



414 Nicollet Mall
Minneapolis, Minnesota 55401

August 9, 2013

—Via Electronic Filing—

Burl W. Haar
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101

RE: SELECTION REPORT-SUPPLEMENT
RENEWABLE DEVELOPMENT FUND - CYCLE 4
DOCKET NO. E002/M-12-1278

Dear Dr. Haar:

On July 29, 2013 Northern States Power Company, doing business as Xcel Energy, submitted its Selection Report for the Renewable Development Fund – Grant Awarding Cycle 4. In subsequent discussions with the Department, it was determined that additional information would be helpful in the process of evaluating the Company’s recommendations in the Selection Report. Therefore, the Company submits the enclosed Supplement to its Renewable Development Fund Cycle 4 Selection Report.

We have electronically filed this document, and served copies of the public version on the parties on the attached service lists.

If you have any questions regarding this filing please contact me at (612) 330-7529 or paul.lehman@xcelenergy.com.

Sincerely,

/s/

PAUL J LEHMAN
MANAGER, REGULATORY COMPLIANCE AND FILINGS

Enclosures
cc: Service List
Applicants

XCEL ENERGY RENEWABLE DEVELOPMENT FUND

**SUPPLEMENT TO
PROJECT SELECTION REPORT
CYCLE 4**

**PREPARED BY
XCEL ENERGY**

**Docket No. E002/M-12-1278
August 9, 2013**

Introduction

On July 29, 2013, Northern States Power Company filed its Renewable Development Fund (RDF) Cycle 4 grant award selection report (Selection Report) with the Minnesota Public Utilities Commission. The Company recommended a total of over \$30 million in grant awards for 20 projects and programs in the areas of Energy Production (EP), Research and Development (RD), and Higher Education for approval by the Commission. In the Selection Report, the Company also proposed a Reserve List of 13 projects should a recommended project not move forward. The Selection Report provided an explanation of the overall selection process involving input from an Independent Evaluator, the advisory group, and the Company. This supplemental filing provides a comprehensive discussion of the selection meeting held by the RDF advisory group. This includes the evaluation the advisory group used to arrive at their recommendations that were not solely based on the Independent Evaluator's scoring.

Selection Process

Upon receiving and opening the bids for the 4th Cycle RDF RFP, the Company reviewed all of these to make sure the proposals met the eligibility requirements of the RFP. After consultation with the RDF advisory group, it was determined that four bids did not meet the eligibility requirements and thus were rejected. That left a total of 67 eligible proposals requesting approximately \$133.5 million in grant funding for RDF Cycle 4. As a first step, each proposal that was received was assigned to two advisory group members for an in-depth review of the proposal. Care was taken to not assign any proposals to advisory group members for which there might be a perceived conflict of interest. For example, the two proposals that were submitted by Xcel Energy were specifically not assigned to either of the two Company advisory group members. There were four other proposals received that were similarly not assigned to certain advisory group members because of their affiliation with the proposal. In the end, each advisory group member reviewed in detail between 20 and 22 of the EP and RD proposals plus each advisory group member reviewed all three of the higher education block grant requests.

In conjunction with the advisory group review and to assist in the technical evaluation of the proposals from an entirely objective perspective, Sargent & Lundy, LLC was contracted as an Independent Evaluator. The three Higher Education proposals received for RDF Cycle 4 were not evaluated by Sargent & Lundy. Sargent & Lundy's numeric evaluation was completed using the scoring methodology filed with our Selection Report as Attachment A: project method, scope, and deliverables; technical requirements; management team, schedule, and cost; potential benefits to Minnesota and ratepayers; resource cost per kWh; and a "bonus" score that could not exceed 15

percent of the basic score. Along with a score for each proposal, the Independent Evaluator divided the proposals (EP and RD) into three categories. Sargent & Lundy placed 30 projects in Category 1, 16 projects in Category 2, and 18 projects in Category 3. The division of the projects into these categories was intended to help the advisory group understand the highest rated projects with the divisions between the categories somewhat reflective of the limited funds available to award in this 4th funding cycle.

Advisory Group Selection Meeting

The advisory group members met on June 12, 2013, along with Sargent & Lundy and the Company to review the scoring report and develop a comprehensive list of Recommended and Reserve List projects. The advisory group used the Independent Evaluator's report as an initial screening tool from which to begin its overall evaluation of the EP and RD proposals. During an all-day review session, the advisory group members first developed a list of subjective attributes against which to evaluate the proposals. This approach was adopted by the advisory group as a way to differentiate the many similar proposals received in RDF Cycle 4. The advisory group established the following attributes members would use to evaluate the proposals in addition to the scoring performed by Sargent & Lundy:

- Diversity of location, project type, and technology
- Uniqueness/innovativeness of the proposal
- Benefit to enhancing renewable market penetration
- Cost
- Practicality
- Convincing nature of the proposal
- Awareness/visibility of the project
- Royalty sharing
- Treatment of Renewable Energy Credits
- Value to Xcel Energy electric ratepayers in Minnesota and Wisconsin
- Balancing of the above attributes

Using these attributes as a guide, the advisory group began the evaluation process by identifying projects that may have received a low score from the Independent Evaluator, but in an advisory group member's opinion possessed one or more of the desired attributes. In that case, the advisory group agreed to discuss that project in more depth during the discussion part of the selection meeting. Similarly, advisory group members identified projects they reviewed that might have had a higher Independent Evaluator's score, but that the advisory group member did not believe did a good job of meeting the identified subjective attributes. In those instances, the identified proposal was moved down the ranking list. Using this process, nearly \$90.0 million in funding requests were identified for more in-depth discussion, which was

three times the \$30 million of available funds (*See Table 1*). Once this re-ordering by the advisory group was complete, the process of evaluation and discussion began with the project that received the highest score from Sargent & Lundy and continued in descending score order.

Table 1

4th Cycle Proposals Selected for RDF Advisory Group Review				
Proposal	Applicant	Grant Request	Score	Category
Energy Production Proposals				
EP4-38	Minnesota Go Solar	\$ 7,439,000	187.45	1
EP4-20	Target Corporation	\$ 583,513	182.85	1
EP4-48	Oak Leaf Energy Partners Ohio	\$ 2,000,000	180.17	1
EP4-33	PowerWorks Wind Turbines	\$ 1,998,416	173.75	1
EP4-43	Cornerstone Group	\$ 310,310	171.45	1
EP4-36	City of Austin	\$ 3,565,000	164.25	1
EP4-13	Metropolitan Airports Commission	\$ 2,022,507	163.25	1
EP4-6	Best Power, Int'l (St. John's)	\$ 172,213	162.15	1
EP4-39	Goodwill Solar	\$ 1,075,250	160.71	1
EP4-11	Innovative Power Systems, Inc.	\$ 1,850,000	158.32	1
EP4-29	Dragonfly Solar (Dodge Center)	\$ 1,650,000	156.78	1
EP4-42	Aurora St. Anthony Limited	\$ 398,000	155.92	1
EP4-18	Gustavus Adolphus College	\$ 480,000	155.92	1
EP4-46	Geronimo Energy	\$ 1,503,000	155.73	1
EP4-7	Anoka Ramsey Community College	\$ 828,900	151.80	1
EP4-2	City of Hopkins	\$ 708,204	151.32	1
EP4-5	Best Power, Int'l, (Sisters of Notre Dame)	\$ 900,000	149.02	1
EP4-45	City of Rogers	\$ 1,470,544	145.47	1
EP4-14	Murphy Warehouse Company	\$ 2,016,118	143.17	1
EP4-3	Minneapolis Public School	\$ 917,250	141.64	1
EP4-9	Mondovi Energy Systems	\$ 2,000,000	135.03	2
EP4-37	Natural Systems Utilities	\$ 2,000,000	133.30	2
EP4-24	Bergey Windpower Co.	\$ 1,106,600	129.57	2
EP4-4	SGE Partners LLC (Sanimax)	\$ 5,000,000	129.09	2
EP4-41	City of Hutchinson	\$ 958,369	126.50	2
EP4-22	Minneapolis Park and Recreation Board	\$ 969,741	122.95	2
EP4-34	City of St. Paul	\$ 555,750	117.97	3
EP4-12	Xcel Energy Services	\$ 10,800,000	109.63	3
EP4-21	Farmamerica	\$ 600,000	106.28	3
EP4-17	MN Department of Natural Resources	\$ 641,000	97.08	3
EP4-15	MN Renewable Energy Society	\$ 2,661,320	90.66	3
Total Energy Production Proposals		\$59,181,005		

