

## **REQUEST FOR PROPOSALS**

**Grow Solar St. Louis  
(Cities of St. Louis, Clayton, Maplewood, Richmond Heights, University City)  
Group Buy Program  
Summer/Autumn 2019**

### **INSTALLATION OF RESIDENTIAL AND SMALL COMMERCIAL SOLAR ELECTRIC SYSTEMS**

**Date of Issue:** June 7, 2019

**Proposal Due Date:** June 28, 2019 at 2pm CST

**Issued By:** Midwest Renewable Energy Association

**RFP Point of Contact:** Peter Murphy, Solar Program Manager  
Midwest Renewable Energy Association  
3628 W Pierce St. Milwaukee, WI 53215  
peterm@midwestrenew.org

## INTRODUCTION

Midwest Renewable Energy Association (MREA) is seeking qualified firms to submit proposals for the design, procurement, and installation of new, residential and commercial, direct-owned and power purchase agreement photovoltaic systems at a per-watt price lower than the prevailing single system market rate.

The group buy is being led by Midwest Renewable Energy Association. The goal of the group buy is to increase solar education and installations in St. Louis, Clayton, Maplewood, Richmond Heights, and University City through a group purchase involving free information sessions and a competitive selection process.

Between 2013 and 2018, the MREA facilitated twenty-two Solar Group Buy programs around the Midwest, reaching over 6,000 individuals with our Solar Power Hour information sessions, and leading to more than 7,400 kW on over 1,000 properties. Among those property owners who received proposals from partnering contractors, an average 42% purchased a PV system. To date, the average system size is 7.5 kW.

The group buy is offered with support of MREA and Missouri Botanical Garden (MOBOT) with high visibility in St. Louis, Clayton, Maplewood, Richmond Heights, and University City. MREA will coordinate and deliver a minimum of 16 free, public Solar Power Hour information sessions and market them widely with physical posters, email blasts, paid social media promotion, yard signs, and in the press.

## ABOUT THIS RFP

The intent of this RFP is to select one proposal to provide system design and installation services for eligible participants of the group buy. Proposing firms are invited to submit proposals individually or collaborate with another firm to submit a joint proposal.

As a result of this solicitation, qualified solar installation contractors may enter into a Master Service Agreement ("Agreement") with MREA. The Agreement will set forth the terms and conditions under which a contractor will provide site assessments/estimates and design, procure, and install residential and commercial solar systems for group buy participants. Installations shall be completed and energized before April 30, 2020, unless an extension is granted by MREA.

Additionally, MREA reserves the right to select a single or joint proposal. To make a selection, MREA may negotiate with or solicit quotes from one or more solar installation firms applying under this RFP. Nothing in this solicitation process, RFP, or any contemplated or final agreement relieves any qualified vendor from complying with all laws and regulations applicable to the agreement.

## QUESTIONS RELATED TO RFP

Questions, including requests for explanations of the meaning or interpretations of the provisions of the RFP, **shall be submitted in writing (via email)** to the RFP Point of Contact Peter Murphy at peterm@midwestrenew.org by 6/21/2019 at 2:00pm CST. Questions and answers will be posted here: <https://www.growsolar.org/request-for-proposals-rfps/request-for-proposals-grow-solar-st-louis-residential-solar-group-buy> as they are received, with no more accepted after 6/21/2019 at 2:00pm CST.

## PROPOSAL DUE DATE AND SUBMITTAL

**Proposals must be received no later than 6/28/2019 at 2:00pm CST.** Proposals must be submitted to Peter Murphy at [peterm@midwestrenew.org](mailto:peterm@midwestrenew.org). All emailed proposals will generate an emailed response within one business day confirming receipt of the proposal. If you do not receive a confirmation email, please email [peterm@midwestrenew.org](mailto:peterm@midwestrenew.org) or call 414-988-7963.

In order to maintain the fairness and integrity of the selection process, proposals must conform to the requirements of this RFP. All communications shall be through the RFP Point of Contact listed on the RFP Cover Sheet. Communications with members of the evaluation committee for the purpose of unfairly influencing the outcome of this RFP may be cause for the proposal to be rejected and disqualified from further consideration.

## ADVISORY COMMITTEE

The selection of the solar installation firm will be made by the Group Buy Advisory Committee. The Committee consists of representatives from MREA, Washington University, and MOBOT.

