#### PROFESSIONAL SERVICES AGREEMENT

THIS IS AN AGREEMENT made as of \_\_\_\_\_\_\_\_, 2022 between the LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT (OWNER) and Solar Energy Solutions, LLC (PROFESSIONAL). OWNER intends to proceed with roof-mounted solar photovoltaic systems in Lexington, Kentucky as described in the attached Request for Proposal document. The services are to include design and installation of solar photovoltaic systems for the city as described in the OWNER's Request for Proposal No. 5-2022. The services are hereinafter referred to as the Project.

**OWNER** and **PROFESSIONAL** in consideration of their mutual covenants herein agree in respect of the performance of design and installation services by **PROFESSIONAL** and the payment for those services by **OWNER** as set forth below.

**PROFESSIONAL** was selected by **OWNER** based upon its response to the Request for Proposal No. 5-2022.

**PROFESSIONAL** shall provide design and installation of solar photovoltaic systems for **OWNER** in all phases of the Project to which this Agreement applies, serve as **OWNER'S** representative for the Project as set forth below and shall give professional consultation and advice to **OWNER** during the performance of services hereunder.

#### SECTION 1 - BASIC SERVICES OF PROFESSIONAL

**PROFESSIONAL** shall perform all services as hereinafter stated which include customary planning and analysis incidental thereto.

The following documents are incorporated by reference herein as if fully stated and are attached hereto as exhibits:

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RFP No. 5-2022 (Exhibit "A")
PROFESSIONAL's Response subscribed 2/21/2022 (Exhibit "B"), 39 pages
PROFESSIONAL's Letter dated 2/28/2022 (Exhibit "C"), 3 pages
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To the extent there is conflict among their provisions, the provisions of this Agreement shall take precedence, followed by the provisions of Request for Proposal No. 5-2022 (Exhibit "A").

After written authorization to proceed with the Project, **PROFESSIONAL** shall:

- 1. Notify the **OWNER** in writing of its authorized representative who shall act as Project Manager and liaison representative between the **PROFESSIONAL** and the **OWNER**.
- 2. Design and install a roof-mounted solar photovoltaic system as proposed in Exhibit "B" and subject to the "System Requirements" and "Contractor Requirements" as defined in Exhibit "A", "Scope of Work".

This Agreement (consisting of pages 1 to 9 inclusive), together with the Exhibits and schedules identified above constitutes the entire Agreement between **OWNER** and **PROFESSIONAL** and supersedes all prior written or oral understandings. This Agreement and said Exhibits and schedules may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

The General Provisions of RFP No. 5-2022 are incorporated herein by reference as if fully stated.

#### SECTION 2 - ADDITIONAL SERVICES BY PROFESSIONAL

- 2.1. The OWNER may desire to have the PROFESSIONAL perform work or render services in connection with this Project other than provided by Exhibit A of this Agreement. Such work shall be considered as "Additional Services", subject to a change order, supplemental to this Agreement, setting forth the character and scope thereof and the compensation therefore. Work under such change order shall not proceed until the OWNER gives written authorization. Should the OWNER find it desirable to have previously satisfactorily completed and accepted plans or parts thereof revised, the PROFESSIONAL shall make such revisions as directed, in writing, by the OWNER. This work shall be considered as "Additional Services" and shall be paid as such.
- **2.2.** All "Additional Services" is subject to prior written authorization of **OWNER** and necessary appropriations made by the Urban County Council.

#### **SECTION 3 - OWNER'S RESPONSIBILITIES**

#### **OWNER shall:**

- **3.1.** Provide criteria and information as to **OWNER'S** requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations.
- **3.2.** Assist **PROFESSIONAL** by placing at its disposal available information pertinent to the Project.
- **3.3.** Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by **PROFESSIONAL**, and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of **PROFESSIONAL**.
- **3.4.** Designate in writing a person to act as **OWNER'S** representative with respect to the services to be rendered under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define

- **OWNER'S** policies and decisions with respect to materials, equipment, elements and systems pertinent to **PROFESSIONAL'S** services.
- **3.5.** Give written notice to **PROFESSIONAL** whenever **OWNER** observes or otherwise becomes aware of any development that affects the scope or timing of **PROFESSIONAL'S** services, or any defect in the work of Contractor(s).
- **3.6.** Furnish or direct **PROFESSIONAL** to provide, necessary Additional Services as stipulated in Section Two (2) of this Agreement or other services as required.

#### **SECTION 4 - PERIOD OF SERVICES**

- **4.1.** Time is of the essence. See Exhibit "B" (attached) for the project schedule.
- **4.2.** The provisions of this Section Four (4) and the various rates of compensation for **PROFESSIONAL'S** services provided for elsewhere in this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion.
- 4.3 If delays result by reason of acts of the OWNER or approving agencies or other causes, which are beyond the control of the PROFESSIONAL, an extension of time for such delay will be considered. If delays occur, the PROFESSIONAL shall within 30 days from the date of the delay apply in writing to the OWNER for an extension of time for such reasonable period as may be mutually agreed upon between the parties, and if approved, the Project schedule shall be revised to reflect the extension. Such extension of time to the completion date shall in no way be construed to operate as a waiver on the part of the OWNER of any of its rights in the Agreement. Section 6.5, under DISPUTES, of this Agreement, shall apply in the event the parties cannot mutually agree upon an extension of time.

In the event that the overall delay resulting from the above described causes is sufficient to prevent complete performance of the Agreement within six (6) months of the time specified therein, the Agreement fee or fees shall be subject to reconsideration and possible adjustment. Section 6.5 of this Agreement shall apply in the event the parties cannot mutually agree upon an adjustment of fee.

4.4. If delays result solely by reason of act of the **PROFESSIONAL**, the **PROFESSIONAL** must immediately notify the **OWNER** in the event of such delay, and provide the **OWNER** a written action plan within five (5) business days on how it will reasonably attempt to resolve the delay. If the parties cannot mutually agree to an extension of time or an adjustment, Section 6.5 of this Agreement shall apply. If the delay would prevent complete performance of the project within six (6) months of the time specified herein, **OWNER** shall have the option of canceling the project or otherwise adjusting the scope of service or work and any related fees.

#### SECTION 5 - PAYMENTS TO PROFESSIONAL

#### 5.1 Methods of Payment for Services of PROFESSIONAL

#### **5.1.1** For Basic Services.

All Lump Sum Pricing shall include all direct labor and supervision necessary to complete the item in a manner that meets or exceeds the **OWNER'S** satisfaction. It shall also include the labor payroll costs, overhead (such as unemployment taxes, general liability insurance, rent, utilities, phones, supplies, administrative salaries, F.I.C.A. sick and vacations, etc. disposal fees tool allowance, equipment, materials, profit and all other costs used on the job). The negotiated cost of services is established in Exhibit "B" per "RFP 2-2022 Price Proposal Form".

#### **5.2.** Times of Payment.

**5.2.1. PROFESSIONAL** shall submit a schedule of values subject to approval by the **OWNER** prior to starting work. The approved schedule of values will be the basis for monthly statements for Basic Services and Additional Services rendered. The Statements will be based upon **PROFESSIONAL'S** estimate of the proportion of the total services actually completed at the time of billing and are subject to approval by the **OWNER**. **OWNER** shall pay **PROFESSIONAL'S** monthly statements within thirty (30) days of receipt.

#### 5.3. Other Provisions Concerning Payments.

- **5.3.1.** In the event the Agreement is terminated by the **OWNER** without fault on the part of the **PROFESSIONAL**, the **PROFESSIONAL** shall be paid for the work performed or services rendered in an amount bearing the same ratio to the total Agreement fee as the amount of work completed or partially completed and delivered to the **OWNER** is to the total amount of work provided for herein, as determined by mutual agreement between the **OWNER** and the **PROFESSIONAL**.
- **5.3.2.** In the event the services of the **PROFESSIONAL** are terminated by the **OWNER** for fault on the part of the **PROFESSIONAL**, the **PROFESSIONAL** shall be paid reasonable value of the work performed or services rendered and delivered, and the amount to be paid shall be determined by the **OWNER**.
- **5.3.3.** In the event the **PROFESSIONAL** shall terminate the Agreement because of gross delays caused by the **OWNER**, the **PROFESSIONAL** shall be paid as set forth in Section 5.3.1. above.

#### **SECTION 6 – ADDITIONAL GENERAL CONSIDERATIONS**

#### **6.1.** Termination

**6.1.1. PROFESSIONAL** may only terminate this Agreement due to **OWNER'S** material breach of the terms hereof which breach causes **PROFESSIONAL** to be unable to perform its duties and responsibilities under this Agreement, and only upon

- ten (10) days written notice to **OWNER**, and provided **OWNER** fails to cure such default within the ten (10) day period.
- **6.1.2.** The **OWNER** reserves the right to terminate the Agreement for any reason at any time upon seven (7) days written notice to the **PROFESSIONAL**.

#### 6.2. Ownership and Reuse of Documents.

All documents, including Drawings and Specifications, prepared by the **PROFESSIONAL** pursuant to this Agreement shall be delivered to and become the property of the **OWNER**. The **OWNER** shall have the right to reuse same without restriction or limitation, but without liability or legal exposure to **PROFESSIONAL**.

#### 6.3. Legal Responsibilities and Legal Relations.

- **6.3.1.** The **PROFESSIONAL** shall familiarize itself with and shall at all times comply with all federal, state and local laws, ordinances, and regulations which in any manner affect the services of this Agreement.
- **6.3.2.** In performing the services hereunder, the **PROFESSIONAL** and its **PROFESSIONALS**, employees, agents and representatives shall not be deemed or construed to be employees of **OWNER** in any manner whatsoever. Except as otherwise provided in this Agreement, the **PROFESSIONAL** shall be acting as an independent contractor. The **PROFESSIONAL** shall not hold itself out as, nor claim to be, an officer or employee of **OWNER** by reason hereof and shall not make any claim, demand or application to or for any right or privilege applicable to an officer or employee of **OWNER**. The **PROFESSIONAL** shall be solely responsible for any claims for wages or compensation by **PROFESSIONAL'S** employees, agents and representatives, including **PROFESSIONALS**, and shall save and hold **OWNER** harmless therefrom.
- **6.3.3.** The parties hereto agree that causes of actions between the parties shall be governed by applicable provisions of the Kentucky Revised Statutes, that venue of any legal action shall be a court of appropriate jurisdiction in Fayette County, Kentucky, and that Kentucky law shall apply with respect to the interpretation of any provision of this Agreement.

#### 6.4. Successors and Assigns.

- **6.4.1. PROFESSIONAL** binds itself and its partners, successors, executors, administrators, assigns and legal representatives to this Agreement in respect to all covenants, agreements and obligations of this Agreement. **PROFESSIONAL** shall not assign any interest, obligation or benefit in this Agreement. **PROFESSIONAL** shall not assign any interest, obligation or benefit in this Agreement or transfer any interest in the same, whether by assignment or novation, without prior written consent of **OWNER**.
- **6.4.2.** The **PROFESSIONAL** shall not subcontract more than fifty percent (50%) of the work, based upon dollar value, to be provided under this Agreement. The **PROFESSIONAL** shall obtain written approval prior to subletting or assigning any

services contained in this Agreement, and consent to sublet or assign any part of this Agreement shall not be construed to relieve the **PROFESSIONAL** of any responsibility for compliance with the provisions of this Agreement.

**6.4.3.** Nothing herein shall be construed to give any rights or benefits hereunder to anyone other than **OWNER** and **PROFESSIONAL**.

#### 6.5. Disputes.

Except as otherwise provided in this Agreement, any dispute concerning the amount of payment due the **PROFESSIONAL** or any dispute concerning any question of fact of any act to be performed under this Agreement, which is not disposed of by agreement between the Urban County Division of Central Purchasing and the **PROFESSIONAL**, shall be submitted to the Commissioner, Department of General Services, Lexington-Fayette Urban County Government for review. The decision of the Commissioner as to the determination of such dispute shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, capricious, arbitrary or so grossly erroneous as necessarily to imply bad faith. Pending a final decision of a dispute hereunder, the **PROFESSIONAL** shall proceed diligently with the performance of the Agreement in accordance with the directions of the **OWNER**.

#### 6.6. Accuracy of PROFESSIONAL'S Work.

The **PROFESSIONAL** shall be required to perform this Agreement in accordance with the degree of ordinary and reasonable skill and care usually exercised by solar industry professionals prevailing at the time, place and under similar conditions as the services hereunder are rendered.

The **PROFESSIONAL** shall be responsible for the accuracy of all work, even though Drawings and Specifications have been accepted by the **OWNER**, and shall make any necessary revisions or corrections resulting from errors and/or omissions on the part of the **PROFESSIONAL**, without additional compensation. By submission of reports, calculations and Drawings and Specifications to the **OWNER**, the **PROFESSIONAL** has made a statement that, to the best of its belief and knowledge, the information is accurate. Failure on the part of **PROFESSIONAL** to provide the expected level of accuracy may be grounds for the **OWNER** to terminate this Agreement.