Table 1 (continued)

Research & Development Proposals				
RD4-7	Interphases Solar	\$ 1,000,000	156.83	1
RD4-11	U of M - NRRRI (Torrefaction)	\$ 1,899,499	136.37	1
RD4-5	University of Florida	\$ 1,109,538	136.37	1
RD4-13	U of M (VWS)	\$ 1,391,684	135.08	1
RD4-6	AF-Energy Corporation	\$ 1,573,680	133.11	1
RD4-12	U of M (Noise)	\$ 625,102	126.92	1
RD4-2	U of M (Dairy)	\$ 982,408	123.67	1
RD4-8	City of Red Wing	\$ 1,999,500	113.75	1
RD4-9	Small Wind Turbines, LLC	\$ 446,944	110.75	1
RD4-21	Solar Cell & LED Technology	\$ 1,000,000	109.17	1
RD4-4	Xcel Energy Business Systems	\$ 390,000	103.92	2
RD4-18	Open Access Technology International	\$ 1,945,223	97.17	2
RD4-1	U of M (Gasification)	\$ 999,999	98.58	2
RD4-19	Community Energy Solutions	\$ 250,000	77.91	3
RD4-16	U of M (Wind Tunnel)	\$ 299,472	67.83	3
RD4-14	Barr Engineering	\$ 161,081	63.00	3
Total Research & Development Proposals		\$16,074,130		

Higher Education Proposals

HE4-1	MnSCU	\$5,500,000	145.01	N/A
HE4-3	University of St. Thomas	\$2,157,215	120.00	N/A
HE4-2	University of Minnesota	\$6,900,300	117.96	N/A
Total Higher Education Proposals		\$16,074,130		
Total Proposals for Group Discussion		\$89,812,650		

Seventeen proposals totaling \$35.3 million, about 25% of the total eligible proposals received, were not discussed individually by the RDF advisory group (*See Table 2*). All proposals within this group had been reviewed by a minimum of two advisory group members prior to the selection meeting. This group was comprised of proposals that received relatively low technical scores and did not contain any notable attributes to counter the low technical score when reviewed by a RDF advisory member.

Table 2

4th Cycle Proposals Not Selected for RDF Advisory Group Review				
Proposal	Applicant	Grant Request	Score	Category
Energy Production Proposals				
EP4-44	Region Five Development Commission	\$1,993,659	138.50	2
EP4-8	Salvation Army	\$460,000	135.51	2
EP4-1	ECOCORP	\$2,000,000	133.50	2
EP4-47	North Central Region Council of Carpenters	\$1,102,395	128.22	2
EP4-31	Heliacal, LLC	\$1,999,481	122.57	2
EP4-27	Positive Energy Alternatives	\$2,000,000	121.80	3
EP4-30	Gelco Corporation	\$3,129,400	119.79	3
EP4-25	Hince Farms, Inc.	\$350,000	117.20	3
EP4-26	Positive Energy Systems, LLC	\$2,000,000	104.75	3
EP4-16	OSEMI, Inc.	\$1,750,000	104.27	3
EP4-19	Adonis Eco-Housing	\$2,046,673	87.59	3
EP4-35	Revier Cattle Company	\$6,756,225	87.11	3
EP4-28	Future Force Inc.	\$2,778,400	86.73	3
EP4-23	Green Peak Solar LLC	\$2,300,000	76.28	3
EP4-32	Emerald H2	\$1,984,977	63.06	3
Total Energy Production Proposals		\$32,651,210		
Research & Development Proposals				
RD4-3	Angel Alternative Energy	\$593,604	108.58	2
RD4-17	University of Minnesota - Morris	\$2,078,708	87.50	2
Total Research & Development Proposals		\$2,672,312		
Total Proposals Not Selected for Discussion		\$35,323,522		

A. EP Discussions and Recommendations

As stated in our Selection Report, after the selection process was complete, the Company reached conclusion on requesting funding approval of the following EP projects.

Table 3

ID Number	Independent Evaluator Rank	Applicant	Type	Amount Recommended¹	Total Project Cost
EP4-20	2	Target Corporation	Solar (350 kW)	\$583,513	\$1,060,933
EP4-43	5	Cornerstone Group	Solar (152 kW)	\$310,310	\$705,250
EP4-13	7	Metropolitan Airport Commission	Solar (1,180 kW)	\$2,022,507	\$4,189,000
EP4-39	9	Goodwill Solar, LLC	Solar (700 kW)	\$1,075,250	\$1,525,250
EP4-11	10	Innovative Power Systems, Inc.	Solar (967 kW)	\$1,850,000	\$2,698,200
EP4-42	12	Aurora St. Anthony, LLC	Solar (252 kW)	\$398,000	\$911,798
EP4-7	15	Anoka Ramsey Community College	Solar (458 kW)	\$828,900	\$1,825,976
EP4-5	17	School Sisters of Notre Dame	Solar (907 kW)	\$900,000	\$1,811,857
EP4-3	20	Edison High School	Solar (485 kW)	\$917,250	\$1,949,002
EP4-9	23	Mondovi Energy Systems	Biomass (2,000 kW)	\$2,000,000	\$13,220,683
EP4-24	26	Bergey Windpower	Wind (500 kW)	\$1,106,600	\$3,191,745
EP4-4	27	SGE Partners, LLC	Biomass (1,100 kW)	\$5,000,000	\$14,847,764
EP4-22	30	Minneapolis Park & Recreation Board	Solar (200 kW)	\$969,741	\$1,119,133
Total				\$17,962,071	\$49,056,591

For EP projects, the Company affirmed the recommendations of the advisory group for RDF Cycle 4 funding with no changes. The reasons for selection of each of these projects are detailed in the Company's July 29, 2013 Selection Report.

As identified in the Selection Report, the advisory group also identified a list of projects that should be placed on a reserve list of projects ready to be awarded funding should any of the projects on the recommended list not proceed. While the Company chose to divide this list of projects into a first tier of reserve projects (to be funded first) and a second tier, the Company agreed with the advisory group's

¹ The RDF advisory group and the Company recommend fully funding the amounts requested for projects instead of only a portion of the requested funding.

recommendation of the projects that should be reserved for potential funding. In arriving at the Recommended and Reserve Lists, the remaining proposals were reviewed and the decision to not fund these proposals was made. The following discussion covers these projects and provides the reasoning of the advisory group for final funding recommendations.

EP Proposals Recommended for Funding as Reserve Projects

Oak Leaf Energy Partners Ohio, LLC: Blue Lake Wastewater Treatment Plant Solar Project (EP4-48)

A 1.0 MW solar PV facility would be installed at the Metropolitan Council's Blue Lake wastewater treatment plant located near Shakopee, Minnesota. This project would be one of the largest demonstrations of a behind-the-meter solar farm in the state.

The advisory group identified contract issues with this proposal that, while surmountable, prevented the group from reaching a consensus given other available rooftop solar projects to select from. The advisory group also identified other solar installations that would be more visible to the general public, those in the Energy Innovation Corridor for example, among the proposals with high scores received by Sargent & Lundy. However, recognizing value in a municipal partner who has successfully developed an RDF project, this proposal was added to the Reserve List.

City of Austin: Austin Wastewater Treatment Facility Biogas Renewable Energy Project (EP4-36)

This 1.0 MW biomass project would consist of two 500 kW internal combustion engines which would be fueled by a biogas generator from the existing anaerobic digester at the City of Austin wastewater treatment facility. This project would increase the efficiency and production of the City's current anaerobic digester system. Project generation would be consumed on-site.

The overall funding request was on the higher end of proposals reviewed by the advisory group. The advisory group also noted that the City of Austin would experience reduced wastewater costs. To balance funding for biomass proposals, the advisory group preferred two proposals that were based in the Xcel Energy service territory and the proposal did not clearly state why a grant award larger than the average amount is justified as requested on page 10 of the RFP. The advisory group recommended this proposal as an alternative project on the Reserve List.

Best Power Int'l, LLC: St. John's 198 kW Solar PV Expansion (EP4-6)

This 198 kW solar PV project would expand the current RDF solar project at St. John's University and incorporate an on-site, side-by-side comparison of competing solar technologies including linear axis tracking system in place today and a new fixed tilt system.

