Amendment No. 1 may be amended, changed, modified, or altered in accordance with the terms of the Grant Contract, *provided, however, that* such amendment, change, modification, or alteration shall be in writing.
- 6. This Amendment No. 1 is binding upon and shall inure to the benefit of the Parties hereto and their respective successors, legal representatives, and assigns.
- 7. Except and specifically provided in this Amendment No. 1, no other amendments, revisions, or changes are made or have been made to the Grant Contract.
- 8. Upon the effectiveness of this Amendment No. 1, each reference in the Grant Contract to "this Grant Contract", "herein", "hereto", or words of like import shall mean and be a reference to the Grant Contract, as amended hereby.

[SIGNATURE PAGE FOLLOWS]

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IN WITNESS WHEREOF, the Parties have executed this Amendment No. 1 as of the date first set forth above.

Northern States Power Company, a Minnesota corporation

Its: RVP, Rates & Regulatory Affairs

Minnesota Renewable Energy Society

By: _____

Date: _____

Its: Managing Director

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Minnesota Renewable Energy Society (EP4-15) Grant Award Analysis

Control - Original Proposal								Alternative - ARR Pricing							
Assumptions original propos second year of	al. Term of c							values. Dis	count rate an	d avoided o	costs based o	n original pro	ect costs based oposal. CSG a erm based on	pplication co	ompleted
1.0 MW (Origin	nal TRC calcu	lation at \$0.07	PPA)					1.0 MW (2	5 year 2016 A	ARR CSG ta	arriff and MR	ES productio	on)		
Discount rate = 0.0721							Discount r		0.0721		1	,			
				RDF Funding			Total					RDF Fundin	_		Total
	Energy	Price	Energy	+Bidder	Externality	Avoided	Program		Energy	Price	Energy	+Bidder	Externality	Avoided	Program
	kwh	\$/MWh	Cost (\$)	Cost	cost	Cost	Cost		kwh	\$/MWh	Cost (\$)	Cost	cost	Cost	Cost
	а	Ь	a*b=c	d	e	f	(c+d+e)-f		а	b	a*b=c	d	e	f	(c+d+e)-f
2017	1,224,178	\$70.00	\$85,692	\$3,613,139		\$727	\$3,698,104		1,294,902		\$163,106	\$3,966,420		\$27,402	\$4,102,12
2018	1,218,057	\$71.75	\$87,396	\$264,296		\$27,402	\$324,290		1,292,137	\$128.88	\$166,534			\$28,087	\$138,44
2019	1,211,967	\$73.54	\$89,133	\$74,167		\$28,087	\$135,213		1,289,379		\$170,033			\$28,789	\$141,24
2020	1,205,907	\$75.38	\$90,904	\$84,818		\$28,789	\$146,933		1,286,626		\$173,607			\$29,509	\$144,09
2021	1,199,877	\$77.27	\$92,711			\$29,509	\$63,202		1,283,879	\$138.06	\$177,255			\$30,247	\$147,00
2022	1,193,878	\$79.20	\$94,553			\$30,247	\$64,307		1,281,138		\$180,980			\$31,003	\$149,97
2023	1,187,909	\$81.18	\$96,433			\$31,003	\$65,430		1,278,403		\$184,784			\$31,778	\$153,00
2024	1,181,969	\$83.21	\$98,349			\$31,778	\$66,571		1,275,674		\$188,667			\$32,572	\$156,09
2025	1,176,059	\$85.29	\$100,304			\$32,572	\$67,732		1,272,950		\$192,632			\$33,387	\$159,24
2026	1,170,179	\$87.42	\$102,298			\$33,387	\$68,911		1,270,232		\$196,680			\$34,221	\$162,45
2027	1,164,328	\$89.61	\$104,331			\$34,221	\$70,109		1,267,520		\$200,814			\$35,077	\$165,73
2028	1,158,506	\$91.85	\$106,404			\$35,077	\$71,327		1,264,814	\$162.11	\$205,034			\$35,954	\$169,0
2029	1,152,714	\$94.14	\$108,519			\$35,954	\$72,565		1,262,114		\$209,343			\$36,853	\$172,4
2030	1,146,950	\$96.50	\$110,676			\$36,853	\$73,823		1,259,419		\$213,742			\$37,774	\$175,90
2031								2031	1,256,731	\$173.65	\$218,234			\$38,718	\$179,5
2032								2032	1,254,048		\$222,820			\$39,686	\$183,13
2033								2033	1,251,370		\$227,503			\$40,678	\$186,82
								2034	1,248,699	\$186.02	\$232,284			\$41,695	\$190,58
Totals	16,592,478	-	\$1,367,702	\$4,036,420	\$ 0	\$415,606	\$4,309,079	2035	1,246,033	\$190.34	\$237,166			\$42,738	\$194,42
Average	-	\$82.59	-	Calcul	lated TRC $=$	\$0.2597 ,	/kWh	2036	1,243,372	\$194.75	\$242,150			\$43,806	\$198,34
								2037	1,240,718		\$247,239			\$44,901	\$202,33
								2038	1,238,069	\$203.89	\$252,434			\$46,024	\$206,41
				RDF Grant	\$2,661,320			2039	1,235,426		\$257,740			\$47,174	\$210,50
						2040	1,232,788	\$213.46	\$263,156			\$48,354	\$214,80		
Note - The origi	nal proposal w	as assessed w	ith a flat price	structure of \$7	70/MWh as sub	mitted on page	es 2 and 3 of								
the Grant Application Form.						Totals	30,326,442	-	\$5,023,935	\$3,966,420	\$0	\$886,428	\$5,519,4		
								Average	-	\$166.05	-	Rev	ised TRC $=$	\$0.1820	/kWh