#### 6.7. Security Clause.

The **PROFESSIONAL** certifies that it shall not at any time release or divulge any information concerning the services covered by this Agreement to any person or any public or private organization except the **OWNER** without prior approval of the **OWNER** unless required by law.

#### 6.8. Access to Records.

The **PROFESSIONAL** and its sub-**PROFESSIONALS** shall maintain all books, documents, papers, and accounting records, and make such materials available at their respective offices at all reasonable times during the contract period and for three (3) years from the date of final payment under the contract for inspection by the **OWNER**, and copies thereof shall be furnished if requested. Failure to maintain such records for three (3) years after the date of final payment may be grounds for the **OWNER** to disqualify the **PROFESSIONAL** from consideration for future **PROFESSIONAL** service agreements.

#### 6.9. Required Risk Management Provisions.

The Risk Management Provisions of RFP No. 5-2022 are incorporated herein by reference as if fully stated. Copies of the required Certificates of Insurance shall be provided to **OWNER** as required therein.

#### SECTION 7 - EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this service agreement, the **PROFESSIONAL** agrees as follows:

- 7.1. The **PROFESSIONAL** will not discriminate against any employee or application for employment because of race, color, religion, national origin, sex, age or handicap. The **PROFESSIONAL** will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, national origin, sex, age or handicap. Such action shall include, but not be limited to the following: employment upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeships. The **PROFESSIONAL** agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.
- 7.2 The **PROFESSIONAL** will, in all solicitations or advertisements for employees placed by or on behalf of the **PROFESSIONAL**, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, age (between forty and seventy), or handicap.

#### **SECTION 8 - SPECIAL PROVISIONS**

- **8.1.** This Agreement is subject to the following provisions.
  - **8.1.2.** Pursuant to subparagraph 3.4 of this Agreement, **OWNER'S** representative is authorized to monitor, direct and review the performance of work of the **PROFESSIONAL**. Documents, data, reports and all matters associated with carrying out this Agreement shall be addressed to the **OWNER'S** representative or their designee. Questions by the **PROFESSIONAL** regarding interpretations of the terms, provisions and requirements under this Agreement shall be addressed to the **OWNER'S** representative or their designee. The **PROFESSIONAL** shall look only

- to the **OWNER'S** representative or their designee for direction in its performance under this Agreement; no other direction shall be binding upon **OWNER**. **OWNER** shall respond to written requests by **PROFESSIONAL** within thirty (30) days.
- **8.2. NO THIRD PARTY RIGHTS.** This agreement does not create a contractual relationship with or right of action in favor of a third party against either **OWNER** or **PROFESSIONAL**.
- **8.3. UNENFORCEABLE TERMS/SURVIVABILITY**. If any term or provision of this Agreement shall be found to be illegal or unenforceable, this Agreement shall remain in full force and such term or provision shall be deemed stricken. The provisions of Section 6 of this Agreement shall survive its termination.
- **8.4. NON-WAIVER.** The failure of either party to enforce any right reserved to it in this Agreement shall not be a waiver of any such right to which the party is entitled.

**IN WITNESS WHEREOF**, the parties hereto have made and executed this Agreement as of the day and year first above written.

## **OWNER** (LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT): Signature: \_\_\_\_\_MAYOR Date: ATTEST: CLERK OF URBAN COUNTY COUNCIL **PROFESSIONAL** (Solar Energy Solutions, LLC): Signature: Printed Name: Position: COMMONWEALTH OF KENTUCKY COUNTY OF (\_\_\_\_\_\_) The foregoing instrument was subscribed, sworn to and acknowledged before me by \_\_\_\_\_ as \_\_\_\_\_ for and on behalf of \_\_\_\_\_\_, on this the \_\_\_\_\_ day of , 20 . My commission expires:

NOTARY PUBLIC, STATE AT LARGE, KY



# Lexington-Fayette Urban County Government

#### Request for Proposals

The Lexington-Fayette Urban County Government hereby requests proposals for RFP #5-2022 Solar PV Installation at Fire Station 21 to be provided in accordance with terms, conditions and specifications established herein.

Sealed proposals will be received through Ion Wave until **2:00 PM**, prevailing local time, on **February 22, 2022.** All forms and information requested in RFP must be included and attached in Response Attachments tab in Ion Wave.

Proposals received after the date and time set for opening proposals will not be accepted. It is the sole responsibility of the Proposer to assure that his/her proposal is submitted in Ion Wave before the date and time set for opening proposals.

Proposals, once submitted, may not be withdrawn for a period of one hundred twenty (120) calendar days.

The Lexington-Fayette Urban County Government reserves the right to reject any or all proposals, and to waive technicalities and informalities when such waiver is determined by the Lexington-Fayette Urban County Government to be in its best interest.

Signature of this proposal by the Proposer constitutes acceptance by the Proposer of terms, conditions and requirements set forth herein.

Minor exceptions may not eliminate the proposal. Any exceptions to the specifications established herein shall be listed in detail on a separate sheet and attached hereto. The Lexington-Fayette Urban County Government shall determine whether any exception is minor.

The Lexington-Fayette Urban County Government encourages the participation of minority- and women-owned businesses in Lexington-Fayette Urban County Government contracts. This proposal is subject to Affirmative Action requirements attached hereto.

Please do not contact any LFUCG staff member or any other person involved in the selection process other than the designated contact person(s) regarding the project contemplated under this RFP while this RFP is open and a selection has not been finalized. Any attempt to do so may result in disqualification of the firm's submittal for consideration.

Pre-proposal meeting will be held Feb 8, 2022, 10:00 am, 3191 Maple Leaf Dr, Lexington, KY.

#### Laws and Regulations

All applicable state laws, municipal ordinances and regulations of all authorities having jurisdiction over the project shall apply to the contract, and shall be deemed to be incorporated herein by reference.

#### **Equal Employment Opportunity**

The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, religion, sex (including pregnancy, sexual orientation or gender identity), national origin, disability, age, genetic information, political affiliation, or veteran status, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.

#### **Kentucky Equal Employment Opportunity Act**

The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any "county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

"During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, or national origin;
- (2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, or national origin;
- (3) The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provision of the nondiscrimination clauses required by this section; and
- (4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses."

#### The Act further provides:

"KRS 45.610. Hiring minorities -- Information required

(1) For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetables.

(2) Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.

KRS 45.620. Action against contractor -- Hiring of minority contractor or subcontractor

- (1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.
- (2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.
- (3) The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job."

It is recommended that all of the provisions above quoted be included as <u>special conditions</u> in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his workforce in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

#### **LFUCG Non-Appropriation Clause**

Contractor acknowledges that the LFUCG is a governmental entity, and the contract validity is based upon the availability of public funding under the authority of its statutory mandate.

In the event that public funds are unavailable and not appropriated for the performance of the LFUCG's obligations under this contract, then this contract shall automatically expire without penalty to the LFUCG thirty (30) days after written notice to Contractor of the unavailability and non-appropriation of public funds. It is expressly agreed that the LFUCG shall not activate this non-appropriation provision for its convenience or to circumvent the requirements of this contract, but only as an emergency fiscal measure during a substantial fiscal crisis, which affects generally its governmental operations.

In the event of a change in the LFUCG's statutory authority, mandate and mandated functions, by state and federal legislative or regulatory action, which adversely affects the LFUCG's authority to continue its obligations under this contract, then this contract shall automatically terminate without penalty to the LFUCG upon written notice to Contractor of such limitation or change in the LFUCG's legal authority.

#### **Contention Process**

Vendors who respond to this invitation have the right to file a notice of contention associated with the RFP process or to file a notice of appeal of the recommendation made by the Director of Central Purchasing resulting from this invitation.

Notice of contention with the RFP process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his/her contention with the RFP process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Central Purchasing shall promptly respond in writing findings as to the compliance with RFP processes. If, based on this review, a RFP process irregularity is deemed to have occurred the Director of Central Purchasing will consult with the Commissioner of Finance, the Chief Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a RFP recommendation must be filed within 3 business days of the RFP recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

#### **SELECTION CRITERIA:**

1. Company Profile / Experience 20 points

2. Project Team 10 points

3. Technical Approach / Output 30 points

4. Price Proposal 40 points

Proposals shall contain the appropriate information necessary to evaluate based on these criteria. A committee composed of government employees as well as representatives of relevant user groups will evaluate the proposals.

Questions shall be submitted via IonWave at: <a href="https://lexingtonky.ionwave.net">https://lexingtonky.ionwave.net</a>

#### Affirmative Action Plan

All vendors must submit as a part of the proposal package the following items to the Urban County Government:

- 1. Affirmative Action Plan for his/her firm;
- 2. Current Work Force Analysis Form;

Failure to submit these items as required may result in disqualification of the submitter from award of the contract. All submissions should be directed to:

Director, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, 3rd Floor Lexington, Kentucky 40507

All questions regarding this proposal must be directed to the Division of Central Purchasing, (859)-258-3320.

#### **AFFIDAVIT**

Comes	s the Affia	ant,				, and afte	r being first duly
sworn, states	under pen	alty of perjury a	as follows	3:			
1. His/her r	name is _					and he/she	is the individual
submitting	the	proposal	or	is	the	authorized	representative
of		<del> </del>				, the	e entity submitting
the proposal (	(hereinafte	r referred to as	"Propose	er").			

- 2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
- 3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
- 4. Proposer has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
- 5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.
- Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

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	e or should have been aware that his conduct is of that r	lature or that the circ	umstance
	Further, Affiant sayeth naught.		
STAT	E OF		
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	The foregoing instrument was subscribed, sworn to an	d acknowledged bet	fore me
by		on this the	day
	, 20	on this the	day
	, 20		day
			day
	, 20		day
	, 20  My Commission expires:		day
	, 20		day
	, 20  My Commission expires:		day

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is

#### **EQUAL OPPORTUNITY AGREEMENT**

#### Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

#### The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

\*\*\*\*\*\*\*\*\*

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

<u>Bidders</u>		
I/We agree to comply with the Civil Rights Laws veterans, handicapped and aged persons.	listed above that govern employment rigl	hts of minorities, women, Vietnam
O'markens	Alexand Devices	_
Signature	Name of Business	

#### **WORKFORCE ANALYSIS FORM**

Name of Organization:	

Categories	Total	Wh (No Hispa oi Latii	ot anic r		oanic atino	Afri Ame (N Hisp	ck or can- erican Not canic atino	Haw ar Otl Pad Islar (N Hisp	tive aiian aid her cific nder lot banic atino	Asi (N Hisp or La	ot anic	Amer India Alas Nat (no Hisp or La	in or kan ive ot anic	Two mo rac (N Hispa o Lati	ore es ot anic r	То	tal
		М	F	M	F	М	F	М	F	М	F	М	F	М	F	M	F
Administrators																	
Professionals																	
Superintendents																	
Supervisors																	
Foremen																	
Technicians																	
Protective																	
Para-																	
Office/Clerical																	
Skilled Craft																	
Service/Maintena																	
Total:																	

Prepared by: _	Date:/	
	(Name and Title)	Revised 2015-Dec-15

#### DIRECTOR, DIVISION OF CENTRAL PURCHASING LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT 200 EAST MAIN STREET LEXINGTON, KENTUCKY 40507

### NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITIES AND DBE CONTRACT PARTICIPATION

Notice of requirement for Affirmative Action to ensure Equal Employment Opportunities and Disadvantaged Business Enterprises (DBE) Contract participation. Disadvantaged Business Enterprises (DBE) consists of Minority-Owned Business Enterprises (MBE) and Woman-Owned Business Enterprises (WBE).

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this Contract be subcontracted to Disadvantaged Business Enterprises, which is made up of MBEs and WBEs. The Lexington Fayette Urban County Government also has set a goal that not less than three percent (3%) of the total value of this Contract be subcontracted to Veteran-owned Small Businesses. The goal for the utilization of Disadvantaged Business Enterprises as well Veteran —owned Small Businesses as subcontractors is a recommended goal. Contractor(s) who fail to meet such goal will be expected to provide written explanations to the Director of the Division of Purchasing of efforts they have made to accomplish the recommended goal, and the extent to which they are successful in accomplishing the recommended goal will be a consideration in the procurement process. Depending on the funding source, other DBE goals may apply.

For assistance in locating Disadvantaged Business Enterprises Subcontractors contact:

Sherita Miller, MPA, Division of Central Purchasing Lexington-Fayette Urban County Government 200 East Main Street, 3rd Floor, Room 338

Lexington, Kentucky 40507

smiller@lexingtonky.gov

Firm Submitting Prop	osal:		
Complete Address:	Street	City	Zip
Contact Name:		Title:	
Telephone Number:		Fax Number:	
Email address:			

## Lexington-Fayette Urban County Government MWDBE PARTICIPATION GOALS

#### A. GENERAL

- 1) The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE), Woman-Owned (WBE), Disadvantaged (DBE) Business Enterprises and Veteran-Owned Small Businesses (VOSB) as subcontractors or suppliers in their bids.
- 2) Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned, Woman-Owned and Disadvantaged Businesses on this contract.
- 3) It is therefore a request of each Bidder to include in its bid, the same goal (10%) for MWDBE participation and other requirements as outlined in this section.
- 4) The LFUCG has also established a 3% of total procurement costs as a Goal for participation for of Veteran-Owned Businesses.
- 5) It is therefore a request of each Bidder to include in its bid, the same goal (3%) for Veteran-Owned participation and other requirements as outlined in this section.