The project is the enhancement of a prior RDF cycle project and the advisory group believed that putting the project on a reserve funding list was appropriate since the project mainly consisted of expansion of a prior RDF funded solar installation.

Dragonfly Solar, LLC: Solar Addition to Existing Dodge Center Wind Farm Project (EP4-29)

This 998 kW solar PV project would take advantage of an interconnection and infrastructure systems in place at the existing Garwin McNelius wind farm near Dodge Center, Minnesota. The project would use next generation solar modules that may be their first application in the U.S.

The advisory group identified significant contract issues with the proposal but believed the overall proposal was intriguing and should be recommended as a reserve project. The advisory group was also concerned about the ability to negotiate the contract with the developer because of the significant number of proposed modifications to the standard grant contract that were requested as part of the proposal. These modifications include proposals to change the RDF's standard legal notice language, concerns with long standing RDF reporting requirements, and use of information. Based on this, the advisory group members believed that it would be difficult to reach a mutually agreeable contract with this developer within the cycle timeframe. Based on this, the advisory group identified other solar projects that requested fewer contract modifications while providing the same benefits as this proposal (for example EP4-5).

City of St. Paul: Lowertown Ballpark Solar Project (EP4-34)

This 105 kW solar PV project, to be located at the new St. Paul Saints ballpark in St. Paul, would consist of two separate arrays. The first array will be situated over a group spectator terrace which can be seen by visitors throughout the ballpark. The second array will be located on a car canopy over a parking lot adjacent to the ballpark.

The advisory group noted that the application lacked some detail regarding total project costs but that the project would have very high visibility and provided opportunities for the public to observe the installation. These attributes resulted in the

advisory group recommending this project for the Reserve List even though the technical score was relatively low.

Farmamerica: Installation of 10-20 kW Wind Turbine, 90-100 kW Tracking/Non-Tracking Solar PV and 20-30 kW Battery Bank System (EP4-21)

This 120 kW solar/wind project would be designed to achieve a net zero noncombustion based energy production system at the Farmamerica interpretive center and significantly reduce their carbon footprint. The project would include a 50 kW fixed axis solar PV array, a 40 kW dual axis tracker array, and up to a 20 kW wind turbine and a battery storage bank for any project output not used on-site that will be linked to an electric vehicle charging station.

The combination of both solar and wind in the proposal was identified by the advisory group as innovative. The advisory group determined that the innovative merits mitigated the very low technical score and would warrant placement on the Reserve List.

EP Proposals Not Recommended for Funding

Minnesota Go Solar, LLC: 20 1.0 MW Alternating Current Solar PV Facilities (EP4-38)

This project proposed to construct 20 1.0 MW alternating current solar photovoltaic generating facilities in Xcel Energy's service territory. Solar installations would be located near sufficient load centers in small and medium sized cities throughout southeast and southwest Minnesota.

While the proposal presented an interesting opportunity through solar renewable energy credits, the overall project cost was disfavored by the advisory group as it would require too large a portion of the funds anticipated to be awarded to EP projects (over a third of available funds). As stated on page 10 of the RFP, grant awards larger than average amounts should include specific information that support why a larger grant award is justified. One of the objectives the advisory group identified for RDF Cycle 4 was a desire for a diverse set of grant opportunities. The project's focus on the development of a solar renewable energy credit market was identified by some advisory group members as not very compelling within the mission of the RDF. As stated earlier in this document, the advisory group sought to fully fund grant requests and preferred to have a diverse portfolio of projects for RDF Cycle 4. Additionally, the energy price per kWh was high relative to other EP proposals and the locations for constructing the facilities were still open, which adds uncertainty. From prior experience, RDF proposals that do not have specific sites

identified or a very clear plan to identify sites have significant project delays. Further, the overall timeline proposed for the project was not long enough based on the Company's prior experiences negotiating power purchase agreements for projects of the scale proposed.

PowerWorks Wind Turbines: Ten 100 kW Refurbished Wind Turbines (EP4-33)

This proposal was to install 10 remanufactured PowerWorks 100 kW wind turbines to provide 1,000 kW additional capacity in Xcel Energy's Minnesota service territory. The wind turbines would collectively generate approximately 2,000,000 kWh per year to Xcel Energy's grid.

A proposal to utilize refurbished turbines was disfavored by the advisory group. The use of refurbished turbines has had mixed results pertaining to service and reliability within the State of Minnesota. The advisory group would prefer introducing new wind technology by supporting the introduction of new model's versus funding the older technology.

Gustavus Adolphus College: 336 kW DC Solar Project (EP4-18)

This 336 kW_{DC} (269 kW_{AC} project) solar PV project located at Gustavus Adolphus College in St. Peter, Minnesota, would be a collaborative venture between Best Power Int'l, LLC and Gustavus Adolphus College. The facility would generate a portion of the college's electrical load at a cost that is no more than what the college currently pays for electricity.

Utilizing a holistic approach, the advisory group identified this project as similar to other behind-the-meter solar installations at institutions of higher education such as the Sisters of Notre Dame Project (EP4-5) and the second phase of the St. John's University Project (EP4-6). Because the proposal is not within the Xcel Energy service territory the advisory group determined that other similar projects would provide greater benefits to Xcel Energy electric ratepayers. Further, the advisory group could not identify any innovative aspects of the proposal. The project is potentially eligible to receive funding through other solar initiatives that are available.

Geronimo Energy: Slumberland Solar Proposal (EP4-46)

This 1 MW rooftop racking system solar project would be located on the roof of the Slumberland distribution center in Little Canada, Minnesota, and the energy generated would be used onsite. The project is backed by Geronimo Energy's strategic partner Enel Green Power.

The advisory group identified that many rooftop solar proposals were received during this funding cycle and sought to ensure a diverse mix of project types to receive funding based on a more objective evaluation. The advisory group identified that the Slumberland Solar proposal was similar to those of other proposals (EP4-39, for example, which was scored higher by Sargent & Lundy) and that those other proposals better met the advisory group's subjective attributes notwithstanding their lower score. The project is potentially eligible to receive funding through other solar initiatives that are available.

City of Hopkins: Municipal Solar Energy (EP4-2)

This 475 kW solar PV project, located in Hopkins, Minnesota, would utilize Minnesota-based tenKsolar RAIS Wave equipment with panels rated at 410 watts on four major Hopkins facilities (Public Works, Fire Station, Pavilion Ice Arena, and Hopkins Center for the Arts). Additionally, the project would utilize energy storage integrated with solar PV at the Hopkins Fire Station to serve as a backup power supply source.

The advisory group provided favorable comments on the proposal by a government entity within the Xcel Energy service territory and the lower cost. The advisory group, however, found the overall proposal not as well developed as others submitted, which weighed against the subjective attributes related to the proposal. Given that it was not significantly different than other solar proposals that scored higher and to provide a balance and mix of project types by avoiding duplicative projects, the advisory group decided not to pursue this proposal further. The project is potentially eligible to receive funding through other solar initiatives that are available.

City of Rogers: Solar Energy Project (EP4-45)

This project would install approximately 631 kW of nameplate tenKsolar equipment and 28 kW of energy storage Silent Power units on four municipal buildings. The installation would be used to demonstrate use of solar energy and storage as a strategy for reducing peak energy demands at municipal liquor stores. All generated electricity would be consumed on-site.

The advisory group observed that other proposals similar to this proposal were received and that the project lacked innovation. The advisory group looked at this project, given it was similar to other proposals that were scored higher by Sargent & Lundy, against all the subjective attributes the group identified. Although this project has notable technical attributes, the advisory group's evaluation in the areas of innovativeness, benefits to enhancing the renewable market penetration, overall visibility, and balance of projects that would receive funding in this cycle weighed

against the project and ultimately resulted in the advisory group moving this project to the list of projects for which funding was not recommended. The project is potentially eligible to receive funding through other solar initiatives that are available.

Murphy Warehouse Company: Innovation Corridor Solar Array (EP4-14)

This 650 kW solar PV project, located near the Central Corridor Stadium Village Light Rail Transit Station in southeast Minneapolis, would utilize a Minnesota-based tenKsolar PV array at Murphy Warehouse Company's warehouse. The solar PV array is intended to generate 75 percent of Murphy Warehouse Company's energy needs and to test the effectiveness of solar PV panels facing southwest to lessen the energy demand curve during peak demand hours.