The Solar Group Buy Advisory Committee is responsible for selecting one proposal for design, procurement, and installation of PV systems for participating residential and commercial property owners (herein “property owners”). During the evaluation process, the Advisory Committee has the right to require any clarification they need in order to understand the Proposer’s approach.

## SOLAR GROUP BUY TIMELINE

RFP Announced	June 7, 2019
RFP Questions Due/Posted	June 21, 2019
RFP Proposals Due	June 28, 2019
Firm(s) Selected	July 12, 2019
Participant List Available to Contractor	Ongoing
Site Assessments Provided to Participants	July through November 15, 2019
Participants Make “Go” or “No Go” Decision	July through November 15, 2019
Installations Begin	Ongoing
Installations Completed	April 30, 2020

## PROPOSING FIRM REQUIREMENTS

Proposing firms are responsible for carefully reading all the terms and conditions contained in this RFP and for following the instructions given. Proposals that do not contain all the information requested may be rejected as non-responsive. Proposing firms must review the entire RFP to ensure that all required information is included in their proposal.

## **PROPOSING FIRM QUALIFICATIONS**

Proposing firms must meet the minimum qualifications described in this section to participate. The determination of whether a proposing firm meets the minimum qualifications will be based on the complete proposal.

### **Required:**

1. Proposing firms must be, or contract with, a company that has at least one employee that is a North American Board of Certified Energy Practitioners (NABCEP) Certified PV Installer.
2. Proposing firms must be, or contract with, electrical contractor(s) that has all applicable licensure requirements for the authorities having jurisdiction (AHJs).
3. Proposing firms must respond to each section of this Request for Proposals and use the following outline as a guide for formatting Proposals.
4. Proposing firms will provide a volume-based pricing structure that incentivizes participation through lower prices as the number of participants or kW capacity rise.
5. Proposing firms must have at least 200kW installed capacity of residential solar experience.

### **Additional Points Awarded to Firms that:**

1. Have a principal place of business located in St. Louis, Clayton, Maplewood, Richmond Heights, or University City. A company's principal place of business is the primary location where its business is performed. This is generally where the business's books and records are kept and is often where the head of the firm – or, at least, upper management – is located. (Up to 3 points)
2. Have at least one Master Electrician on staff. (Up to 1 point)
3. Provide financing options for solar arrays. (Up to 3 points)
4. Prioritize diversity and inclusiveness in business practices, including but not limited to diversity goals in hiring and/or contracting processes; collection of data on hiring and promotion processes with regards to diversity on the basis of age, disability, ethnicity, gender, religion, sexual orientation, and/or criminal record; and/or specific initiatives to increase diversity and inclusiveness in the workplace. (3 points)

## **PROPOSAL SCORING & EVALUATION**

The Advisory Committee shall evaluate each proposal based on the categories outlined below. Proposal ranking will be the central evaluation in determining successful applicants and final award. All Proposers will be notified of the outcome of the selection.

## **CONDITIONS AND RESERVATIONS**

MREA and the Advisory Committee are not obligated as a result of the submission of a Proposal to enter into an agreement with any Proposer, and have no financial obligation to any Proposer arising from this RFP. All Contracts will be executed between the home or commercial building owners and the selected contractor. Home and commercial building owners are not obligated to use the selected contractor for any services and may still choose other contractors.

The Contract between the property owner and the selected firm will state that MREA, MOBOT, and the Solar Group Buy Advisory Committee are not parties to the Contract, and that the selected solar installation firm will be solely liable for any claims, losses or damages arising out of the Contract. The solar installation firm will be expected to sign an Agreement with MREA to confirm each organization's roles and responsibilities prior to work starting. The selected firm and MREA shall retain and own participant and customer data resulting from the project. The selected firm and MREA are prohibited from selling or sharing customer data without permission of the customers.