Grant Award Calculation									
Original Award	NPV Control	NPV Alternative	Grant Reduction	Revised Grant Award					
а	b	с	b-c=d	a-d					
\$2,661,320	\$825,326	\$2,203,607	\$1,378,281	\$1,283,039					

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www.minneapolismn.gov

Minneapolis City of Lakes

September 20, 2017

Mark Ritter Xcel Energy – Renewable Energy Fund 414 Nicollet Mall – GO 7 Minneapolis, MN 55401-1993

Dear Mr. Ritter:

The City of Minneapolis is pleased to provide this letter of support for the amending of the original Minnesota Renewable Energy Society's (MRES) Renewable Development Fund (RDF) grant contract that created two community solar gardens marketed to Low Income Households (LIHs) in Minnesota. The City of Minneapolis welcomes the chance to re-task the extra RDF funds from this contract to assist Minneapolis in developing a solar garden on the rooftops of new City Public Works Department buildings being built in the East Phillips Neighborhood of Minneapolis starting in 2018 with completion expected in 2019. The goal of this new solar garden is to significantly reduce the utility costs for LIHs in the neighborhood of one of the most racially concentrated areas of poverty in the region. Approximately 88% of residents are people of color, and 45% live below the poverty line.

To assist in bring down the installation cost of the solar garden, the City has already enrolled the project in the Department of Energy's Solar Challenge Grant program but we know the odds of receiving a meaningful federal grant are slim. The RDF grant funds would present a tangible and material difference in the lives of residents of this neighborhood who have been living adjacent to industrial uses for a number of years. We have calculated that for every \$500,000 in savings on the installation price of the solar garden, the developer can reduce the subscription price by \$0.03/kWh. A reduction of this size would allow the subscribers to reduce their electricity bill by 20% -25% each month. The City is hoping that the RDF award for this new array be closer to\$1,000,000 to allow a 40% to 50% bill reduction. The City will consider assisting in credit enhancing the solar garden subscriptions to make the project financeable.

This innovative project is consistent with the City's vision of clean, affordable and local energy supply, articulated in our Climate Action Plan. It is also consistent with legislative initiatives to:

- Increase the market penetration of renewable electric energy resources in Minnesota at reasonable costs.
- Promote the start-up, expansion, and attraction of renewable electric energy projects and companies within Minnesota.

If you have any questions, please contact Minneapolis Energy Manager Brian Millberg at (612) 673-3024 or brian.millberg@minneapolismn.gov.

Sincerely,

Mark Ruff Chief Financial Officer

CERTIFICATE OF SERVICE

I, Jim Erickson, hereby certify that I have this day served copies of the foregoing document or a summary thereof on the attached list of persons.

- <u>xx</u> by depositing a true and correct copy or summary thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota; or
- \underline{xx} via electronic filing

Docket No. E002/M-12-1278

Dated this 22nd day of September 2017

/s/

Jim Erickson Records Analyst

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.m n.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_12-1278_Official
Mara	Ascheman	mara.k.ascheman@xcelen ergy.com	Xcel Energy	414 Nicollet Mall FI 5 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_12-1278_Official
Carl	Cronin	Regulatory.records@xcele nergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_12-1278_Official
lan	Dobson	Residential.Utilities@ag.sta te.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_12-1278_Official
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_12-1278_Official
James	Gibson	james.gibson@farmameric a.org	Farmamerica	7367 360th Avenue Waseca, MN 56093	Electronic Service	No	OFF_SL_12-1278_Official
Cheryal Lee	Hills	chills@regionfive.org	Region Five Development Commission	200 First Street NE Suite 2 Staples, MN 56479	Electronic Service	No	OFF_SL_12-1278_Official
Thomas	Melone	Thomas.Melone@AllcoUS. com	Minnesota Go Solar LLC	222 South 9th Street Suite 1600 Minneapolis, Minnesota 55120	Electronic Service	No	OFF_SL_12-1278_Official
Shalini	Menezes	smenezes@interphases.co m	InterPhases Solar	668 Flinn Avenue Moorpark, CA 93021	Electronic Service	No	OFF_SL_12-1278_Official
Robert	Messerich	b.messerich@gmail.com	Dragonfly Solar, LLC	10583 202nd St West Lakeville, MN 55044	Electronic Service	No	OFF_SL_12-1278_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Alan	Muller	alan@greendel.org	Energy & Environmental Consulting	1110 West Avenue Red Wing, MN 55066	Electronic Service	No	OFF_SL_12-1278_Official
David	Shaffer	shaff081@gmail.com	Minnesota Solar Energy Industries Project	1005 Fairmount Ave Saint Paul, MN 55105	Electronic Service	No	OFF_SL_12-1278_Official
Pamela A.	Webb	N/A	University of Minnesota	450 McNamara Alumni Center 200 Oak St SE Minneapolis, MN 55455-2070	Paper Service	No	OFF_SL_12-1278_Official
Dr. Don	Weinkauf	N/A	University of St. Thomas	Mail OSS 101 2115 Summit Ave St. Paul, MN 55105-1079	Paper Service	No	OFF_SL_12-1278_Official
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_12-1278_Official