The overall cost share of the project identified in the proposal was only five percent. The advisory group noted that other similar proposals included cost shares up to 50 percent. Further, the advisory group identified inconsistencies in the proposal, including a discrepancy between the total demand versus the proposed size of the array, that it was unable to reconcile with the submitted materials. Given that it was not significantly different than other solar proposals that scored higher and to provide a balance and mix of project types by avoiding duplicative projects, the advisory group decided not to pursue this proposal further. As a private company, the applicant could be eligible for federal tax credits to fund a solar installation. The project is also potentially eligible to receive funding through other solar initiatives that are available.

Region Five Development Commission: Solar Project on Four Public Schools and Leech Lake Community College (EP4-44)

This 1,493 kW project would install tenKsolar RAIS Wave equipment on buildings in four public school districts and at Leech Lake Community College. An energy storage demonstration would also be installed at two of the school sites.

This proposal was one of many solar installations that included energy storage demonstrations submitted as part of RDF Cycle 4. The advisory group believed that this project has notable technical attributes that were reflected in the Sargent & Lundy score. The advisory group, however, noted that the proposal was lacking in the areas of innovativeness, benefits to enhancing the renewable market penetration, and balance of projects that would receive funding in this cycle. The advisory group ultimately moved this project to the list of projects for which funding was not recommended. The project is potentially eligible to receive funding through other solar initiatives that are available.

Salvation Army: Solar Project on Facilities in Maplewood and St. Paul (EP4-8)

This 250 kW solar PV project would utilize Minnesota-based tenKsolar equipment with panels rated at 410 watts with integrated energy storage capability of 100 kW on two Salvation Army facilities, one in Maplewood and one in St. Paul. This project would demonstrate solar energy's ability to serve as a backup power supply during an emergency or grid failure.

While the advisory group felt that the Salvation Army proposal was intriguing, it focused on emergency preparedness instead of every day operations. The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion. The project is potentially eligible to receive funding through other solar initiatives that are available.

ECOCORP: Sleepy Eye Biogas Energy Facility (EP4-1)

This 14.4 MW waste-to-energy project, developed by ECOCORP, would generate biogas during the process of converting industrial food processing organic wastes (from canneries and breweries), production organic wastes (from paper mills), animal manures (from turkeys), and crop residues (from corn and wheat), all generated in Minnesota, into organic bio-fertilizers to be sold to Minnesota farmers for corn, sugar beets, and other crops.

The project is larger on a capacity basis than other biomass projects recommended for funding by the advisory group. The advisory group, however was concerned about the price proposed for the power purchase agreement and overall lack of innovativeness regarding the project's processing of waste material.

Natural Systems Utilities, LLC/Michael Foods: Anaerobic Digester Project (EP4-37)

This project proposes an anaerobic digester to treat Michael Foods, Inc.'s Chaska, Minnesota facility's (potato processing plant) wastewater and produce electricity for its operations. The project's combined heat and power system is estimated to generate 13,000 kWh/d or 3,445,000 kWh/yr. The renewable energy generated would be consumed on site, replacing power that is currently being purchased from the grid.

The overall cost associated with this proposal was quite high, as noted by Sargent & Lundy in its review. Additionally, the project is not within the Xcel Energy service territory and there were some technical aspects that were not fully developed. The advisory group determined that the project was similar to other biomass projects

proposed and had higher costs compared to other proposals. Given that it was not significantly different than other biomass proposals that scored higher and to provide a balance and mix of project types by avoiding duplicative projects, the advisory group decided not to pursue this proposal further.

North Central Regional Council of Carpenters: Solar Array on Roof of Office and Training Facility (EP4-47)

This proposal involved the installation of a tenKsolar system with a nameplate capacity of 478.47 kW positioned slightly west of true north. The positioning is intended to shift system output and demonstrate the array's ability to reduce peak energy use and demand charges on the roof of the North Central Regional Council of Carpenters' office and training facility located near the State Capitol and the Innovation Corridor.

The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion. The project is potentially eligible to receive funding through other solar initiatives that are available.

City of Hutchinson: Municipal Landfill Solar Energy Demonstration Project (EP4-41)

This 402 kW solar PV project intends to be a model for how to cost-effectively develop a significant solar energy resource on a closed landfill that would otherwise have little or no economic value. The project would use solar modules provided by Minnesota-based tenKsolar. Project generation will be consumed on-site.

The project presented innovative renewable energy opportunities but the advisory group expressed environmental concerns with the proposal. Given that it was not significantly different than other solar proposals that scored higher, and to provide a balance and mix of project types by avoiding duplicative projects, the advisory group decided not to pursue this proposal further. The project is potentially eligible to receive funding through other solar initiatives that are available.

Heliacal, LLC: 15-20 Solar Roof-Leasing Projects along Energy Innovation Corridor (EP4-31)

This 750kW (AC) solar PV proposal, developed by Heliacal, LLC, will encompass 15 to 20 solar roof-leasing agreements with businesses along the Energy Innovation Corridor (EIC). The project will also create a portal or web link on the EIC website

for displaying the real-time performance of the system, to support the EIC goal of demonstrating innovative energy technologies.

The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion. The project is potentially eligible to receive funding through other solar initiatives that are available.

Positive Energy Systems, LLC: Installation of a Solar Photovoltaic System at the Dunn County Judicial Center (EP4-27)

This is a 1.0 MW solar PV project located at the Dunn County Judicial Center in Menomonie, Wisconsin. Excess electricity would be sold to Xcel Energy.

The advisory group did not recommend this proposal for funding based on a low technical score, the concept was not significantly different than other solar proposals that scored higher (for example, EP4-39 Goodwill Solar, LLC) and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion.

Dragonfly Solar in partnership with GE Capital, Fleet Services: Solar Installation at GE Capital Fleet Services Headquarters (EP4-30)

This 753.345kW solar PV project would be installed at the headquarters of GE Capital, Fleet Services in Eden Prairie, Minnesota. This project represents a commercial scale solar PV installation using a campus wide mix of site integrated solar, roof mounted solar and multi-use solar support structures. This technology moves the maximum power tracking technology from the inverter to the individual solar modules.

The advisory group did not recommend this proposal for funding based on a low technical score, the concept was not significantly different from other solar proposals that scored higher (for example, EP4-13 Metropolitan Airports Commission and EP4-39, Goodwill Solar, LLC) and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion. The project is potentially eligible to receive funding through other solar initiatives that are available.

Hince Farms, Inc.: Installation of a Solar Photovoltaic System on the Hince Farms, Inc. (EP4-25)

This 100 kW solar PV project will be located at Hince Farms, Inc. in Plum City, Wisconsin. The farm conducted an electrical engineering assessment of its electrical usage that showed with lighting retrofitting, equipment retooling, proper insulation, and the inclusion of a renewable energy system, the farm can eliminate its cost for electricity. The excess electricity will be sold to Xcel Energy.

The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion. The project is potentially eligible to receive funding through other solar initiatives that are available.

Xcel Energy: Buy All/Sell All Solar*Rewards Program (EP4-12)

This program will utilize funding from the Renewable Development Fund to provide incentives to Xcel Energy customers to invest in solar PV systems and to improve Xcel Energy's Solar*Rewards program.

The advisory group did not recommend this proposal for funding based on a low technical score and limited detail describing project implementation. While the proposal presented an interesting opportunity to fund solar investment the overall project cost was disfavored by the advisory group as it would require too large a portion of the funds anticipated to be awarded to EP projects (over a third of available funds). As stated on page 10 of the RFP, grant awards larger than average amounts should include specific information that support why a larger grant award is justified. Overall, however, the advisory group felt that Solar*Rewards could be funded through other mechanisms.

Positive Energy Systems, LLC: Solar PV project at Brownfield in Olivia (EP4-26)

This 1.0 MW solar PV facility would be located at a Brownfield site in Olivia, Minnesota. The Brownfield site is a former dump site that was used for garbage disposal and composting.

The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion. The project is potentially eligible to receive funding through other solar initiatives that are available.