#### B. PROCEDURES

- 1) The successful bidder will be required to report to the LFUCG, the dollar amounts of all payments submitted to Minority-Owned, Woman-Owned or Veteran-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)
- 2) Replacement of a Minority-Owned, Woman-Owned or Veteran-Owned subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another MWDBE Firm; this is subject to approval by the LFUCG. (See LFUCG MWDBE Substitution Form)
- 3) For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, bidders may contact:
  - a) The Lexington-Fayette Urban County Government, Division of Central Purchasing (859-258-3320)
- 4) The LFUCG will make every effort to notify interested MWDBE and Veteran-Owned subcontractors and suppliers of each Bid Package, including information on the scope of work, the pre-bid meeting time and location, the bid date, and all other pertinent information regarding the project.

#### C. DEFINITIONS

- 1) A Minority-Owned Business Enterprise (MBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by persons of African American, Hispanic, Asian, Pacific Islander, American Indian or Alaskan Native Heritage.
- 2) A Woman-Owned Business Enterprise (WBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by one or more women.

- 3) A Disadvantaged Business (DBE) is defined as a business which is certified as being at least 51% owned, managed and controlled by a person(s) that are economically and socially disadvantaged.
- 4) A Veteran-Owned Small Business (VOSB) is defined as a business which is certified as being at least 51% owned, managed and controlled by a veteran and/or a service disabled veteran.
- 5) Good Faith Efforts are efforts that, given all relevant circumstances, a bidder or proposer actively and aggressively seeking to meet the goals, can reasonably be expected to make. In evaluating good faith efforts made toward achieving the goals, whether the bidder or proposer has performed the efforts outlined in the Obligations of Bidder for Good Faith Efforts outlined in this document will be considered, along with any other relevant factors.

#### D. OBLIGATION OF BIDDER FOR GOOD FAITH EFFORTS

- 1) The bidder shall make a Good Faith Effort to achieve the Participation Goal for MWDBE and Veteran-Owned subcontractors/suppliers. The failure to meet the goal shall not necessarily be cause for disqualification of the bidder; however, bidders not meeting the goal are required to furnish with their bids written documentation of their Good Faith Efforts to do so.
- 2) Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.
- 3) The Form of Proposal includes a section entitled "MWDBE Participation Form". The applicable information must be completed and submitted as outlined below.
- 4) Failure to submit this information as requested may be cause for rejection of bid or delay in contract award.

#### E. DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS

- 1) Bidders reaching the Goal are required to submit only the MWDBE Participation Form." The form must be fully completed including names and telephone number of participating MWDBE firm(s); type of work to be performed; estimated value of the contract and value expressed as a percentage of the total Lump Sum Bid Price. The form must be signed and dated, and is to be submitted with the bid.
- 2) Bidders not reaching the Goal must submit the "MWDBE Participation Form", the "Quote Summary Form" and a written statement documenting their Good Faith Effort to do so. If bid includes no MWDBE and/or Veteran participation, bidder shall enter "None" on the subcontractor / supplier form). In addition, the bidder must submit written proof of their Good Faith Efforts to meet the Participation Goal:
  - a. Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.
  - b. Included documentation of advertising in the above publications with the bidders good faith efforts package

- c. Attended LFUCG Central Purchasing Economic Inclusion Outreach event
- d. Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned businesses of subcontracting opportunities
- e. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses.
- f. Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
- g. Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
- d. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs and/or Veteran-Owned businesses soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
- e. Followed up initial solicitations by contacting MWDBEs and Veteran-Owned Businesses to determine their level of interest.
- j. Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.
- k. Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce
- l. Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.
- m. Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.
- n. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

- o. Made an effort to offer assistance to or refer interested MWDBE firms and Veteran-Owned businesses to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal
- p. Made efforts to expand the search for MWBE firms and Veteran-Owned businesses beyond the usual geographic boundaries.
- q. Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE and Veteran participation.

<u>Note</u>: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement which is subject to review by the MBE Liaison. Documentation of Good Faith Efforts must be submitted with the Bid, if the participation Goal is not met.



Sherita Miller, MPA
Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507
smiller@lexingtonky.gov
859-258-3323

OUR MISSION: The mission of the Minority Business Enterprise Program is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long term economic viability of Lexington-Fayette Urban County Government.

To that end the city council adopted and implemented Resolution 484-2017 – A Certified Minority, Women and Disadvantaged Business Enterprise ten percent (10%) minimum goal and a three (3%) minimum goal for Certified Veteran-Owned Small Businesses and Certified Service Disabled Veteran – Owned Businesses for government contracts.

The resolution states the following definitions shall be used for the purposes of reaching these goals (a full copy is available in Central Purchasing):

Certified Disadvantaged Business Enterprise (DBE) — a business in which at least fifty-one percent (51%) is owned, managed and controlled by a person(s) who is socially and economically disadvantaged as define by 49 CFR subpart 26.

Certified Minority Business Enterprise (MBE) — a business in which at least fifty-one percent (51%) is owned, managed and controlled by an ethnic minority (i.e. African American, Asian American/Pacific Islander, Hispanic Islander, Native American/Native Alaskan Indian) as defined in federal law or regulation as it may be amended from time-to-time.

Certified Women Business Enterprise (WBE) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a woman.

Certified Veteran-Owned Small Business (VOSB) – a business in which at least fifty-one percent (51%) is owned, managed and controlled by a veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.

Certified Service Disabled Veteran Owned Small Business (SDVOSB) — a business in which at least fifty-one percent (51%) is owned, managed and controlled by a disabled veteran who served on active duty with the U.S. Army, Air Force, Navy, Marines or Coast Guard.

The term "Certified" shall mean the business is appropriately certified, licensed, verified, or validated by an organization or entity recognized by the Division of Purchasing as having the appropriate credentials to make a determination as to the status of the business.

We have compiled the list below to help you locate certified MBE, WBE and DBE certified businesses. Below is a listing of contacts for LFUCG Certified MWDBEs and Veteran-Owned Small Businesses in (https://lexingtonky.ionwave.net)

Business	Contact	Email Address	Phone
LFUCG	Sherita Miller	smiller@lexingtonky.gov	859-258-3323
Commerce Lexington – Minority Business Development	Tyrone Tyra	ttyra@commercelexington.com	859-226-1625
Tri-State Minority Supplier Diversity Council	Susan Marston	smarston@tsmsdc.com	502-365-9762
Small Business Development Council	Shawn Rogers UK SBDC	shawn.rogers@uky.edu	859-257-7666
Community Ventures Corporation	Phyllis Alcorn	palcorn@cvky.org	859-231-0054
KY Transportation Cabinet (KYTC)	Melvin Bynes	Melvin.bynes2@ky.gov	502-564-3601
KYTC Pre-Qualification	Shella Eagle	Shella.Eagle@ky.gov	502-782-4815
Ohio River Valley Women's Business Council (WBENC)	Sheila Mixon	smixon@orvwbc.org	513-487-6537
Kentucky MWBE Certification Program	Yvette Smith, Kentucky Finance Cabinet	Yvette.Smith@ky.gov	502-564-8099
National Women Business Owner's Council (NWBOC)	Janet Harris-Lange	janet@nwboc.org	800-675-5066
Small Business Administration	Robert Coffey	robertcoffey@sba.gov	502-582-5971
LaVoz de Kentucky	Andres Cruz	lavozdeky@yahoo.com	859-621-2106
The Key News Journal	Patrice Muhammad	production@keynewsjournal.com	859-685-8488



to submit a completed form may cause rejection of the bid.	
understood that those substitutions must be submitted to Central Purchasing for approval immediately. Failu	re
substitution is made or the total value of the work is changed prior to or after the job is in progress, it is	
The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If an	ιy

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1.				
2.				
3.				
4.				

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Company	Company Representative
Date	Title



Date

Rid	/RFP	/Onote	Reference #	
Diu	/ IXI I	Quote	KCICICIICC m	

The substituted MWDBE and/or veteran subcontractors listed below have agreed to participate on this Bid/RFP/Quote.
These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated
below and are now being submitted to Central Purchasing for approval. By the authorized signature of a representative of
our company, we understand that this information will be entered into our file for this project.

SUBSTITUTED MWDBE Company Name, Address, Phone, Email	MWDBE Formally Contracted/ Name, Address, Phone, Email	Work to Be Performed	Reason for the Substitution	Total Dollar Value of the Work	% Value of Total Contract
1.					
2.					
3.					
4.					

The undersigned acknowledges that any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Company

Company Representative

Title



The undersigned acknowledges that the minority and/or veteran subcontractors listed on this form definition of the contractors and the contractors are designed acknowledges.	id
submit a quote to participate on this project. Failure to submit this form may cause rejection of the bid.	

Company Name	e			Contact	Contact Person  Bid Package / Bid Date					
Address/Phone	/Email			Bid Pack						
MWDBE Company Addres	Contact Person	Contact Information (work phone, Email, cell)	Date Contacted	Services to be performed	Method of Communication (email, phone meeting, ad, event etc)	Total dollars \$\$ Do Not Leave Blank (Attach Documentation)	MBE * AA HA AS NA Female	Veteran		
NA= Native . The undersign	American ed acknow	vledges that all	information	is accurate.	Any misrepresental concerning false sta	tion may result in to	ermination			
Company				Ō	Company Represe	entative				
Date				-	Гitle					



The LFUCG has a 10% goal plan adopted by city council to increase the participation of minority and women owned businesses in the procurement process. The LFUCG also has a 3% goal plan adopted by cited council to increase the participation of veteran owned businesses in the procurement process. In order to measure that goal LFUCG will track spending with MWDBE and Veteran contractors on a monthly basis. By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentation may result in termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims. Please submit this form monthly to the Division of Central Purchasing/ 200 East Main Street / Room 338 / Lexington, KY 40507.

Project Name/ C	Contract #		Work Period/		To:			
Company Name	:		Address:  Contact Person:					
Federal Tax ID:								
Subcontractor Vendor ID (name, address, phone, email	Description of Work	Total Subcontract Amount	% of Total Contra Awarde to Print for this Project	this Period	Purchase Order number for subcontractor work (please attach PO)	Scheduled Project Start Date	Scheduled Project End Date	
By the signature be of the representation prosecution under a	ns set forth belo	ow is true. Any	misrepres	sentations may res	sult in the termina	ation of the co		
Company				Company Representative				

## LFUCG STATEMENT OF GOOD FAITH EFFORTS Bid/RFP/Quote #\_\_\_\_\_

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation.
Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.
Included documentation of advertising in the above publications with the bidders good faith efforts package
Attended LFUCG Central Purchasing Economic Inclusion Outreach event
Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities
Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses
Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest.
Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.
Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items

Date		Title
Company		Company Representative
in termination		s accurate. Any misrepresentations may result pplicable Federal and State laws concerning
	cause for rejection of bid. Bidders relevant to this requirement which	documentation requested in this section may be may include any other documentation deemed is subject to approval by the MBE Liaison. orts must be submitted with the Bid, if the
		at the bidder submits which may show that the aith efforts to include MWDBE and Veteran
	Made efforts to expand the susinesses beyond the usual geograp	search for MWBE firms and Veteran-Owned phic boundaries.
	Veteran-Owned businesses to obtain	ance to or refer interested MWDBE firms and the necessary equipment, supplies, materials, the work requirements of the bid proposal
	unacceptable. The fact that the bide contract work with its own forces rejecting a MWDBE and/or Vetera	reasons why the quotations were considered der has the ability and/or desire to perform the swill not be considered a sound reason for an-Owned business's quote. Nothing in this ire the bidder to accept unreasonable quotes in an goals.
	firms and Veteran-Owned business	quotations received from interested MWDBE es which were not used due to uncompetitive ptable and/or copies of responses from firms bmitting a bid.
	businesses not rejecting them as u	interested MWDBE firms and Veteran-Owned nqualified without sound reasons based on a abilities. Any rejection should be so noted in an agreement could not be reached.
	•	facilitate MWDBE and Veteran participation, y otherwise perform these work items with its

Date

#### **GENERAL PROVISIONS**

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 et. seq., as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

- 2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
- 3. Addenda: All addenda and IonWave Q&A, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
- 4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
- 6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
- 8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

- 9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
- 10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- 11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
- 12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

#### A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
  - (a) Failure to perform the contract according to its terms, conditions and specifications;
  - (b) Failure to make delivery within the time specified or according

- to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
- (d) Failure to diligently advance the work under a contract for construction services:
- (e) The filing of a bankruptcy petition by or against the contractor; or
- (f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

### B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must

be signed by a duly authorized officer, agent or employee of the Respondent.

- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.
- 20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.