Furthermore, MREA reserves all rights regarding this RFP, including, without limitation, the right to:

- Amend, delay or cancel the RFP without liability if the team finds it is in the best interest of the project to do so. In the event it becomes necessary to amend any part of this RFP, notice will be provided in the same manner as notice of the original solicitation;
- Reject any or all Proposals received upon finding that it is in the best interest of the project to do so;
- Waive any minor informality or non-conformance with the provisions or procedures of the RFP, and seek clarification of any Proposal, if required;
- Reject any Proposal that fails substantially to comply with all prescribed RFP procedures and requirements;
- Negotiate and/or amend the Scope of Work to serve the best interest of the project

## **SOLAR GROUP BUY 2019 PROPOSAL CONTENT**

### **PROPOSAL FORMAT AND EVALUATION CRITERIA**

Please create project proposals in 8½" x 11" document size using a minimum 12 point font size. Proposals should be submitted as one PDF file, or, if multiple files are required, one ZIP file containing the proposal folder and files. Proposals shall not exceed 25 pages, including cover page, cover letter and any appendices and/or attachments. The sample site assessment/cost estimate and sample contract do not count toward your 25 page maximum.

#### **Proposal Checklist:**

- 1. Cover Letter**
- 2. Firm Profile**
- 3. Qualifications**
  - NABCEP certified staff member**
  - Any Subcontractors**
- 4. Business Practices**
  - Sample Site Assessment / Cost Estimate**
  - Sample Contract**
- 5. Work Quality**
- 6. Customer Service**
  - References**
- 7. Point of Contact**
- 8. Appendix (Optional)**

- 9. Exhibit A
- 10. Exhibit B
- 11. Exhibit C

### **I. Cover Letter**

The cover letter shall discuss the highlights, key features and distinguishing points of the Proposal. As part of this discussion, please describe specifically why you want to work with MREA on program. The cover letter must be prepared and signed by a manager having the authority to make offers and enter into financial agreements on behalf of the firm(s).

**Provide responses to the following prompts using the section numbers/letters provided.**

### **II. Proposing Firm Profile**

- A. Detail the proposing firm size and local organizational structure. Describe the demonstrated experience of the firm in developing, designing and installing residential solar electric systems. (Up to 5 points)
- B. Describe how your business-as-usual practices would apply on a community-wide scale. (Up to 5 points)
- C. Provide a statement describing the firm's capability to complete the project per the project timeline specified above. Include a discussion of the firm's financial stability, number of employees, length of time in business, capacity, and resources. Include any website or marketing support your firm plans to provide for this project. (Up to 5 points)
- D. Explain how the firm can expand quickly if necessary—and maintain quality—to meet the large demand that may occur due to this project. Present your plan to accommodate large demand within the timeline stated above. If possible, provide two examples of projects completed to date which have prepared the firm for an undertaking of this scale (potentially 15-100 installations). (Up to 5 points)

### **III. Qualifications of the Project Team**

- A. Identify key personnel for this project including roles, experience, licenses and certificates, with corresponding numbers as appropriate. Key personnel should include at a minimum: Owners; Project Managers; Designers; Installers and Office Manager who will provide data to property owners per the specifications outlined in the Scope of Work (see Exhibit A). Include NABCEP Certification information here, as well as any Journeyman Electrician or other certified staff involved in this project. (Up to 5 points)
- B. Identify any subcontractors you plan to use, along with their value to the project, and provide background information on size, experience, management, licensing, and subcontracting agreement. (Up to 5 points) (Companies that do not use subcontractors will be awarded 5 points)

### **IV. Business Practices**

- A. Lead management practices: Describe the process for in-office management of a large volume of leads, scheduling of site assessments and installations, and processing of relevant paperwork. (Up to 5 points)
- B. **Please provide a sample site assessment and cost estimate that is representative of what program participants will receive from you as the selected installer for the program.** (Up to 5 points)
- C. Provide a sample customer contract tailored for use with this group buy program that includes a description of your terms of payment, process, and timeline, from initial deposit to final payment.

**NOTE:** Customer contract must require no more than 20% down payment upon contract signing, with further payments due after delivery of equipment.

**NOTE:** Customer contract must require final payment after interconnection and final inspection have been completed.

**NOTE:** Customer contract must also provide production credit in the event installation ends on or after 1/1/20 according to production estimates given to customer in site assessment and cost estimate (systems installed before 1/1/20 but interconnected after 1/1/20 do not need production credit).