OSEMI Inc.: Concentrated Photovoltaic Solar Electric Power Plant (EP4-16)

This solar PV project would build a photovoltaic power plant designed for Minnesota's climate and for storing and generating electricity 24/7. OSEMI would manufacture and install 0.1 MW, 1 MW, 10 MW, and 25 MW solar PV systems at solid waste facilities, metro transit facilities, public utilities, and private businesses.

The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion. The project is potentially eligible to receive funding through other solar initiatives that are available.

Minnesota Department of Natural Resources (DNR): EV Charging Stations (EP4-17)

This solar PV project would install at least 84 kW of solar PV capacity to be utilized at electric vehicle charging stations at eight to ten Minnesota Department of Natural Resources sites in Minnesota. These charging stations would create a chain of facilities through Minnesota from Iowa to Canada. The charging stations will prevent approximately 13,800 metric tons of carbon emissions over a 30-year period.

The advisory group appreciated the management of the last Department of Natural Resources RDF project and the public education aspect of this particular proposal. The electric energy cost was high due to many of the project costs pertained to the installation of equipment for the charging station. The advisory group decided to not provide funding due to the focus on energy consumption (i.e. charging stations) with only 84 kW of additional energy capacity.

Adonis Eco-Housing: Statewide Affordable Solar Homes (EP4-19)

This 200 kW solar PV project would consist of small solar systems for approximately 200 affordable homes dispersed across urban and rural Minnesota. The system would be built of modules that individually convert direct current electricity into alternating current electricity at each panel.

The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion. The project is potentially eligible to receive funding through other solar initiatives that are available.

Green Peak Solar LLC: Cooperative-Community Solar “Block Club” (EP4-23)

This is a 312 kW solar PV project. The project would form a cooperative to organize and conduct an initial test market to design, finance, market, construct, administer and operate the nation’s first urban Solar Farm via a Community Solar “Block Club” business model. This project would site one hundred, pole-mounted 3.12 kW solar PV trackers in inner-city backyards. The trackers would be connected into Xcel Energy’s existing utility grid. The project would secure a power purchase agreement for the energy with Xcel Energy and standard utility interconnection agreements. Each solar tracker would also provide 10 kW of dispatchable battery storage that can be used during Xcel Energy’s peak demand. This project would demonstrate that this system can successfully deliver volume installations at significantly reduced costs over the project’s lifetime.

As stated on page 10 of the RFP, grant awards larger than average amounts should include specific information that support why a larger grant award is justified. The proposal did not explain the justification for a grant award that exceeded the average energy production award. The advisory group did not recommend this proposal for funding based on a very low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion.

Future Force Inc.: ZCT Wind Turbine (EP4-28)

This project would refurbish an existing 440 kW wind turbine system with Zero Contact Transmission (ZCT) technology to increase its capacity by 90 kW. The location of the project is yet to be determined. The ZCT technology would increase the wind turbine system’s availability by reducing repair activities, eliminating maintenance related to the gear box, and expanding low wind operation.

The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion.

Revier Cattle Company: Anaerobic Digester (EP4-35)

This project proposes an anaerobic digester for Revier that will transform manure into renewable energy, along with a solar photovoltaic system that will capture energy for use on its farm and feed lot operations to help the Company become self-sustaining. The project would consist of a shade structure for the operation’s cattle pens that covers up to 60,000 square feet of surface area.

The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or that contained elements of interest to the advisory group had been identified for discussion. The project is potentially eligible to receive funding through other solar initiatives that are available.

B. RD Discussions and Recommendations

As stated in our selection report, the Company is recommending approval of the following RD projects:

Table 4

ID Number	Rank	Applicant	Type	Amount Recommended	Total Project Cost
RD4-13	4	U. of Minnesota	Wind	\$1,391,684	\$1,391,684
RD4-12	6	U. of Minnesota	Wind	\$625,102	\$625,102
RD4-2	7	U. of Minnesota	Wind/Solar	\$982,408	\$982,408
RD4-14	18	Barr Engineering	Wind	\$161,081	\$161,081
Total				\$3,160,275	\$3,160,275

As was the case for the EP proposals, for the RD proposals, the Company affirmed the recommendations of the advisory group of proposals to be funded in this 4th RDF award cycle with no changes. The reason for selection of each of these proposals is detailed in the Company's July 29, 2013 Selection Report. As identified in the Selection Report, the advisory group also determined RD proposals that should be combined with the EP proposals on the reserve list. As was the case with the EP reserve proposals, the Company chose a RD reserve project to be on the first tier of reserve projects (to be funded first). Other than creation of two tiers of reserve RD projects, the Company agreed with the advisory group's recommendation of the projects that should be reserved for potential funding. The remaining RD proposals were also reviewed and the decision to not fund the remaining proposals was made. The following discussion covers these projects and provides the reasoning of the advisory group for the proposal not being recommended for funding.

R&D Proposals Recommended for Funding as Reserve Projects

City of Red Wing: Cleaner Refuse Derived Biomass Fuel Production (RD4-8)

This project would demonstrate the production of a cleaner refuse derived biomass fuel including the recovery of more recyclables, the removal of fuel contaminants and a corresponding reduction in fuel hauling costs. The City would add dual-stage, shear-shredding equipment to its existing facility at the City's waste campus.

The advisory group identified concerns to use refuse as a renewable fuel. As stated on page 10 of the RFP, grant awards larger than average amounts should include specific information that support why a larger grant award is justified. The proposal provided some explanation for a grant award that exceeded the average research and development award because a significant amount of project costs is for machinery and equipment. The advisory group recommended this proposal as an alternative project on the reserve funding list.

InterPhases Solar: New CIS Solar Cells with All-Solutions-Based Roll-to-Roll Processing (RD4-7)

This project would advance the production of thin film manufacturing outcomes achieved from an RDF Cycle 2 and RDF Cycle 3 grant award by taking the next step toward commercializing and marketing a simplified manufacturing process that also improves the output efficiency of solar PV cells.

Advisory group members identified several concerns with the proposal including the possibility that the proposer could find an industry partner instead of relying on the RDF. But due to the high technical score and past investment from the RDF, the advisory group recommended this proposal as an alternative project on the reserve funding list.

University of Florida: A Mobile, Self-Contained, Pilot Anaerobic Digester Facility for Conversion of Non-Agricultural Residues in Minnesota to Electricity (RD4-5)

This project would promote the use of anaerobic digestion technologies that use non-agricultural biomass residues. The project would demonstrate biogasification at two sites: the SunOpta Grains and Food facility in Alexandria, Minnesota and the Denco II corn ethanol facility in Morris, Minnesota. This project would develop further research funded by RDF Cycle 3, focusing on optimizing the feedstock characteristics and other process components.

The advisory group identified contract negotiation concerns that were experienced during the last RDF cycle but the possibility of a mobile unit was intriguing and the proposal is an enhancement of RDF Cycle 2 project activity (RD2-34). As stated on page 10 of the RFP, grant awards larger than average amounts should include specific information that support why a larger grant award is justified. The proposal did not explain the justification for a grant award that exceeded the average research and development award. But due to the high technical score and past investment from the RDF, the advisory group recommended this proposal as an alternative project on the reserve funding list.

University of Minnesota Duluth: Demonstrating the Potential for Distributed Power Generation Using Converted Biomass (RD4-11)

This project would develop an effective and efficient solid biofuel that has the potential for direct, stand-in use at large and small power generation facilities in a distributed generation environment to support local power supply needs using rural biomass as a fuel stock. Timber from the local area would be utilized as the source of fuel during the demonstration.

The proposal did not include royalty sharing and there was a concern regarding the commercial viability of the project outcome. As stated on page 10 of the RFP, grant awards larger than average amounts should include specific information that support why a larger grant award is justified. The proposal did not explain the justification for a grant award that exceeded the average research and development award. Due to the high technical score the advisory group recommended this proposal as an alternative project on the reserve funding list.

Xcel Energy: IT Infrastructure Development to Enable Community Solar Gardens (RD4-4)

The goal of this project is to develop the information technology to provide customers with valuable information regarding their participation in the anticipated development and operation of solar garden projects throughout the Company's service territory. This project would develop the technology to provide customers with monthly reports as part of their billing statements that include the energy produced from their share of a solar garden project.

Advisory group members identified other sources of funding for this type of activity but recognized if funded through the RDF the project findings would be open to the public through the milestone reports. This would help with the development of solar gardens and similar renewable energy initiatives. The advisory group recommended this proposal as an alternative project on the reserve funding list.