Signature	Date

# RISK MANAGEMENT PROVISIONS INSURANCE AND INDEMNIFICATION

## INDEMNIFICATION AND HOLD HARMLESS PROVISION

- (1) It is understood and agreed by the parties that Contractor hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Contractor or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "CONTRACTOR") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- CONTRACTOR shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by CONTRACTOR's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the CONTRACTOR; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.
- (3) In the event LFUCG is alleged to be liable based upon the above, CONTRACTOR shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.
- (4) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.
- (5) LFUCG is a political subdivision of the Commonwealth of Kentucky. CONTRACTOR acknowledges and agrees that LFUCG is unable to provide indemnity or otherwise save, hold harmless, or defend the CONTRACTOR in any manner.

# FINANCIAL RESPONSIBILITY

BIDDER/CONTRACTOR understands and agrees that it shall demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions prior to final acceptance of its bid and the commencement of any work or provision of goods.

# **INSURANCE REQUIREMENTS**

YOUR ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW, AND YOU MAY NEED TO CONFER WITH YOUR INSURANCE AGENTS, BROKERS, OR CARRIERS TO DETERMINE IN ADVANCE OF SUBMISSION OF A RESPONSE THE AVAILABILITY OF THE INSURANCE COVERAGES AND ENDORSEMENTS REQUIRED HEREIN. IF YOU FAIL TO COMPLY WITH THE INSURANCE REQUIREMENTS BELOW, YOU MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

# Required Insurance Coverage

BIDDER/CONTRACTOR shall procure and maintain for the duration of this contract the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to LFUCG in order to protect LFUCG against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONTRACTOR. The cost of such insurance shall be included in any bid:

Coverage

General Liability
(Insurance Services Office Form CG 00 01)

Worker's Compensation

Employer's Liability

Excess/Umbrella Liability

Limits

\$1 million per occurrence, \$2 million aggregate or \$2 million combined single limit

Statutory

\$100,000

The policies above shall contain the following conditions:

- a. All Certificates of Insurance forms used by the insurance carrier shall be properly filed and approved by the Department of Insurance for the Commonwealth of Kentucky (DOI). LFUCG shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy using the Kentucky DOI approved forms.
- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by LFUCG.
- c. The General Liability Policy shall include Premises and Operations coverage unless it is deemed not to apply by LFUCG.
- d. The General Liability Policy shall include Employment Practices Liability coverage or an endorsement in a minimum amount of \$1 million unless it is deemed not to apply by LFUCG.
- e. The Policy shall include Umbrella/Excess Liability coverage in the amount of \$1 million per occurrence, \$1 million aggregate, unless it is deemed not to apply by LFUCG.
- f. LFUCG shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- g. Said coverage shall be written by insurers acceptable to LFUCG and shall be in a form acceptable to LFUCG. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

# Renewals

After insurance has been approved by LFUCG, evidence of renewal of an expiring policy must be submitted to LFUCG, and may be submitted on a manually signed renewal endorsement form. If

the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

### **Deductibles and Self-Insured Programs**

IF YOU INTEND TO SUBMIT A SELF-INSURANCE PLAN IT MUST BE FORWARDED TO LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, DIVISION OF RISK MANAGEMENT, 200 EAST MAIN STREET, LEXINGTON, KENTUCKY 40507 NO LATER THAN A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE RESPONSE DATE. Self-insurance programs, deductibles, and self-insured retentions in insurance policies are subject to separate approval by Lexington-Fayette Urban County Government's Division of Risk Management, upon review of evidence of BIDDER/CONTRACTOR's financial capacity to respond to claims. Any such programs or retentions must provide LFUCG with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance coverage

# Safety and Loss Control

CONTRACTOR shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and LFUCG.

# Verification of Coverage

BIDDER/CONTRACTOR agrees to furnish LFUCG with all applicable Certificates of Insurance signed by a person authorized by the insurer to bind coverage on its behalf prior to final award, and if requested, shall provide LFUCG copies of all insurance policies, including all endorsements.

### Right to Review, Audit and Inspect

CONTRACTOR understands and agrees that LFUCG may review, audit and inspect any and all of its records and operations to insure compliance with these Insurance Requirements.

# **DEFAULT**

BIDDER/CONTRACTOR understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default and that LFUCG may elect at its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging BIDDER/CONTRACTOR for any such insurance premiums purchased, or suspending or terminating the work.

00548704

# Request for Proposal 5-2022 Solar PV Installation for Fire Station 21

### SCOPE OF WORK

#### Location

3191 Mapleleaf Drive, Fire Station #21

### Introduction

LFUCG is soliciting proposals from qualified solar PV providers to design and install a roof-mounted solar photovoltaic system at Fire Station #21. Respondents shall have demonstrated experience designing, planning, permitting and constructing complete solar electric systems, and have relationships with/knowledge of local utility requirements.

An award under this RFP may not be based solely on the lowest price but will be made to the respondent with the overall best value proposal. Proposals will be evaluated and scored based on the evaluation criteria defined herein.

### **System Requirements**

Photovoltaic panels shall be roof mounted on the southernmost roof face exclusively.

All power generation and transmission equipment shall be UL listed for its designed use. Construction must comply with current adopted building codes, which includes: International Building Code, National Electric Code.

Modules shall be UL1703 or UL61730 listed and California Energy Commission (CEC) listed with 25-year output performance warranty greater than 84% over 25 years. Eligible module manufacturers: LG Electronics, CSI Solar, Panasonic, Jinko Solar, Hanwha Q Cells, Trina Solar, First Solar, Solaria, Catepillar, Sunpower.

Inverters shall be UL1741 listed and CEC listed with weighted efficiency of 96% or higher. Eligible inverter manufacturers: LG Electronics, SunPower, Jinko Solar, SMA America, Fronius USA, Enphase Energy, SolarEdge Technologies.

// Non-CEC listed model numbers are subject to approval by LFUCG //
California Energy Commission – Solar Equipment Lists
https://www.energy.ca.gov/programs-and-topics/programs/solar-equipment-lists

The system shall include a Web-based monitoring solution to display solar performance information. The solution shall allow LFUCG the ability to download data in increments no greater than one hour for a period no less than one year.

Exterior conduit shall be liquid tight. Flexible conduit lengths shall not exceed 24 inches.

#### **Contractor Requirements**

The contractor is responsible for the assessment of the building structural integrity, roof condition and shading limitations. Prior to installation, the contractor shall provide a letter from a structural engineer with Kentucky Professional Engineer stamp, verifying the integrity of the existing facility to handle the additional loads of proposed PV system.

The contractor is responsible for all permitting related to the design and installation of the system.

Under no circumstances shall the contractor disable electrical service to the building or secondary circuits within the building without authorization from LFUCG.

Under no circumstances shall the contractor obstruct access to the facility or driveways.

The contractor is responsible for documenting the condition of the roof and, specifically, any damages that exist prior to construction.

The contractor is responsible for the construction safety plan to include, at a minimum, all applicable OSHA workplace safety and Personal Protective Equipment (PPE) requirements.

Performance Verification: The contractor shall review generation data and provide a report to LFUCG to demonstrate that system output is meeting expectations. Two reports are required: (1) after 30 days and (2) prior to the expiration of workmanship warranty.

The contractor shall achieve substantial completion within 120 calendar days of Notice to Proceed. Substantial Completion is defined as LFUCG having beneficial use of the photovoltaic system.

#### **Guidelines**

The output capacity of the inverter(s) shall not exceed 15kW.

Modules should lay in a plane parallel to the roof.

Mounting system should limit roof penetrations.

Conduit penetrations should be minimized. Interior runs are preferred.

Modifications to the electrical distribution should not fill all spaces in the panel or sub-panel (i.e. leave room for future circuits).

Installation should minimize electrical downtime to the facility.

#### **Proposal Format**

Company Profile: Provide name, address, year established, year of first solar PV installation, and number full time employees. Elaborate on company's focus on solar with respect to other services and company's impact and presence in Lexington.

Project Experience: Quantify the number of solar PV systems, 20kW or less, installed by the company since 1/1/2020. Describe your experience with project permitting and interconnection experience with LGE-KU. Provide two (2) references of completed projects within LGE-KU service territory, including a brief description of the PV system installed.

Project Team: Provide name of key team members, professional certifications, industry experience, and workload capacity. Only profile individuals that will directly be working on the project. Clearly identify the project manager and the use of sub-contractors.

Technical Approach: Describe the approach and design of your proposed system. Requirements:

Narrative. Describe the selection of materials and design relative to the facility and surroundings. Explain how the design maximizes output in a cost-effective manner. Comment on electrical downtime and other impacts to LFUCG operations.

Panel, inverter, racking specifications

Equipment and workmanship warranties

Exhibits showing proposed layouts and single line diagrams, including any electrical panel modifications

Exhibits showing roof and wall penetrations, racking anchor, sealing details

Software modeling report quantifying system performance and monthly output

Proposed monitoring solution

Proposed timeline from Notice to Proceed to Substantial Completion

Price Proposal: Complete and sign the PRICE PROPOSAL FORM included within this solicitation to determine a lump sum price to complete the scope of work, inclusive of overhead and profit.

The Owner Allowance is exclusively for owner-directed work beyond the proposal. Reimbursements for allowance work shall be authorized by LFUCG in advance and in writing to the contractor.

Exceptions: any exceptions to the requirements herein must be specifically identified in this section.

# **Evaluation Criteria**

LFUCG will evaluate proposals according to the evaluation criteria below. Points will be awarded based on the relative merit of the information provided in the response to the solicitation.

Company Profile / Experience 20 points

Project Team 10 points

Technical Approach / Output 30 points

Price Proposal 40 points

TOTAL 100 points

# RFP 2-2022 Price Proposal Form Solar PV Installation for Fire Station 21

Fire Station #21, 3191 Mapleleaf Drive	
Modules	\$
Inverter(s) & Monitoring System	\$
Electrical & Wiring Materials	\$
Labor	\$
Structural Verification Letter	\$
Other w/ description	\$
Owner Allowance (mandatory)	\$5,000.00
TOTAL	\$
If total is over \$50,000, include price of 100% Performance and	
Payment Bond.	\$
TOTAL if P&P Bond Required	\$

Printed Name of Authorized Representative
Title of Authorized Representative
Signature of Authorized Representative



# Executive Summary – Solar Energy Solutions

# Regional Leader in Solar Energy Development

Solar Energy Solutions, LLC (SES) is dedicated to bringing renewable energy to Kentucky and the surrounding states, helping the environment, establishing energy independence, and educating the public on how to take part in making a healthier, more secure future.

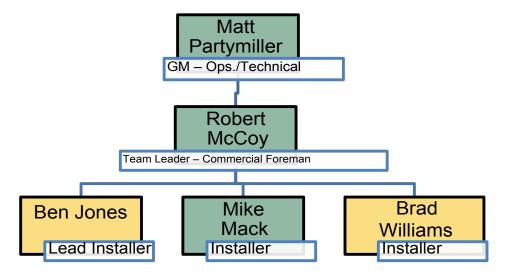
SES is Kentucky's preeminent full-time renewable energy installation firm. Formed in 2006 with nearly 10.5 MW of solar installed in the last 5 years, and 6MW installed in 2020 and 2021 alone. SES merges engineering expertise with electrical acumen to produce superior renewable energy installations. With 47 full-time employees, the SES staff are specifically trained and solely engaged in the development of solar photovoltaic and battery storage systems. SES staff carry all relevant licenses and certifications including a PE license, electrical licenses and solar specific NABCEP certificates. As a result, SES has completed numerous exceptional projects across the governmental, institutional, commercial and residential spectrum.

The expertise of Solar Energy Solutions is appreciated regionally and nationally. Past and current partnerships have paired SES with some of the area's largest architectural and engineering firms to develop regional solar projects. On the national scale, SES has been invited to represent premier brands in the photovoltaic industry including SunPower and LG. Additionally; SES is a Tesla Powerwall Certified Installer. SES personnel are exemplary solar practitioners; cumulatively SES personnel hold all relevant state trade licenses as well as having North American Board of Certified Energy Practitioners (NABCEP) accreditations.

In the last year alone, SES has installed over 200 independent solar photovoltaic systems and/or battery storage system. SES success is contingent on full-time immersion in the solar industry including standards and best practices.

# Project Staff/Organizational Structure

Organizational structure of the staff assigned to the commercial/institution projects and their responsibilities.



# **Team Profiles**

Below are the profiles, including the qualifications, of Solar Energy Solutions' management team and the management staff that will oversee the project.

**Frances Lockwood**, PhD., P.E., is the President and majority partner of Solar Energy Solutions. Dr. Lockwood is a chemical engineer with 30 years. experience in management of R&D, planning and project management. In 2006 she founded Solar Energy Solutions, a woman-owned small business that is currently the leading installer of solar projects in Kentucky. Dr. Lockwood takes primary responsibility for bid preparation and project oversight. She is responsible for forming bid teams with sub-contractors and for the SES safety program. She maintains financing for SES, chairs monthly meetings, and convenes meetings of the SES Advisory Board. Dr. Lockwood has twice been elected as Vice-Chairman of the Kentucky Solar Energy Society.