**Note:** All Contracts will be executed between the home or commercial building owner and the selected contractor. The Contract between the owner and the selected firm will state that the Midwest Renewable Energy Association or the Advisory Committee are not parties to the Contract, and that the selected contractor will be solely liable for any claims, losses or damages arising out of the Contract.) (Up to 5 points)

- D. Please describe any financing options your company provides (or partners with a lending institution to provide) to customers who intend to finance their solar array. (Up to 5 points)
- E. Change orders: Describe how the firm addresses change orders. Please provide an example of a recent change order and how it was priced, tracked, and managed. (Up to 5 points)
- F. Work practices: Address the firm's health and safety record and practices. Identify any communications with Labor and Industries regarding workplace issues in the last 3 years. (Up to 5 points)
- G. Demonstrate familiarity with permitting fees and requirements in relevant local jurisdictions. (Up to 5 points)

## **V. Work Quality**

- A. Explain why the products included in your response to this request for proposals are appropriate for this project. Provide descriptions of warranties and support that ensure the long-term durability, operation, and maintenance of PV installations. Include performance and reliability figures, in addition to where the products were manufactured. (Up to 5 points)
- B. Describe the installation process, including how you will minimize disruption and disturbance of neighbors, landscaping, structures, and clients' living arrangements during preparation, installation, and clean up. (Up to 5 points)
- C. Describe final testing and sign-off procedures, including punch lists, inspection, and other necessary requirements. (Up to 5 points)

## **VI. Customer Service**

- A. Describe how you plan to handle incident reports (property damage, warranty, service calls, and inquiries). Discuss your typical response time on calls, hours of coverage for customer service calls, and process for providing status reports after an incident is logged. (Up to 5 points)
- B. List any complaints received by the Better Business Bureau over the last 3 years. (Up to 5 points)
- C. Describe the training you provide the property owner, including materials or manuals, customer care books, and/or support for later questions and system performance. (Up to 5 points)
- D. Describe approach to encourage energy efficiency. (Up to 5 points)
- E. Provide references from at least 3 recent residential installations including size, date of installation, and location, with a contact name and telephone number. (The Advisory Committee won't assign points, but will take into consideration the presence and quality of the references in addition to scoring proposals)
- F. **Note:** Proposing installer must abide by the SEIA Solar Business Code:  
<http://www.seia.org/policy/consumer-protection/seia-solar-business-code>

## **VII. Working with the Midwest Renewable Energy Association and Solar Group Buy Advisory Team**

- A. Identify the main point of contact at the proposing firm.
- B. Confirm this individual's ability to **provide weekly progress reports** per the specifications outlined in the Scope of Work (see Exhibit A).

## **VIII. Appendix**

- A. You can provide an Appendix to include any supporting information, such as resumes, references or other data that will support your firm as the best for this project. If present, the Appendix is included in the maximum allowed length of 25 pages for the entire proposal.

## **IX. Pricing schedule**

- A. Using **Exhibit C**, Proposers should present pricing as price-per-watt of installed capacity for direct-owned installations and power purchase agreement installations, exclusive of any eligible incentives or tax credits for a grid-tied system installed on a typical dwelling. The price is to apply to all work described in Scope of Work identified in Exhibit A.
- B. Provide per-watt pricing for each module/inverter combination offered as a tiered structure based on the total installed capacity of all systems. The tiered structure is to be based on four tiers as indicated in Exhibit C. (Up to 5 points)
- C. You can provide up to three equipment pricing options in Exhibit C. You do not need to provide three. (Up to 5 points)
  - At least one of the systems you provide cost estimates for must have U.S. made modules.
  - Proposers may also provide the cost estimate of a battery-based system (in the "Additional Cost Factors" section).
- D. Identify any potential additional costs by pricing Adders in Exhibit C to establish fixed costs for potential solar array peripherals. (Up to 5 points)
- E. Pricing based solely on specific individual system size will not be considered.
- F. **Note:** Include all your anticipated costs of customer development in this RFP. Customer communication, site assessments, system design and cost estimate development should be factored into the final RFP price.  
**(There is no charge for property owners to have a site assessment and cost estimate from the selected contractor – it is all in the final price).** You must calculate any costs associated with system design and a site visit into your price-per-watt pricing in Exhibit C.
- G. **Note:** An administrative fee of \$5,000 will be due from the selected firm upon selection. A \$5,000 check should be made out to the Midwest Renewable Energy Association. The fee is designed to cover programmatic administration costs. This is the equivalent of \$.10/w for 50 kW. In addition to the \$5,000, a \$.10 per watt fee will be applied for contracted installations above 50kW. This \$0.10/watt fee will be paid to the MREA after installations are completed. It should be reflected in your baseline pricing provided in Exhibit C. (For example, if you are providing baseline price of \$4.00/watt for install, your final price on Exhibit C should actually read \$4.10/watt.)
- H. **Note:** The MREA will provide each participating home or business owner (those who install solar through the program) with a 1-year complimentary membership on behalf of the selected installer.
- I. **Note:** Special considerations may be required for placement of solar installations on historic properties.