R&D Proposals Not Recommended for Funding

AF-Energy Corporation: Accelerator™ Vertical Axis Wind Turbine and a Universal Hybrid Solar/Wind Controller (RD4-6)

AF Energy Corporation's project, located in Minnetonka, Minnesota, would develop two new technologies – an Accelerator™ Vertical Axis Wind turbine and a universal hybrid solar/wind controller. The goal of the project is to offer a portable, rugged, low cost method for providing grid-connected or off-grid renewable electric energy, and will take advantage of wind resources not applicable to other technologies, in urban environments and ground-level wind.

As stated on page 10 of the RFP, grant awards larger than average amounts should include specific information that support why a larger grant award is justified. The advisory group did not recommend this proposal for funding because there was no explanation for a grant award that exceeded the average RD award.

Small Wind Turbines, LLC: Comparative Field Tests of Small Wind Turbine Generator Technology (RD4-9)

The project would conduct comparative field tests of a small wind turbine generator technology at Central Lakes College in Staples, Minnesota. The goal of the project is to demonstrate that the small wind turbine system offers a higher level of torque-to-weight efficiency over a conventional system. The lower cost, smaller alternative to conventional systems could offer a highly competitive wind turbine system in the power production range from five to 100 kilowatts.

The advisory group did not recommend this proposal for funding because of concern over the general applicability of the research proposed to be completed to the local market and the lack of scientific rigor for testing the turbines. The proposal did not include a methodology for selection and identification of the 10 kW, 20 kW, and 40 kW microturbines.

Solar Cell & LED Technology: Thin Film Solar Cells (RD4-21)

This project proposes to develop high efficiency, light weight, flexible plastic, low cost, thin film solar cells. The thin film solar cells are next generation photovoltaics, which replace silicon family solar cells to reduce cost. The low cost and high efficiency thin film solar cells on flexible sheets with solar to electric conversion efficiency greater than 25 percent will be competitive in the renewable energy market.

The advisory group did not recommend this proposal for funding because of concern over limited information in the proposal that lacked details on responsibilities for research activities and outcomes.

Angel Alternative Energy: Solar Power System for Heat and Electricity (RD4-3)

This project seeks to design a solar power system capable of producing both heat and electricity. In East Grand Forks, Minnesota, Angel Alternative Energy will test and quantify components for a residential sized organic Rankin cycle power engine that can be seamlessly integrated into an existing solar thermal system as a packaged product to convert a solar thermal system into a co-generation system.

The advisory group did not recommend this proposal for funding based on a low technical score and a significant amount in funding requests with higher scores or contained elements of interest to the advisory group had been identified for discussion.

Regents of the University of Minnesota: Developing Gasification Technology from Solid Waste (RD4-1)

The goal of this St. Paul, Minnesota-based project is to enable distributed/decentralized generation of electricity from biomass and other solid wastes on sites where biomass and solid wastes are generated. The project would develop fast gasification electricity generation technology, based on microwave heating, by converting solid feedstock to a combustible gas that can fuel steam generators or gas turbines.

The advisory group did not recommend this proposal for funding based on a relatively low technical score and a significant amount in funding requests with higher scores as well as a concern of the overall usefulness and application of this type of gasification.

Open Access Technology International: Software for Solar Installations (RD4-18)

This project would deploy Open Access Technology International, Inc.'s Software as a Service technology with a solar installation. The project would demonstrate a coordinating forecasting, scheduling, and economic dispatch and control system for battery-equipped solar systems along with Demand Response and Distributed Energy Resources at the company's main campus in Minneapolis and secondary campus in Bloomington using tenKsolar equipment.

As stated on page 10 of the RFP, grant awards larger than average amounts should include specific information that support why a larger grant award is justified. The advisory group did not recommend this proposal for funding because there was no explanation for a grant award that exceeded the average research and development award and a relatively low technical score.

University of Minnesota – Morris: Advanced Distribution Generation Platform (RD4-17)

The research project would examine the advanced distributed generation platform at University of Minnesota's Morris Campus, which is the result of investments made in energy efficiency, wind generation, combined heat and power, and micro grids. The research would consider the intermittency of wind and the cyclic production trends of wind in relation to behind the meter land and peak demand issues at the point of interconnection.

As stated on page 10 of the RFP, grant awards larger than average amounts should include specific information that support why a larger grant award is justified. The advisory group did not recommend this proposal for funding because there was no explanation for a grant award that exceeded the average research and development award and a relatively low technical score.

Community Energy Solutions: First Light Biogas Generator (RD4-19)

This project proposes to build an organic waste-to-energy conversion system using the latest technologies and a new innovative design to maximize the efficiency of energy production per ton of feedstock. The project would use the First Light system, which utilizes proprietary bacteria and other unique processes and produces as much as 60% more biogas. In addition, Community Energy Solutions would incorporate a new infrared dryer technology to more efficiently dry out the waste sludge to create its dried fertilizer product.

The advisory group did not recommend this proposal for funding based on a low technical score and limited information pertaining to the detail and explanation of how the technology will be demonstrated.

Regents of the University of Minnesota: Preventive and Corrective Maintenance for Large Wind (RD4-16)

This research and experiment project, located at the University of Minnesota's Atmospheric Wind Tunnel at St. Anthony Falls Laboratory, seeks to provide a decision tool to wind power plant operators which allows them to optimize response

strategies to faulty turbine units, and offer preventative maintenance strategies for operational turbines. The project aims to reduce the Levelized Cost of Energy, increase efficiency of wind power plants, minimize the risk of damages and malfunctions within power plants, and provide optimal response to turbine failures that cannot be tested in real scale wind farms.

The advisory group did not recommend this proposal for funding based on a low technical score and limited information on industry partners and project personnel. The advisory group was concerned that modeling would be performed only in a wind tunnel.

Xcel Energy Review of the Advisory Group Recommendations

Even though the project scoring done by the Independent Evaluator and the selection recommendations of the advisory group were extremely helpful, the final decision on projects to recommend for funding in this RDF 4th funding cycle rests with Xcel Energy. At the conclusion of the advisory group selection process, the Company assessed all evaluation and scoring opinions to identify proposals for a funding recommendation to the Commission. In doing this, the Company considered several factors.

First, the Company believed the process that had been used for reaching the recommendations of the advisory group was sound and wanted to support the advisory group conclusions as long as they were reasonable. Further, while the process was proposal-evaluation specific, the Company was interested in how the overall results were reached, and considered the following. Were the objectives that the advisory group used in its evaluation on a project-by-project basis achieved on a global basis looking at the totality of the award recommendations? Is there a balance of projects with respect to technology, location, and project type? Will Xcel Energy's customers benefit from the projects selected? Are the proposed projects likely to succeed? Are the issues that remain with certain projects (i.e. royalties, REC ownership, contract terms, etc.) resolvable and are protections to the electric ratepayers who support the fund maintained? Are the projects on the reserve list good projects that can be used as a replacement if need be? Finally, the Company looked at where, if at all, modifications to the recommendations could be made to uphold the process, yet enhance benefit to our customers.

The end result of this review process by the Company was as we described in our Selection Report filing. We found no fault with the set of projects the advisory group recommended for funding. While the Company might believe certain projects on the list best excel for a certain set of the objectives desired, and other projects might best excel at other criteria, the total package of projects are acceptable to the Company.

The same can be said for the set of projects on the Reserve List. However, in looking at this list, the Company came to the conclusion that there was a much wider difference in opinion as to the order in which these reserve projects should progress to funding should award money become available.

In ranking these projects for order of funding, a number of projects received both highest desired ranking from some advisory group members as well as lowest desired ranking from other members. Thus, while there was a common view amongst the advisory group members of the projects to be on the Reserve List, there was far from a common view on the order in which they should be funded. Therefore, the Company used the rankings of its members on the advisory group to select, in the Company's opinion, the three best projects (excluding our own Reserve List project) to be first in line for funding. Again the reasons for these Reserve List rankings are contained in our Selection Report.

The end result of the Company's review of the EP and RD proposals is shown in Tables 5 and 6 below. The projects shaded in green are the projects the Company is recommending for funding in this 4th RDF funding cycle. The projects shaded in orange are the projects from the advisory group's list of reserve projects that the Company recommends for first consideration of funding if RDF funds become available (Tier 1 Reserve Projects). Finally, the projects shaded in yellow are the Company's recommended Tier 2 Reserve Projects.