Matthew Partymiller, NABCEP, CE, is the General Manager (Operations) of Solar Energy Solutions. Mr. Partymiller has led the development of SES since its inception in 2006. He is primarily focused on project implementation and design. Mr. Partymiller is directly responsible for implementing the plans of the company president and informing her of ongoing activities which may not otherwise require her attention. Since the inception of SES, Mr. Partymiller has installed renewable projects in all four corners of Kentucky and expanded SES into surrounding states. Mr. Partymiller has led the company in the design and installation of more than 1400 projects, including installations of photovoltaic, solar thermal, wind renewable energy, battery storage. Mr. Partymiller was involved as a co-founder of Kentucky's Solar Energy Society where he has served

on the board. Mr. Partymiller was the first NABCEP dual certified Kentuckian for PV and solar thermal and one of the first 25 dual certified installers in North America.

**Jeff Nazarko,** VP of Sales, Marketing & Business Development. Mr.Nazarko is responsible for the oversight and management of all sales and marketing processes at Solar Energy Solutions. Mr. Nazarko started his career in the power conversion business working to develop and market the first generation of grid-tied energy storage system and renewable integration. After that, Mr.Nazarko worked for a world class manufacturer of highly engineered, precision electrical steel products used in energy conversion systems. As Global Marketing Director he collaborated with clients to develop innovative technologies for commercial, Industrial, and electric propulsion systems with a focus on efficiency improvements to reduce energy consumption.

Robert McCoy is an on-site project manager for Solar Energy Solutions. Mr. McCoy has been in the construction trade for 25 years. He has been a master plumber for 15 years and has significant experience as a project foreman over the past decade. Mr. McCoy's experience includes hospitals, schools, restaurants, private and public office buildings and residential. Mr. McCoy directed the photovoltaic installation for Wendell H. Ford Regional Training Center's 300 kW Humidity Controlled Warehouse, one of the largest photovoltaic systems in Kentucky. Since 2011 Mr. McCoy has been the primary Project Manager for Solar Energy Solutions, completing numerous residential, commercial, and institutional solar projects totaling over 1 MW cumulative capacity. Relevant projects managed by Mr. McCoy include the installation of Hopkinsville Community College's Solar Array in 2012, the installation of the Wendell H. Ford M16 Range Array, Berea Municipal Utility's solar array, and numerous others.

**Ezra Klarer**, NABCEP, ME is a senior solar installer on the Solar Energy Solutions Design- Build team. As co-founder of Solar Energy Solutions, Mr. Klarer has installed over 200 photovoltaic and thermal solar systems, two wind turbines, and has repaired numerous systems installed by other vendors. Mr. Klarer is currently NABCEP certified for both photovoltaics and solar hot water. Mr. Klarer is a licensed master electrician in Kentucky and has been involved in the construction trade since childhood when he was recruited to help with his father's general contracting business. Mr. Klarer has been essential in the development of numerous Solar Energy Solutions photovoltaic arrays including Mammoth Cave National Park's 30 kW PV array, Humana Tower's 28th story array in downtown Louisville, KY, Louisville Pollution Control's Cannons Lane project, and EXEDY Corporation.

**Erik Meyerhoffer**, NABCEP, ME is Solar Energy Solution's Commercial Sales Project Manager. Environmental Policy and Management M.Sc with focus on Energy and Sustainability.Certified NABCEP PV Installation Professional and PV Technical Sales with 300+ completed installs in 3 states. Tesla, LG Chem Resu, Sonnen, and SPAN certified installer. Licensed Indiana Master Electrician.

# **Technical Approach**

Solar Energy Solutions will satisfy the component requirements and performance objectives outlined in the Request for Proposal 5-2022 Solar PV Installation for Fire Station 21 Scope of Work by utilizing Hanwha Q.Cell PV Modules, Fronius PV Inverters and APSmart Rapid Shutdown Devices, and K2 Flush-Mount PV Racking. Solar Energy Solution's design will adhere to IFC Fire Setback requirements for Solar PV arrays, as wells as 2017 NEC Rapid Shutdown code requirements.

The Fronius Solar.web monitoring platform will provide visibility of the site performance and key metrics to the designated system owners.

The maximum available roof area has been utilized while honoring the 15kW AC inverter limit, maximizing annual production.

The selected components provide maximum value, balancing cost-effectiveness, reliability, system performance, and safety in design.

Solar Energy Solutions does not anticipate the install of the proposed system to cause any electrical downtime or disruptions to LFUCG operations.

Maximum timeline from Notice to Proceed to Substantial Completion is estimated to be 100 days.

Solar Energy Solutions has extensive experience coordinating the interconnection of solar PV systems for net metering within the LG&E/KU service territory. Two specific examples are a 302.56kW ground-mount array installed at the Richmond National Guard Armory in 2015, and a 240kW ballast-mounted roof array with 220kWh of battery storage at the Bullitt County Public Library in 2021/2022.

# List of Solar System Components

Component	Qty	Brand	Model	Warranty	<b>Contact Information</b>
PV Module	29	Hanwha	Q-Cell	25 Year Product Warranty	Hanwha Q Cells America Ind 400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618 USA Tel: 949.748.5996 inquiry@us.q-cells.com
Inverter	1	Fronius	Primo 15.0kW	10 Year Product Warranty	Fronius International GmbH 6797 Fronius Drive Portage, IN 46368 Tel: 877.376.6487 pv-sales-usa@fronius.com
Rapid Shutdown	60	APSystems	s APSmart RSD-S-PL	25 Year Product Warranty	APsystems USA 600 Ericksen Ave NE, Suite 200 Seattle, WA 98110 United States of America Tel: 844.666.7035 info.usa@APsystems.com usa.APsystems.com
Racking		K2	Cross Rail	25 Year Product Warranty	K2 Systems LLC 4665 North Avenue Suite I Oceanside, CA 92056 Tel: tel: 760.301.5300 info-us@k2-systems.com https://k2-systems.com/ en-US

# Warranty

# Installation

Solar Energy Solutions LLC warrants the installation of its Photovoltaic array system for one year from date of installation. Solar Energy Solutions LLC warrants its system to be free from defects in workmanship and materials under installed service conditions. Solar Energy Solutions LLC warrants that it will replace or repair any faulty materials free of charge during the warranty period. Solar Energy Solutions LLC makes no claims to warrant any materials damaged by end user abuse or mismanagement. This warranty applies exclusively to system purchaser. Warranty becomes void upon transfer of ownership. Solar Energy Solutions LLC also bares no responsibility for damages resulting from system alterations performed by end user or other parties.

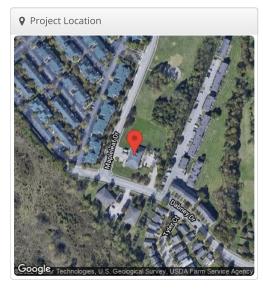
# Manufacturer warranties

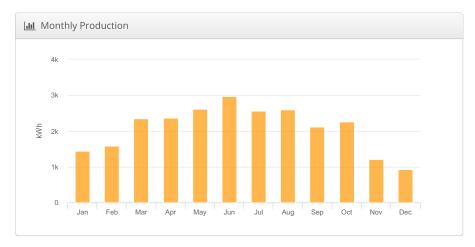
The equipment installed benefits from manufacturer warranties as per the attached documents.

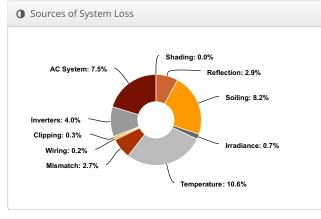


# Design 1 Lexington Fire Department #21, 3191 Mapleleaf Dr, Lexington, KY 40509

System Met	System Metrics						
Design	Design 1						
Module DC Nameplate	21.8 kW						
Inverter AC Nameplate	15.0 kW Load Ratio: 1.45						
Annual Production	25.01 MWh						
Performance Ratio	68.2%						
kWh/kWp	1,148.2						
Weather Dataset	TMY, SOMERSET(AWOS), NSRDB (tmy3, III)						
Simulator Version	d778319958-66e7e006e8-028c3edc64- e2adb369c0						







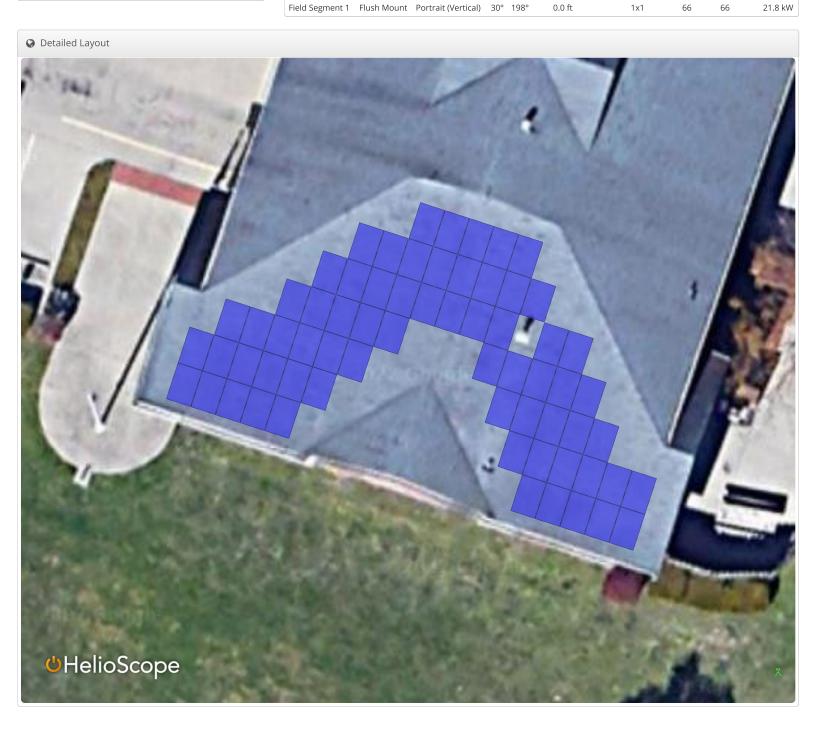
	Description	Output	% Delta
	Annual Global Horizontal Irradiance	1,489.1	
	POA Irradiance	1,682.8	13.0%
Irradiance	Shaded Irradiance	1,682.7	0.0%
(kWh/m²)	Irradiance after Reflection	1,633.5	-2.9%
	Irradiance after Soiling	1,499.5	-8.2%
	Total Collector Irradiance	1,499.5	0.0%
	Nameplate	32,707.3	
	Output at Irradiance Levels	32,487.5	-0.7%
	Output at Cell Temperature Derate	29,057.9	-10.6%
Energy	Output After Mismatch	28,283.8	-2.7%
(kWh)	Optimal DC Output	28,223.6	-0.2%
	Constrained DC Output	28,147.4	-0.3%
	Inverter Output	27,034.4	-4.0%
	Energy to Grid	25,006.8	-7.5%
Temperature N	Metrics		
	Avg. Operating Ambient Temp		18.1 °C
	Avg. Operating Cell Temp		36.5 °C
Simulation Me	trics		
	0	perating Hours	4367
		Solved Hours	4367

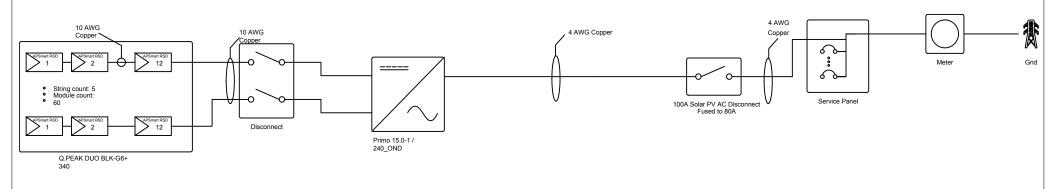
Condition Set												
Description	Condi	Condition Set 1										
Weather Dataset	TMY,	MY, SOMERSET(AWOS), NSRDB (tmy3, III)										
Solar Angle Location	Proje	Project Lat/Lng										
Transposition Model	Perez	Model										
Temperature Model	Sandi	a Mode	el									
Tanananatuna Madal	Rack	Туре		a		b			Temp	erature	Delta	
Temperature Model Parameters	Fixed	Tilt		-3.5	6	-0.07	75		3°C			
	Flush	Moun	t	-2.8	1	-0.04	155		0°C			
Soiling (%)	J	F	M	Α	M	J	J	Д	S	0	N	D
	17	15	10	5	5	5	5	5	5	10	15	17
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5%	to 2.59	6									
AC System Derate	7.50%	5										
Module Characterizations	Module					Uploaded By		Characterization				
Wodule Characterizations		CS1H-330MS (Canadian Fols Solar) Lab					1	Spec Sheet Characterization, PAN				
Component Characterizations	Devic	e	Device Uploaded By Characterization						aracte			



☐ Components						
Component	Name	Count				
Inverters	Primo 15.0-1 / 240_OND (Fronius USA)	1 (15.0 kW)				
Strings	10 AWG (Copper)	6 (382.6 ft)				
Module	Canadian Solar, CS1H-330MS (330W)	66 (21.8 kW)				