## EXHIBIT A SCOPE OF WORK

The selected firm will provide for design and installation of residential and commercial solar electric systems for a group of St. Louis, Clayton, Maplewood, Richmond Heights, and University City property owners in accordance with the general scope of services outlined below. Proposers may use this outline as a guide for organizing a scope of work for their proposal, but are encouraged to expand upon, refine or suggest alternative approaches based on previous experiences with similar projects.

Installations provided by the firm may take the form of cash purchase and/or power purchase agreement. The firm may offer financing and purchasers may acquire separate financing. The inclusion of community solar subscriptions sales in the education, marketing, and sales of the project will be at the sole discretion of MREA. Firms should expect that any community solar subscriptions associated with the public sector partners in the project may be incorporated into the project.

The purpose of this project is to enable the installation of solar photovoltaic systems on homes and commercial buildings in St. Louis, Clayton, Maplewood, Richmond Heights, and University City at a per-watt price lower than that typically offered by the firm. The selected firm will access cost efficiencies through a program which combines lowered customer acquisition costs with group purchasing and installations.

Between the months of July and November 2019, program partners will promote and deliver educational workshops at easily accessible public locations. As prospective participants are identified who wish to proceed with the process, their names and contact information will be provided to the selected firm. If more than one firm is selected, MREA and the Advisory Committee will refer prospective participants to the firms in an equitable manner determined at the time of firm selection.

The selected firm must provide **weekly progress reports or a progress report updated weekly** to the MREA regarding campaign progress and lead status. Progress reports should include the following:

- Name, address, phone, and email as available for each lead
- Date for status changes of each Lead and sum of all statuses
  - Contacted
  - Declined Site Assessment
  - Scheduled Site Assessment
  - Cost Estimate Sent
  - Contract Signed
  - Cost Estimate Declined
  - System Energized
  - Type of System
  - Size of System
  - Price of System

The selected firm(s) will provide site assessments and system design cost estimates for each participant free of charge. Individual system designs should be aesthetically pleasing, taking into consideration the preferences of the owner while minimizing project costs and maximizing solar energy production. System cost estimates should also take into consideration each owner's self-identified financial limitations including, if applicable, any owner-arranged financing with a bank, credit union or other financing entity.

The installations will be carried out by the selected firm in conformance with all applicable laws, codes, and interconnection requirements for net-metered installations in the resident or business utility service area.

For each participating home or small business, the selected firm will be responsible for:

- securing all required permits (typically building and electrical permits),
- completing and submitting all incentive applications,
- scheduling and passing all inspections,
- ensuring each contracted owner with completing an interconnection agreement with the resident or business utility service,
- providing each owner with information regarding energy efficiency,
- providing each owner appropriate documentation and guidance for applying for the federal residential solar energy tax credit and where applicable federal commercial asset depreciation tax credit,
- providing each owner with guidance and assistance about any applicable opportunity to sell SRECs.
- providing introductions and support materials to banks, credit unions, and other interested financing entities as needed.

**Note:** To ensure that participants in the group buy are receiving complete and accurate site assessments and cost estimates, the MREA reserves the right to review site assessments and cost estimates given to potential customers as part of the program.

**Note:** Program may be extended to another round of group purchase at mutual consent of MREA and selected Installer.

**EXHIBIT B**  
**PROPOSING FIRM QUALIFICATION STATEMENT**

**Proposing Firm Qualification Statement:**

I, \_\_\_\_\_, have read the entire contents of the RFP, and certify that Proposing Firm has necessary purchasing contacts, equipment, storage facilities, experience, ability and capital to furnish the proposed products in the manner described and to perform the required work satisfactorily.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title of Signatory: \_\_\_\_\_

I acknowledge that Proposing Firm possesses the following certifications: (Check appropriate boxes to indicate compliance.)