Table 5

EP Proposals				
ID Number	Applicant	Type	S&L Score	S&L Category
EP4-38	Minnesota Go Solar, LLC	Solar	187.45	1
EP4-20	Target Corporation	Solar	182.85	1
EP4-48	Oak Leaf Energy Partners Ohio, LLC	Solar	180.17	1
EP4-33	PowerWorks Wind Turbines	Wind	173.75	1
EP4-43	Cornerstone Group	Solar	171.45	1
EP4-36	City of Austin	Biomass	164.25	1
EP4-13	Metropolitan Airports Commission	Solar	163.25	1
EP4-6	Best Power, Int'l, LLC	Solar	162.15	1
EP4-39	Goodwill Solar, LLC	Solar	160.71	1
EP4-11	Innovative Power Systems, Inc.	Solar	158.32	1
EP4-29	Dragonfly Solar, LLC	Solar	156.78	1
EP4-42	Aurora St. Anthony Limited, LLC	Solar	155.92	1
EP4-18	Gustavus Adolphus College	Solar	155.92	1
EP4-46	Geronimo Energy	Solar	155.73	1
EP4-7	Anoka Ramsey Community College	Solar	151.80	1
EP4-2	City of Hopkins	Solar	151.32	1
EP4-5	Best Power, Int'l, LLC	Solar	149.02	1

Table 5 (continued)

EP Proposals				
ID Number	Applicant	Type	S&L Score	S&L Category
EP4-45	City of Rogers	Solar	145.47	1
EP4-14	Murphy Warehouse Company	Solar	143.17	1
EP4-3	Minneapolis Public School	Solar	141.64	1
EP4-44	Region Five Development Commission	Solar	138.50	2
EP4-8	Salvation Army	Solar	135.51	2
EP4-9	Mondovi Energy Systems	Biomass	135.03	2
EP4-1	ECOCORP	Biomass	133.50	2
EP4-37	Natural Systems Utilities, LLC/Michael Foods Biomass	Biomass	133.30	2
EP4-24	Bergey Windpower Co	Wind	129.57	2
EP4-4	SGE Partners LLC	Biomass	129.09	2
EP4-47	North Central Regional Council of Carpenters	Solar	128.22	2
EP4-41	City of Hutchinson	Solar	126.50	2
EP4-22	Minneapolis Park and Recreation Board (MPRB)	Solar	122.95	2
EP4-31	Heliacal, LLC	Solar	122.57	2
EP4-27	Positive Energy Alternatives	Solar	121.80	3
EP4-30	Gelco Corporation d/b/a GE Fleet Services/Dragonfly Solar	Solar	119.79	3
EP4-34	City of St. Paul	Solar	117.97	3
EP4-25	Hince Farms, Inc.	Solar	117.20	3
EP4-12	Xcel Energy Services, Inc.	Solar	109.63	3
EP4-21	Farmamerica	Solar/Wind	106.28	3
EP4-26	Positive Energy Systems, LLC	Solar	104.75	3
EP4-16	OSEMI, Inc.	Solar	104.27	3
EP4-17	MN Department of Natural Resources (DNR)	Solar	97.08	3
EP4-15	MN Renewable Energy Society	Solar	90.66	3
EP4-19	Adonis Eco-Housing	Solar	87.59	3
EP4-35	Revier Cattle Company	Other	87.11	3
EP4-28	Future Force Inc.	Wind	86.73	3
EP4-23	Green Peak Solar LLC	Solar	76.28	3
EP4-32	Emerald H@, LLC (in partnership with Norfolk Wind Energy)	Wind	63.06	3

Projects recommended for funding
Tier 1 Reserve Projects
Tier 2 Reserve Projects

Table 6

RD Proposals

ID Number	Applicant	Type	S&L Score	S&L Category
RD4-7	InterPhases Solar	Solar	156.83	1
RD4-5	University of Florida	Biomass	136.37	1
RD4-11	Regents of the University of Minnesota	Biomass	136.37	1
RD4-13	Regents of the University of Minnesota	Wind	135.08	1
RD4-6	AF-Energy Corporation	Solar/Wind	133.11	1
RD4-12	University of Minnesota	Wind	126.92	1
RD4-2	Regents of the University of Minnesota	Solar/Wind	123.67	1
RD4-8	City of Red Wing	Biomass	113.75	1
RD4-9	Small Wind Technologies, LLC	Wind	110.75	1
RD4-21	Solar Cell & LED Technology	Solar	109.17	1
RD4-3	Angel Alternative Energy	Solar	108.58	2
RD4-4	Xcel Energy Business Systems	Solar	103.92	2
RD4-1	Regents of the University of Minnesota	Biomass	98.58	2
RD4-18	Open Access Technology International	Solar	97.17	2
RD4-17	University of Minnesota – Morris	Other	87.50	2
RD4-19	Community Energy Solutions	Biomass	77.91	3
RD4-16	Regents of the University of Minnesota	Wind	67.83	3
RD4-14	Barr Engineering Co.	Wind	63.00	3

Projects recommended for funding
Tier 1 reserve projects
Tier 2 reserve projects

Conclusion

The advisory group evaluation built upon the objective technical scoring of Sargent & Lundy. Many of the Independent Evaluator’s recommendations were carried forward by the advisory group and in the Selection Report. Where the advisory group deviated from the objective scoring of Sargent & Lundy, members identified subjective attributes that made the proposal less desirable than those selected for the recommended project list. The evaluation of proposals in RDF Cycle 4 provided the advisory group the opportunity to use the Sargent & Lundy scoring as a starting point for review and layer over that a more holistic approach to selecting proposals for funding.

The projects selected by the Company to be funded and the projects to be held in reserve for funding are well suited for use of the RDF fund and meet the objectives of the program.