♣ Wiring Zon	nes					
Description	Co	ombiner Poles	S	tring Size	Stringing Strategy	
Wiring Zone	-		1	0-12	Along Racking	
Field Segn	nents					
Description	Racking	Orientation	Tilt Azimuth	Intrarow Spacing	Frame Size Frames	Modules Power





Module Specifications							
60x Hanwha Q.PEAK DUO BLK-G6+							
STC Rating	340 W						
V mp	33.94 V						
Imp	10.02 A						
Voc	40.66 V						
Isc	10.52 A						

	Inverter Specifications	
	ronius USA Primo 15.0-1 / OND	
Max AC Power	15 kW	
Max Input Voltage	1,000 V	
Min AC Power	60 W	
Min Input Voltage	80 V	

Wire Schedule						
Tier	Wire	Length				
String	5x 10 AWG	288ft				



Solar Electric - Photovoltaics - PV Solar Thermal - Solar Hot Water

1038 Brentwood Ct., Suite B Tel: (859) 312-7456 Lexington, KY 40511 Fax: (866) 830-0418

www.solar-energy-solutions.com

# PROJECT Request for Proposal 5-2022 Solar PV Installation for Fire Station 21 SHEET 1 OF 1

REV	DESCRIPTION	DATE	BY	СНК
Α	WIRING DIAGRAM	EJM		
ADD				
ADD				

# Experience of each staff relative to projects of the similar scope/complexity.

Project:	Description:	Staff Involved:	Amount:
Mall of St. Mathews & Oxmoor Mall	A combined 1.27 MW of ballasted roof mounted PV to offset lighting, heating and HVAC costs.	M. Partymiller - project mgmt.; R McCoy - foreman	\$2,000,000
Ohio Department of Development (ODOD)	Multiple grants administered through ODOD with Solar Energy Solutions as prime contractor	M. Partymiller - design & project mgmt.	\$2,000,000
Locust Trace Agri-Science Farm Lexington, KY	Installed 178kW roof mounted PV array and 300 kW thermal array at education center	Fran Lockwood - design, R. McCoy - foreman, M. Partymiller - mgmt.	\$1,700,000
Sekisui	814 kW roof & ground mounted with low slope ballasted racking	S Ricketts - design; R McCoy - foreman	\$1,200,000
TVA Utility Array - Mayfield, KY	548 kW PV solar farm utility array	M Partymiller - project design and mgmt.; R McCoy - foreman	\$1,100,000
Taylorsville Elementary & Northside Middleschool	Installation of 35 kw roof mounted PV over seven roof sites.	M Partymiller design & project mgmt. Erik Meyerhoffer Construction	\$887,000
Wendell H. Ford Regional Training Center - Humidity Controlled Warehouses	297 kW PV array over 3 warehouses in Greenville, KY	M Partymiller, design R. McCoy project mgmt. Ezra Klarer, Construction	\$618,000
Bloomington IN County & City Hall	305 kW and 86 kW of roof mounted Solar	S Ricketts - design; R McCoy - foreman	\$600,000
Housing Authority of Owensboro, KY	Domestic Hot Water and on demand hot water for 19 apartments	F Lockwood, design Ezra Klarer, Construction	\$307,000
Bloomington Police Department - Bloomington, IN	76.1 kW roof mounted PV; ballasted racking	S Ricketts - design; R McCoy - foreman	\$180,000
EXEDY Corporation Mascot, TN	50 kW of commercial ground mounted PV with customer racking system	M Partymiller, design & project mgmt. Ezra Klarer, Construction	\$175,000
Mountain Association for Community and Economic Development (MACED) Berea, KY	Installed a 27 kW PV array on 3 sperate roofs over the MACED offices	M Partymiller, design & project mgmt. Ezra Klarer, Construction	\$152,000
Sheppard Square A, C, D & E, F, H	Installation of 35 kw roof mounted PV over seven roof sites.	M Partymiller, design R. Thompson, project mgmt. Ezra Klarer, Construction	\$140,000
ACTUS Lend Lease Fort Campbell, KY	Residential Solar Hot Water (12 kW) and PV (14.72 kW) for net- zero military duplex	M Partymiller, design & project mgmt. Ezra Klarer, Construction	\$121,374



# Commercial/Institutional References

Solar Energy Solutions takes pride in being highly recommended by our customers.

Brett Boezman Director of Operations

Bartholomew Consolidated School

Corporation

1200 Central Avenue Columbus, IN 47201

Email: boezemanb@bcsc.k12.in.us

Tel: 812-378-4723

Randy Hardwick Director of EHS & Kaizen 1200 Rolling Hills Lane Winchester, KY 40391

Email: randyh@sekisui-corp.com

Tel: 859-338-7500

Kendall Merrick General Property Manager Brookfield Properties Oxmoor Mall 7900 Shelbyville Road Louisville, KY 40222

Email:

kendall.merrick@brookfieldpropertiesretail.com

Tel: 502-410-4238

James (B.J.) Boruff
Operations & Facilities Director
Bloomington City

401 N. Morton Street Bloomington, IN 47404

Email: boruffj@bloomington.in.gov

Tel: 812-349-3439

Owensboro Army Reserve Center Mr. Will Phillips, Energy Manager Minuteman Prkwy, Bldg 162

Frankfort, KY 40601 Tel: 502-607-1301

# **AFFIDAVIT**

Comes the Affi	ant, <u>Erik Mey</u>	<u>erhoffer</u>			, and after	being first duly
sworn, states under pe	nalty of perjury	as follow	s:			
1. His/her name is	Erik Meyerhof	fer	· · · · · · · · · · · · · · · · · · ·		and he/she	is the individual
submitting the	proposal	or	is	the	authorized	representative
of Solar Energy Solut	ions, LLC				, the	entity submitting
the proposal (hereinaft	er referred to as	"Propose	er").			

- 2. Proposer will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
- 3. Proposer will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
- 4. Proposer has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
- 5. Proposer has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Proposer will not violate any provision of the campaign finance laws of the Commonwealth.
- 6. Proposer has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

Continued on next page

7. Proposer acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

STATE OF Kentucky
COUNTY OF Jefferson

The foregoing instrument was subscribed, sworn to and acknowledged before me

by Ecik J. Meyerhoffer on this the 21 day

of February, 2022

MIRIAM R. COLE

My Commission expires: Notary Public, State at Large, KY
My commission expires May 26, 2024

Notary ID# KYNP6267

NOTARY PUBLIC, STATE AT LARGE



**CWEST** 

# **CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY) 1/14/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed.

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PRC	DDUCER				CONTA NAME:	CT Allie Cor	nley				
	uredPartners NL					o, Ext): (502) 8		24	FAX (A/C, No):		
	5 River Road iisville, KY 40206				E-MAIL	ss. allie.con	lev@assur	edpartners.con			
	13VIII.C, TCT 40200				ADDRE			RDING COVERAGE	<u>-                                      </u>		NAIC #
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	Solar Energy Solutions LLC 1038 Brentwood Court Suite				INSURE						+
	Lexington, KY 40511				INSURE						+
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	VED 4 050	T.F.			INSURE	:R F :			DED.		
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Α	X COMMERCIAL GENERAL LIABILITY							EACH OCCURRENCE		\$	1,000,000
	CLAIMS-MADE X OCCUR			CPP2841908		1/1/2022	1/1/2023	DAMAGE TO RENTEI PREMISES (Ea occurr	rence)	\$	300,000
								MED EXP (Any one pe	erson)	\$	10,000
								PERSONAL & ADV IN	JURY	\$	1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGA	ATE	\$	2,000,000
	X POLICY PRO- JECT LOC							PRODUCTS - COMP/	OP AGG	\$	2,000,000
	OTHER:							COMBINED SINGLE I		\$	4 000 000
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	X ANY AUTO			CA2841909		1/1/2022	1/1/2023	BODILY INJURY (Per	person)	\$	
	OWNED AUTOS ONLY SCHEDULED AUTOS							BODILY INJURY (Per	accident)	\$	
	HIRED AUTOS ONLY NON-OWNED AUTOS ONLY							PROPERTY DAMAGE (Per accident)		\$	
										\$	
Α	X UMBRELLA LIAB X OCCUR							EACH OCCURRENCE	E	\$	3,000,000
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	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY							PER STATUTE	OTH- ER		
	ANY PROPRIETOR/PARTNER/EXECUTIVE	N/A						E.L. EACH ACCIDENT	т	\$	
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A						E.L. DISEASE - EA EM	MPLOYEE	\$	
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLIC	CY LIMIT	\$	
В	Workers Comp-Indiana			WC5-33S-B21F54-011		12/3/2021	12/3/2022	Limit			1,000,000
DES	CRIPTION OF OPERATIONS / LOCATIONS / VEHIC	LES (A	ACORE	0 101, Additional Remarks Schedu	ile, may b	e attached if mor	re space is requir	red)			
CF	RTIFICATE HOLDER				CANO	CELLATION					
City of Indianapolis					SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.						
					AUTHO	RIZED REPRESE	NTATIVE				





RCW22267

CERTIFICATION NUMBER

06/14/22

EXPIRATION DATE

Certifies that:

# Solar Energy Solutions, LLC

has successfully met the requirements of the NWBOC national certification program for certification as a woman-owned and woman-controlled business.

The identified business has qualified as an eligible Woman Business Enterprise (WBE) as set forth in NWBOC standards and procedures.

238210, 221114, 237130, 238220, 423720, 335999

NAICS Code(s)

06/15/21

Date

PHYLLIS HILL SLATER Board Chair, NWBOC

WWW.NWBOC.ORG

INFO@NWBOC.ORG | 800-794-6140 | 1101 East Cumberland Ave, Suite #301, Tampa, Florida 33602

# RFP 2-2022 Price Proposal Form Solar PV Installation for Fire Station 21

Fire Station #21, 3191 Mapleleaf Drive	
Modules	\$ 13,800
Inverter(s) & Monitoring System	\$ 4,178
Electrical & Wiring Materials	\$ 3,669
Labor	\$ 19,515
Structural Verification Letter	\$ 600
Other w/ description Racking	\$ 2,931
Owner Allowance (mandatory)	\$5,000.00
TOTAL	\$ 49,693
If total is over \$50,000, include price of 100% Performance and	
Payment Bond.	\$
TOTAL if P&P Bond Required	\$

# Erik Meyerhoffer

Printed Name of Authorized Representative

Commercial Sales Project Manager

Title of Authorized Representative

Signature of Authorized Representative

# **GENERAL PROVISIONS**

1. Each Respondent shall comply with all Federal, State & Local regulations concerning this type of service or good.

The Respondent agrees to comply with all statutes, rules, and regulations governing safe and healthful working conditions, including the Occupational Health and Safety Act of 1970, 29 U.S.C. 650 et. seq., as amended, and KRS Chapter 338. The Respondent also agrees to notify the LFUCG in writing immediately upon detection of any unsafe and/or unhealthful working conditions at the job site. The Respondent agrees to indemnify, defend and hold the LFUCG harmless from all penalties, fines or other expenses arising out of the alleged violation of said laws.

- 2. Failure to submit ALL forms and information required in this RFP may be grounds for disqualification.
- 3. Addenda: All addenda and IonWave Q&A, if any, shall be considered in making the proposal, and such addenda shall be made a part of this RFP. Before submitting a proposal, it is incumbent upon each proposer to be informed as to whether any addenda have been issued, and the failure to cover in the bid any such addenda may result in disqualification of that proposal.
- 4. Proposal Reservations: LFUCG reserves the right to reject any or all proposals, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by a Respondent in the preparation of proposals.
- 6. Changes/Alterations: Respondent may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the proposal, and received by LFUCG prior to the scheduled closing time for receipt of proposals, will be accepted. The proposal, when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of proposal".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from a Respondent.
- 8. Bribery Clause: By his/her signature on the bid, Respondent certifies that no employee of his/hers, any affiliate or Subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.

- 9. Additional Information: While not necessary, the Respondent may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the Respondent's response. Additional documentation shall not serve as a substitute for other documentation which is required by this RFP to be submitted with the proposal,
- 10. Ambiguity, Conflict or other Errors in RFP: If a Respondent discovers any ambiguity, conflict, discrepancy, omission or other error in the RFP, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
- 11. Agreement to Bid Terms: In submitting this proposal, the Respondent agrees that it has carefully examined the specifications and all provisions relating to the work to be done attached hereto and made part of this proposal. By acceptance of a Contract under this RFP, proposer states that it understands the meaning, intent and requirements of the RFP and agrees to the same. The successful Respondent shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to Respondent shall be authorized for services or expenses reasonably covered under these provisions that the proposer omits from its Proposal.
- 12. Cancellation: If the services to be performed hereunder by the Respondent are not performed in an acceptable manner to the LFUCG, the LFUCG may cancel this contract for cause by providing written notice to the proposer, giving at least thirty (30) days notice of the proposed cancellation and the reasons for same. During that time period, the proposer may seek to bring the performance of services hereunder to a level that is acceptable to the LFUCG, and the LFUCG may rescind the cancellation if such action is in its best interest.