- Certification through NABCEP (required)
- Principal place of business located within St. Louis, Clayton, Maplewood, Richmond Heights, and University City (not required, but worth additional points).

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title of Signatory: \_\_\_\_\_

I certify that Proposing Firm agrees to abide by the SEIA Solar Business Code:

<http://www.seia.org/policy/consumer-protection/seia-solar-business-code>.

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title of Signatory: \_\_\_\_\_

Proposing Firm declares the following legal status in submitting this proposal:

- A corporation organized and existing under the laws of the State of \_\_\_\_\_
- A partnership
- An individual doing business as \_\_\_\_\_

\_\_\_\_\_  
Company Name FEIN

\_\_\_\_\_  
Address City/State/Zip Code

\_\_\_\_\_  
Proposer's Signature Name & Title

## EXHIBIT C

### Grow Solar St. Louis

Baseline cost per watt price assumes:

1. Cost for major system components (modules, inverter) – must be new. Solar electric modules and inverters must be listed here: [www.gosolarcalifornia.ca.gov/equipment/index](http://www.gosolarcalifornia.ca.gov/equipment/index).
2. Standard racking and mounting hardware and wiring
3. Flush mount systems
4. Cost of complete site assessment/cost assessment for each program enrollee
5. \$5,000 administrative fee which will be paid to the MREA
6. \$0.10/watt fee (after program total exceeds 50 kW) which will be paid to the MREA.
7. Installation of net metered system
8. The system must include at least a *five-year installation warranty* that covers any defects in the workmanship of the installation at no charge to the owner. The warranty must be provided by the contractor that installs the solar electric system.

What is NOT included in baseline price:

1. Costs related to analysis of any structural improvements that may be needed for a property
2. Electrical work that may be required beyond basic interconnection of solar installation (costs incurred by participant to bring electrical system up to code, for example)
3. Upgrades as requested by the program participant (see below)

**EXHIBIT C (cont'd)**  
**Grow Solar St. Louis**

Proposer Firm Name  
Contact Name  
Contact Email  
Contact Phone  
Date


**BASELINE PRICE INFORMATION (ASSUMES ROOF MOUNTED SOLAR ARRAY)**

PV System Equipment Information			Total Participant Capacity (KW)				
System	Modules	Inverter	<50 KW	51-150 kW	151-250 kW	251-350 kW	>350 KW
<b>EXAMPLE</b>	Solar World 275W	SMA 4KW Sunny Boy	\$	\$	\$	\$	\$
1							
2							
3							

**BASELINE PRICE INFORMATION – POWER PURCHASE AGREEMENT (ASSUMES ROOF MOUNTED SOLAR ARRAY)**

PV System Equipment Information			Total Participant Capacity (KW)				
System	Modules	Inverter	<50 KW	51-150 kW	151-250 kW	251-350 kW	>350 KW
<b>EXAMPLE</b>	Solar World 275W	SMA 4KW Sunny Boy	\$	\$	\$	\$	\$
1							
2							
3							

Additional Cost Factors (if any)	Increased Cost (\$/watt)	Flat Rate Adders (\$)	Description
Battery backup			
Roofing - Metal			
Roofing - Spanish (clay) tile			
Roofing - Concrete tile			
Roofing - Wood Shake			
Roofing - Flat (torch-down)			
Roofing - Single-ply membrane			

Roofing - Foam			
Roofing - Tar and Gravel			
Slope - angle exceeding 30 degrees			
Height - Building exceeding 2 stories			
Height - Cost adder			
Electrical - Line Tap			
Electrical - Full Panel Upgrade			
Electrical - DC Disconnect (roof-mounted)			
Electrical - Interior conduit run			
Structural - Rafter bracing			
Structural - Pole or Ground Mount			
Structural - Trenching			
Permitting - Allowance Commercial			
Permitting-Structural			
System - Micro-Inverter			
System - Monitoring			
Ex. Small system adder			
Ex. Large system cost subtraction			
Premium modules (High Efficiency)			
Premium modules (All American made)			
Multiple string inverters (Ex. SMA)			

Obstruction - Vent pipe removal			
Multiple roof arrays			

(Proposing firm may add more rows if necessary.)