CERTIFICATE OF SERVICE

I, SaGonna Thompson, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

**Docket No. E002/M-12-1278 and
 Special Service List-4th Cycle List**

Dated this 9th day of August 2013

/s/

SaGonna Thompson
Records Analyst

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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
John	Alexander	john.alexander@af-energy.com	AF-Energy Corporation	2447 Emerald Trail, Ste 100 Minnetonka, MN 55305	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	SPL_SL_12-1278_4th Cycle List
Charles	Barela	charles.G.Barela@xcelenergy.com	Xcel Energy Business Systems	414 Nicollet Mall Minneapolis, MN 55401	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Mike	Bauer	Mbauer@ci.rogers.mn.us	City of Rogers	22350 South Diamond Lake Rd. Rogers, MN 55374	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Mike	Bergey	mbergey@bergey.com	Bergey Windpower Co	2200 Industrial Blvd Norman, OK 73069	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Rob	Bergh	rob.bergh@state.mn.us	Department of Natural Resources	500 Lafayette Road St. Paul, MN 55155	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
David	Braddock	dave@osemi.com	OSEMI, Inc	250 Highway 19 Red Wing, MN 55066	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Ryan	Brandt	rbrandt@ecocheck.com	Natural Systems Utilities, LLC	11347 North Avenue Chisago City, MN 55013	Paper Service	No	SPL_SL_12-1278_4th Cycle List
John J.	Carroll	jcarroll@newportpartners.com	Newport Partners, LLC	9 Cushing, Suite 200 Irvine, California 92618	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Duane	Carrow	duane.carrow@mnwest.edu	Minnesota West Community & Technical College	1593 11th Avenue Granite Falls, MN 56241	Paper Service	No	SPL_SL_12-1278_4th Cycle List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Jeremy	Carter	jcarter@ci.hutchinson.mn.us	City of Hutchinson	111 Hassan St SE Hutchinson, MN 55350	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Bruce	Chamberlain	bchamberlain@minneapolis-sparks.com	Minneapolis Park and Recreation Board	2117 West River Road North Minneapolis, MN 55411	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Laura	Cina	laurac@mnrenewables.org	MN Renewable Energy Society	2928 5th Ave S Minneapolis, MN 55408	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Leslie	Delroy	leslied@posengalt.com	Poitive Energy Alternatives	518 24th Avenue W Menomonie, WI 54751	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Jerry	Dempsey	proposals@oati.net	Open Access Technology International	3660 Technology Drive NE Minneapolis, MN 55418	Paper Service	No	SPL_SL_12-1278_4th Cycle List
James	Dontje	jdontje@gustavus.edu	Gustavus Adolfus	800 West College Avenue St. Peter, MN 56082	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Brian	Dooley	brian.dooley@target.com	Target Corporation	1000 Nicollet Mall Minneapolis, MN 55403	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Nick	Fatibene	nicholas.fatibene@ge.com	Gelco	3 Capital Drive Eden Prairie, MN 55344	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Nathan	Franzen	nathan@geronimoenergy.com	Geronimo Energy	7650 Edinborough Way Suite 725 Edina, MN 55435	Paper Service	No	SPL_SL_12-1278_4th Cycle List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Roger	Freeman	roger.freeman@anokaramsey.edu	Anoka Ramsey Community College	11200 Mississippi Blvd NW Coon Rapids, MN 55433	Paper Service	No	SPL_SL_12-1278_4th Cycle List
James	Gibson	james.gibson@farmamerica.org	Farmamerica	7367 360th Avenue Waseca, MN 56093	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
D. Thomas	Griep	tgriep@murphywarehouse.com	Murphy Warehouse Company	701 24th Ave SE Minneapolis, MN 55414	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes	SPL_SL_12-1278_4th Cycle List
Michael	Hahm	michael.hahm@ci.stpaul.mn.us	City of St. Paul	25 West 4th Street St. Paul, MN 55102	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Cheryal Lee	Hills	chills@regionfive.org	Region Five Development Commission	200 First Street NE Suite 2 Staples, MN 56479	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Linda	Hince	hincefarms@posengalt.com	Hince Farms	N3902 130th St Plum City, WI 54761	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Lynn	Hinkle	lhinkle@mnseia.org	Minnesota Solar Energy Industries Association	2512 33rd Ave South #2 Minneapolis, MN 55406	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Ian	Houmas	AEH@q.com	Adonis Eco-Housing	1955 University Ave W, Ste 201 St. Paul, MN 55014	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Phillip	Hutton	philliphutton@gmail.com	Angel Alternative Energy	503 S. 5th Street Grand Forks, ND 58201	Paper Service	No	SPL_SL_12-1278_4th Cycle List

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John	Ingersoll	jgingersoll@ecocorp.com	ECOCORP	1211 S Eads St, Ste 803 Arlington, VA 22202	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Dwight	Jelle	dkjelle@gmail.com	Best Power International, LLC	P.O. 5126 Hopkins, MN 55343	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Kerry	Klemm	kerry.r.klemm@xcelenergy. com	Xcel Energy Services, Inc	414 Nicollet Mall Minneapolis, MN 55401	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Benjamin	Knutson	ben@valleycasting.com	Valley Casting, Inc	9462 Deerwood Lane N. Maple Grove, MN 55369	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Subba	Kodigala	kodigala@gmail.com	Solar Cell & LED Technology	730 Arcturus Avenue Oxnard, CA 93033	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Mike	Koebbe	mk@powerwors.com	PowerWorks Wind Turbines	15850P Jess Ranch Road Tracy, CA 95377	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Mara	Koeller	mara.n.koeller@xcelenergy .com	Xcel Energy	414 Nicollet Mall 5th Floor Minneapolis, MN 55401	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Christopher	Kopchynski	ckopchynski@barr.com	Barr Engineering Co.	4700 West 77th St, Ste 200 Minneapolis, MN 55401	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Dennis	Kowalke	dennie.kowalke@mspmac. org	Metropolitan Airports Commission	6040 28th Avenue South Minneapolis, MN 55450	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Steven	Lang	slang@ci.austin.mn.us	City of Austin	500 4th Ave NE Austin, MN 55912	Paper Service	No	SPL_SL_12-1278_4th Cycle List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	SPL_SL_12-1278_4th Cycle List
Christopher	Little	chris.little@ecosrenewable.com	Ecos Energy	222 S 9th St Suite 1600 Minneapolis, Minnesota 55402	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Kyle	Makarios	kmakarios@ncsrcc.org	North Central Regional Council of Carpenters	70 Olive Street St. Paul, MN 55130	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Teresa	Marxen	tmarxen@reviercattle.com	Revier Cattle Company	75382 350th St Olivia, MN 56277	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Michael	McCabe	mike@oakleafp.com	Oak Leaf Energy Partners Ohio, LLC	2645 East 2nd Avenue W Suite 206 Denver, CO 80206	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Kevin	McKoskey	awards@umn.edu	Regents of the University of MN	450 McNamara 200 Oak Street SE Minneapolis, MN 55455	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Shalini	Menezes	smenezes@interphases.com	InterPhases Solar	668 Flinn Avenue Moorpark, CA 93021	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Robert	Messerich	b.messerich@gmail.com	Dragonfly Solar, LLC	10583 102nd St West Lakeville, MN 55044	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Greg	Mowry	gsmowry@stthomas.edu	University of St. Thomas	2115 Summit Avenue St. Paul, MN 55105	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Chris	Osowski	chris_osowski@usc.salvationarmy.org	Salvation Army	2080 Woodlynn Avenue Maplewood, MN 55109	Paper Service	No	SPL_SL_12-1278_4th Cycle List

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Dan	Ostrenga	dan.ostrenga@sanimax.com	SGE Partners LLC	2099 Shawano Avenue Green Bay, WI 54307	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Eric	Pasi	ericp@ips-solar.com	Innovative Power Systems Solar	1413 Hunting Valley Road St. Paul, MN 55108	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Patrick	Pelstring	ppelstring@natrs.com	National Renewable Solutions, LLC	294 Grove Lane East, Ste 240 Wayzata, MN 55391	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Beth	Pfeifer	bpfeifer@tcgmn.com	Cornerstone Group	7661 Bush Lake Dr Bloomington, MN 55438	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Nieeta	Presley	nieeta@aurorastanthy.org	Aurora St. Anthony Limited, LLC	774 University Avenue West St. Paul, MN 55104	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Pratap	Pullammanappallil	pcpratap@ufl.edu	University Of Florida	219 Grinter Hall PO Box 115500 Gainesville, FL 32611-5500	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Lowell	Rasmussen	rasmuslc@morris.umn.edu	University of Minnesota- Morris	600 East 4th Street Morris, MN 56267	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Jeff	Schneider	jeff.schneider@ci.red-wing.mn.us	City of Red Wing	315 West 4th Street Red Wing, MN 55066	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Steve	Stadler	sstadler@hopkinsmn.com	City of Hopkins	11100 Excelsior Blvd Hopkins, MN 55343	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Louis	Sudheimer	historiclou@gmail.com	Green Peak Solar LLC	1415 Hunting Valley Road St. Paul, MN 55108	Paper Service	No	SPL_SL_12-1278_4th Cycle List

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Jeff	Swanson	jeffswanson99@hotmail.com	Community Energy Solutions	15020 Evelyn Lane Minnetonka, MN 55345	Paper Service	No	SPL_SL_12-1278_4th Cycle List
SaGonna	Thompson	Regulatory.Records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	SPL_SL_12-1278_4th Cycle List
Mike	Tkadlec	mike@futureforceinc.net	Future Force Inc.	2387 Hamlet Ave N Oakdale, MN 55128	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Jason	Willett	N/A	Metropolitan Council	390 Robert St N Saint Paul, MN 55101-1805	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Chris	Williams	chris.williams@mpls.k12.mn.us	Minneapolis Public Schools	1250 West Broadway Ave Minneapolis, MN 55411	Paper Service	No	SPL_SL_12-1278_4th Cycle List
David	Winkelman	dw@ecowerc.com	Small Wind Technologies	9081 County Road 23 Brainerd, MN 56401	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Robert	Woods	Robertwoodsjr2013@gmail.com	Business and Real Estate Investment, LLC	1129 Washington Avenue S. Minneapolis, MN 55415	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Sharon	Zachow	zachows@posengalt.com	Mondovi Energy Systems	518 24th Avenue West Suite 4 Menomonie, WI 54751	Paper Service	No	SPL_SL_12-1278_4th Cycle List
Sherif	Zukic	s01733841064@binternet.com	Sherif Zukic	Whittlesey Petersborough, Cambridgeshire PET2b2 Unknown	Paper Service	No	SPL_SL_12-1278_4th Cycle List