### A. Termination for Cause

- (1) LFUCG may terminate a contract because of the contractor's failure to perform its contractual duties
- (2) If a contractor is determined to be in default, LFUCG shall notify the contractor of the determination in writing, and may include a specified date by which the contractor shall cure the identified deficiencies. LFUCG may proceed with termination if the contractor fails to cure the deficiencies within the specified time.
- (3) A default in performance by a contractor for which a contract may be terminated shall include, but shall not necessarily be limited to:
  - (a) Failure to perform the contract according to its terms, conditions and specifications;
  - (b) Failure to make delivery within the time specified or according

- to a delivery schedule fixed by the contract;
- (c) Late payment or nonpayment of bills for labor, materials, supplies, or equipment furnished in connection with a contract for construction services as evidenced by mechanics' liens filed pursuant to the provisions of KRS Chapter 376, or letters of indebtedness received from creditors by the purchasing agency;
- (d) Failure to diligently advance the work under a contract for construction services:
- (e) The filing of a bankruptcy petition by or against the contractor; or
- (f) Actions that endanger the health, safely or welfare of the LFUCG or its citizens.

### B. At Will Termination

Notwithstanding the above provisions, the LFUCG may terminate this contract at will in accordance with the law upon providing thirty (30) days written notice of that intent, Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

- 13. Assignment of Contract: The contractor shall not assign or subcontract any portion of the Contract without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this Contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: The Respondent must be a duly organized and authorized to do business under the laws of Kentucky. Respondent must be in good standing and have full legal capacity to provide the services specified under this Contract. The Respondent must have all necessary right and lawful authority to enter into this Contract for the full term hereof and that proper corporate or other action has been duly taken authorizing the Respondent to enter into this Contract. The Respondent will provide LFUCG with a copy of a corporate resolution authorizing this action and a letter from an attorney confirming that the proposer is authorized to do business in the State of Kentucky if requested. All proposals must

be signed by a duly authorized officer, agent or employee of the Respondent.

- 16. Governing Law: This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this Contract, the Parties agree that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division. All parties expressly consent to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to this Contract or any rights or obligations arising thereunder. Service of process may be accomplished by following the procedures prescribed by law.
- 17. Ability to Meet Obligations: Respondent affirmatively states that there are no actions, suits or proceedings of any kind pending against Respondent or, to the knowledge of the Respondent, threatened against the Respondent before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of Respondent to perform its obligations under this Contract, or which question the legality, validity or enforceability hereof or thereof.
- 18. Contractor understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Contractor is an independent contractor at all times during the performance of the services specified.
- 19. If any term or provision of this Contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.
- 20. Contractor [or Vendor or Vendor's Employees] will not appropriate or make use of the Lexington-Fayette Urban County Government (LFUCG) name or any of its trade or service marks or property (including but not limited to any logo or seal), in any promotion, endorsement, advertisement, testimonial or similar use without the prior written consent of the government. If such consent is granted LFUCG reserves the unilateral right, in its sole discretion, to immediately terminate and revoke such use for any reason whatsoever. Contractor agrees that it shall cease and desist from any unauthorized use immediately upon being notified by LFUCG.

	02/21/2022
Signature	Date

# **EQUAL OPPORTUNITY AGREEMENT**

# Standard Title VI Assurance

The Lexington Fayette-Urban County Government, (hereinafter referred to as the "Recipient") hereby agrees that as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78Stat.252, 42 U.S.C. 2000d-4 (hereinafter referred to as the "Act"), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, (49 CFR, Part 21) Nondiscrimination in Federally Assisted Program of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964 (hereinafter referred to as the "Regulations") and other pertinent directives, no person in the United States shall, on the grounds of race, color, national origin, sex, age (over 40), religion, sexual orientation, gender identity, veteran status, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from the U.S. Department of Transportation, including the Federal Highway Administration, and hereby gives assurance that will promptly take any necessary measures to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

### The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

\*\*\*\*\*\*\*

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

I/We agree to comply with the Civil Rights La veterans, handicapped and aged persons.	ws listed above that govern employment rights of minorities, womer	n, Vietnam
Signature	Solar Energy Solutions, LLC Name of Business	

# **WORKFORCE ANALYSIS FORM**

Name of Organization: Solar Energy Solutions, LLC

Categories	Total	Wh (No Hispa oi Latir	ot anic r		panic atino	Afri Ame (N Hisp	ck or can- erican Not canic atino	Haw ar Oti Pad Islar (N Hisp	tive raiian her cific nder lot banic atino	Asi (N Hisp or La	ot anic	Amer India Alas Nat (no Hisp or La	in or kan ive ot anic	Two mo rac (N Hispa o Lati	ore es ot anic r	То	tal
		М	F	M	F	М	F	М	F	M	F	М	F	М	F	М	F
Administrators			3														3
Professionals		15														15	
Superintendents																	
Supervisors																	
Foremen		4		1												5	
Technicians		19		2		2										23	
Protective																	
Para-																	
Office/Clerical		1														1	
Skilled Craft																	
Service/Maintena																	
Total:		39	3	3		2										44	3

Prepared by: Erik Meyerhoffer Commercial Sales Project Manager Date: 02 / 21 / 2022

(Name and Title) Revised 2015-Dec-15

### LFUCG STATEMENT OF GOOD FAITH EFFORTS

Bid/RFP/Quote #\_ RFP #5-2022 Solar PV Installation at Fire Station 21

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation. \_\_\_\_\_ Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate. Included documentation of advertising in the above publications with the bidders good faith efforts package \_\_\_\_\_ Attended LFUCG Central Purchasing Economic Inclusion Outreach event Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s). Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively. \_\_\_\_ Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest. Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract. Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items

02/21/2022 <b>Date</b>		Commercial Sales Project Manager Title
Company	y Solutions, LLC	Erik Meyerhoffer Company Representative
in termination false statemen	n of the contract and/or be subjects and claims.	ation is accurate. Any misrepresentations may result ct to applicable Federal and State laws concerning
	cause for rejection of bid. Bi relevant to this requirement	of the documentation requested in this section may be dders may include any other documentation deemed which is subject to approval by the MBE Liaison. The Efforts must be submitted with the Bid, if the
	•	nce that the bidder submits which may show that the good faith efforts to include MWDBE and Veteran
	Made efforts to expand businesses beyond the usual g	d the search for MWBE firms and Veteran-Owned eographic boundaries.
	Veteran-Owned businesses to	assistance to or refer interested MWDBE firms and obtain the necessary equipment, supplies, materials, atisfy the work requirements of the bid proposal
	unacceptable. The fact that the contract work with its own rejecting a MWDBE and/or	sound reasons why the quotations were considered ne bidder has the ability and/or desire to perform the forces will not be considered a sound reason for Veteran-Owned business's quote. Nothing in this o require the bidder to accept unreasonable quotes in Veteran goals.
	firms and Veteran-Owned bu	on of quotations received from interested MWDBE sinesses which were not used due to uncompetitive nacceptable and/or copies of responses from firms be submitting a bid.
	businesses not rejecting then thorough investigation of the	h with interested MWDBE firms and Veteran-Owned h as unqualified without sound reasons based on a ir capabilities. Any rejection should be so noted in to why an agreement could not be reached.
	-	or may otherwise perform these work items with its



# Bid/RFP/Quote Reference #RFP #5-2022 Solar PV Installation at Fire Station 21

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. **Failure to submit a completed form may cause rejection of the bid.** 

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1.				
2.				
2				
3.				
4.				
4.				

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Solar Energy Solutions, LLC	Erik Meyerhoffer		
Company	Company Representative		
02/21/2022	Commercial Sales Project Manager		
Date	Title		



# Bid/RFP/Quote Reference #RFP #5-2022 Solar PV Installation at Fire Station 21

The substituted MWDBE and/or veteran subcontractors listed below have agreed to participate on this Bid/RFP/Quote. These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated below and are now being submitted to Central Purchasing for approval. By the authorized signature of a representative of our company, we understand that this information will be entered into our file for this project.

SUBSTITUTED	MWDBE Formally	Work to Be	Reason for the	Total Dollar	% Value of Total
MWDBE Company	Contracted/ Name,	Performed	Substitution	Value of the	Contract
Name, Address, Phone,	Address, Phone,			Work	
Email	Email				
1.					
2					
2.					
3.					
4					
4.					

The undersigned acknowledges that any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Solar, Energy Solutions, LLC	Erik Meyerhoffer
Company	Company Representative
_02/21/2022	Commercial Sales Project Manager
Date	Title



# Bid/RFP/Quote Reference #\_RFP #5-2022 Solar PV Installation at Fire Station 21

The undersigned acknowledges that the minority and/or veteran subcontractors listed on this form did submit a quote to participate on this project. Failure to submit this form may cause rejection of the bid.

Company Name	Contact Person
Solar Energy Solutions, LLC	Erik Meyerhoffer
Address/Phone/Email 1038 Brentwood Ct. Suite B Lexington, KY 40511	Bid Package / Bid Date  RFP #5-2022 Solar PV Installation at Fire Station 21  02/22/2022

MWDBE	Contact	Contact	Date	Services	Method of	Total dollars \$\$	MBE *	Veteran
Company Addres	Person	Information	Contacted	to be	Communication	Do Not Leave	AA	
		(work phone,		performed	(email, phone	Blank	HA	
		Email, cell)		1	meeting, ad,	(Attach	AS	
		,			event etc)	Documentation)	NA	
					ĺ	,	Female	

(MBE designation / AA=African American / HA= Hispanic American/AS = Asian American/Pacific Islander/NA= Native American)

The undersigned acknowledges that all information is accurate. Any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Solar Energy Solutions, LLC	Erik Meyerhoffer
Company	Company Representative
02/21/2022	Commercial Sales Project Manager
Date	Title







#### Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.5%.



#### **INNOVATIVE ALL-WEATHER TECHNOLOGY**

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



#### **ENDURING HIGH PERFORMANCE**

 $\label{log-term} \mbox{Liong-term yield security with Anti LID and Anti PID Technology$^1$,} \\ \mbox{Hot-Spot Protect and Traceable Quality Tra.Q$^{TM}$.}$ 



#### **EXTREME WEATHER RATING**

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa).



#### A RELIABLE INVESTMENT

Inclusive 25-year product warranty and 25-year linear performance warranty<sup>2</sup>.



#### STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.



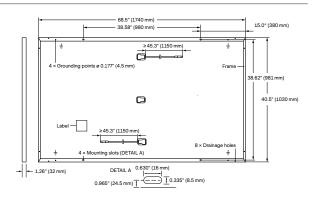
 $<sup>^{\</sup>rm 2}$  See data sheet on rear for further information

#### THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings



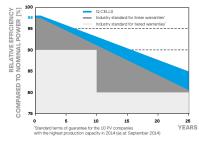


#### **ELECTRICAL CHARACTERISTICS**

PO	WER CLASS			330	335	340	345
MIN	IIMUM PERFORMANCE AT STANDAR	D TEST CONDITIO	NS, STC1 (POW	ER TOLERANCE +5W/-0	W)		
	Power at MPP¹	P <sub>MPP</sub>	[W]	330	335	340	345
_	Short Circuit Current <sup>1</sup>	I <sub>sc</sub>	[A]	10.41	10.47	10.52	10.58
mun	Open Circuit Voltage <sup>1</sup>	V <sub>oc</sub>	[V]	40.15	40.41	40.66	40.92
Mini	Current at MPP	I <sub>MPP</sub>	[A]	9.91	9.97	10.02	10.07
_	Voltage at MPP	$V_{MPP}$	[V]	33.29	33.62	33.94	34.25
	Efficiency <sup>1</sup>	η	[%]	≥18.4	≥18.7	≥19.0	≥19.3
MIN	IIMUM PERFORMANCE AT NORMAL	OPERATING COND	DITIONS, NMOT	*2			
	Power at MPP	P <sub>MPP</sub>	[W]	247.0	250.7	254.5	258.2
Ξ	Short Circuit Current	I <sub>sc</sub>	[A]	8.39	8.43	8.48	8.52
ij	Open Circuit Voltage	V <sub>oc</sub>	[V]	37.86	38.10	38.34	38.59
Ē	Current at MPP	I <sub>MPP</sub>	[A]	7.80	7.84	7.89	7.93
	Voltage at MPP	V <sub>MPP</sub>	[V]	31.66	31.97	32.27	32.57

¹Measurement tolerances P<sub>MPP</sub> ±3%; I<sub>SC</sub>; V<sub>OC</sub> ±5% at STC: 1000 W/m², 25±2°C, AM 1.5 according to IEC 60904-3 • ²800 W/m², NMOT, spectrum AM 1.5

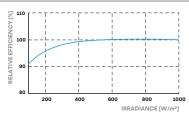
#### Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.54% degradation per year. At least 93.1% of nominal power up to 10 years. At least 85% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organization of your respective country.

#### PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25  $^{\circ}$ C, 1000 W/m²)

TEMPERATURE COEFFICIENTS							
Temperature Coefficient of I <sub>SC</sub>	α	[%/K]	+0.04	Temperature Coefficient of Voc	β	[%/K]	-0.27
Temperature Coefficient of Pugg	v	[%/K]	-0.36	Normal Module Operating Temperature	NMOT	[°F]	109+54(43+3°C)

#### PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V <sub>SYS</sub>	[V]	1000 (IEC)/1000 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI / UL 1703	C (IEC)/TYPE 2 (UL)
Max. Design Load, Push / Pull <sup>3</sup>	[lbs/ft <sup>2</sup> ]	75 (3600 Pa) / 55 (2667 Pa)	Permitted Module Temperature	-40°F up to +185°F
Max. Test Load, Push / Pull <sup>3</sup>	[lbs/ft <sup>2</sup> ]	113 (5400 Pa) / 84 (4000 Pa)	on Continuous Duty	(-40°C up to +85°C)

Number of Modules per Pallet

#### **QUALIFICATIONS AND CERTIFICATES**

#### **PACKAGING INFORMATION**

UL 1703, VDE Quality Tested, CE-compliant, IEC 61215:2016, IEC 61730:2016, Application Class II, U.S. Patent No. 9,893,215 (solar cells)



<sup>3</sup> See Installation Manual





Number of Pallets per 53' Trailer	28
Number of Pallets per 40' HC-Container	24
Pallet Dimensions (L×W×H)	$71.5 \times 45.3 \times 48.0$ in $(1815 \times 1150 \times 1220$ mm)
Pallet Weight	1505 lbs (683 kg)

Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

# Specifications subject to technical changes © Q CELLS Q.PEAK DUO BLK-G6+\_330-345\_2019-06\_Rev01\_NA

# LIMITED WARRANTY FOR CRYSTALLINE PHOTOVOLTAIC MODULES FROM HANWHA Q CELLS

Valid from June 1st, 2016

This limited warranty ("Limited Warranty") is issued by Hanwha Q CELLS Corp, 86 Cheonggyecheon-ro Jung-gu, Seoul, Korea 101-797, or its successors or assigns ("HQC"), and applies exclusively to Q CELLS Modules (as defined in Section 1.a).

#### 1. SCOPE

#### a. Products

Q CELLS Modules are defined in this Limited Warranty as Q CELLS branded photovoltaic modules manufactured by HQC or its authorized manufacturers that are sold and installed within Canada, the European Union (except for Anguilla, Bermuda, Virgin Islands, British Indian Ocean Territory, Falkland Islands, Cayman Islands, Montserrat, Pitcairn Islands, Saint Helena, Ascension and Tristan da Cunha, South Georgia and the South Sandwich Islands Turks- und Caicos Islands, Clipperton, French Guiana, French Polynesia, French Southern and Antarctic Territories, Guadeloupe, Martinique, Mayotte, New Caledonia, Réunion, Saint-Barthélemy, Saint-Martin, Saint-Pierre and Miquelon, Wallis and Futuna, Aruba, Curaçao, Sint Maarten, Bonaire, Saba and Sint Eustatius, Bouvet Island, Canary Islands, Ceuta, Melilla, Illhas Selvagens, Greenland, Jan Mayen, Svalbard, Faroe Islands, Guernsey, Isle of Man, Jersey, Gibraltar, Azores, Madiera), Norway, Switzerland and Turkey and are of the following product type:

- Q.PRO BFR-G4.1, Q.PRO-G4.1
- Q.PLUS BFR-G4.1, Q.PLUS BFR-G4.2, Q.PLUS-G4.2, Q.PLUS-G4.3
- Q.PLUS L-G4.1, Q.PLUS L-G4.2
- Q.PRO L-G4.1

#### b. Beneficiary

The sole and exclusive beneficiary of this Limited Warranty is an end customer who purchases Q CELLS Modules from HQC or from any one of its authorized distributors ("Distributor") and is the initial installer of such modules into a specific photovoltaic (PV) solar energy project ("Project"), and any of the end customer's permitted successors or assigns ("Customer").

#### c. Validity

This Limited Warranty takes effect on June  $1^{\rm st}$ , 2016 and shall remain valid until a new version of warranty applying to Q CELLS Modules is released by HQC.

#### d. Term

The term of this Limited Warranty ("Term") for the Customer begins on the date of initial delivery to the Customer ("Warranty Start Date") and ends at the end of the warranty periods set forth in Section 2. The performance of warranty services under this Limited Warranty does not extend the Term. HQC's obligations under this Limited Warranty are conditioned upon the Customer's compliance with its payment obligations for purchase of the applicable Q CELLS Module.

#### 2. WARRANTY

#### a. Product Warranty

Subject to the terms and conditions in this Limited Warranty, HQC warrants to the Customer for a period of twelve (12) years following the Warranty Start Date that the Q CELLS Modules, when installed, used, and serviced

under normal operating conditions and in accordance with Q CELLS Module Installation Manual provided by HQC or Distributor: (i) will be free from defects in materials and workmanship that have a significant negative effect on the power output of the Q CELLS Modules; and (ii) will be free from potential-induced degradation in accordance to the test criteria: Cells at -1500V against ground, with conductive metal foil covered module surface, 25°C, 168h, (collectively, "Product Defect"). The Product Warranty does not warrant a specific power output of the Q CELLS Modules, which shall be exclusively covered under the Performance Warranty in Section 2.b. Product Defect does not include any cosmetic changes or other changes in the Q CELLS Modules' appearance, including but not limited to, any color changes, mold and normal wear and tear.

#### b. Performance Warranty

Subject to the terms and conditions of this Limited Warranty, HQC warrants to the Customer that the Q CELLS Modules are manufactured to (i) produce a power output of at least ninety-seven percent (97%) of the minimum power output specified in the applicable module data sheet during the first twelve (12) months following the Warranty Start Date, and (ii) have a yearly maximum decrease (or degradation) of power of not more than six tenths of one percent (0.6%) from start of the second (2nd) twelve (12)-month period following the Warranty Start Date until the end of such twelve (12)-month period, and repeated for each successive twelve (12)-month period until the twenty-fifth (25th) anniversary of the Warranty Start Date, (collectively, "Performance Warranty"). As an example, the Q CELLS Module will be manufactured to have a minimum power output of eighty-three (83%) of the minimum power output specified in the applicable module data sheet at the end of the term of this Limited Warranty. Failure to meet the Performance Warranty is defined herein as a "Performance Defect." In the event of a Performance Defect claim, the power output of any Q CELLS Modules described in this Section 2.b shall be measured by HQC under the Standard Test Conditions ("STCs") defined in the IEC standards EN 61215 and 60904-3 in effect as of the Warranty Start Date.

#### 3. EXCLUSIONS

The Limited Warranty shall not apply to any Q CELLS Modules affected by the following events or conditions:

- usage, transport, storage, installation and/or handling in any manner that fails to strictly comply with the Installation Manual and the Packaging and Transportation Information sheet applicable to the Q CELLS Modules;
- system or components of such system that are of a design, configuration or installation that does not meet the standards typically used by experienced professionals in the industry;
- 3. incorrect, improper or inadequate service, operation or maintenance of the Q CELLS Modules or of the Project, or any normal wear and tear of the Q CELLS Modules;
- damage caused by extreme environmental sources of impact, including, but not limited to (i) acid rain or snow, (ii) blowing sand, (iii) saline air, (iv) pollution of any kind in the air, soil or groundwater, (v) unusual oxidation levels, (vi) mold, or (vii) any nearby fire, explo-



sion, smoke or charring;

- damage caused by acts of nature or acts of God, including, but not limited to, lightning, hail, frost, snow, storms, tidal waves, floods, extreme temperatures, earthquakes, typhoons, tornadoes, volcanic eruptions, meteorites, ground motions, earth fissures or landslides;
- damage caused directly or indirectly by acts of violence or intervention by third parties or external forces, including but not limited to, misadventure, riots, war, insurrection, communal violence, unintentional damage by third parties, vandalism, damage caused by animals, and/or acts or omissions by third parties beyond the reasonable control of HQC;
- 7. damage to the Project in which the Q CELLS Modules are installed caused by external factors, including, but not limited to, voltage fluctuations, power peaks, excess current, power failure, poor electrical or mechanical engineering work, or other faults occurring in a power supply system with or without mains connection, whether or not such faults in the power supply system was contributed to by any act or omission of the Customer;
- Q CELLS Modules are modified or used in processes involving other products, without obtaining the prior written consent of HQC;
- the serial number or product label has been removed, changed, deleted or made unrecognizable;
- the Q CELLS Modules are used on any mobile carriers (such as motor vehicles or ships);
- the conditions of use at the Project, at any time, exceed the specifications set out in the applicable module data sheet; and/or
- 12. the Customer fails to notify the Distributor or HQC of a Product Defect or Performance Defect within 30 days of the initial discovery or prior to the end of the applicable warranty period set forth in Section 2.

#### 4. WARRANTY CLAIMS

#### a. Customer Inspection

The Customer must inspect the Q CELLS Modules for visible defects when delivered. The Customer must notify HQC of any defects immediately, but in no event later than thirty (30) days any such defects were discovered during such visible defect inspection process.

#### b. Warranty Claims

The Customer will be entitled to make claims under this Limited Warranty ("Warranty Claims") only if the Customer has provided documented evidence sufficient to prove that the malfunctioning or non-conformity of the Q CELLS Modules resulted exclusively from a Product Defect or Performance Defect covered by this Limited Warranty. If the Warranty Claim is based on glass breakage, then the Customer shall conduct a static load calculation on the substructure.

#### c. Warranty Claim Compliance

The Customer must comply with the HQC's then-current Return Merchandise Authorization ("RMA") process to make any Warranty Claim. HQC will not accept any Warranty Claims not in compliance with the RMA or Warranty Claims that use the delivery of any unauthorized return shipments of Q CELLS Modules.

#### d. Warranty Claim Procedure

The Customer is responsible for shipping the Q CELLS Modules to HQC for evaluation at the Customer's expense. HQC shall pay the costs of a technical inspection and, in the event that the warranty claim is confirmed by such inspection, transportation. Otherwise, the Customer shall

be charged with these costs. To make a Warranty Claim, the Customer must submit the original receipt or invoice, which bears the date of the purchase and of the delivery, the serial numbers of the relevant Q CELLS Modules and the name of the authorized distributor or seller.

#### e. Ownership Interest

The Q CELLS Modules sent to HQC in the course of the RMA process shall remain the property of the Customer until any inspection has been completed and HQC provides a replacement or refund. At the time any refund or delivery of a replacement Q CELLS Module to the Customer takes place under this Limited Warranty, the ownership interest of the defective module passes to HQC. Any repaired, replaced or additionally supplied modules will be warranted only for the remainder of the original warranty period applicable to the original Q CELLS Modules.

#### 5. REMEDIES

#### a. Product Defect Remedy

If HQC determines, following a Warranty Claim, that a Q CELLS Module has a Product Defect, then HQC shall, at its discretion, within a reasonable time: (i) remedy or repair the Product Defect; (ii) provide a replacement module in place of the Q CELLS Module with the Product Defect; or (iii) provide the Customer monetary compensation equal to the purchase price of the Q CELLS Module subject to an annual four percent (4%) depreciation rate on the original purchase price as evidenced by the invoice produced by the Customer; provided, however, if the Customer fails to produce an original invoice, then the price shall be based upon the then-current per watt market price of a comparable PV module in a similar market and the date shall be based upon the date of manufacture according to the HQC records.

#### b. Performance Warranty Remedy

If HQC determines following a Warranty Claim that a Q CELLS Module has a Performance Defect, then HQC shall, at its discretion, within a reasonable time: (i) remedy or repair the Performance Defect; (ii) provide a replacement module in place of the Q CELLS Module that has the Performance Defect; (iii) make up the difference to the guaranteed power output by providing additional modules; or (iv) provide to the Customer monetary compensation equal to the portion of the purchase price of the Q CELLS Module that is in the same proportion to the purchase price as the actual measured power is to the guaranteed power subject to an annual four percent (4%) depreciation rate on the original purchase price as evidenced by the invoice produced by the Customer; provided, however, if the Customer fails to produce an original invoice, then the price shall be based upon the then current per watt market price of a comparable PV module in a similar market and the date shall be based upon the date of manufacture according to the HQC records.

#### c. Sole and Exclusive Remedy and Obligation

THE REMEDIES SET FORTH IN THIS SECTION 5 ARE HQC'S SOLE AND EXCLUSIVE LIABILITY AND OBLIGATION, AND THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES, FOR ANY PRODUCT DEFECT OR PERFORMANCE DEFECT IN ANY Q CELLS MODULE. THE REMEDY EXTENDED TO THE CUSTOMER SPECIFICALLY EXCLUDES ANY REIMBURSEMENT FOR THE COSTS OR EXPENSES INCURRED IN THE DISMANTLING OR INSTALLATION OF THE Q CELLS MODULES, REPLACEMENT MODULES OR PARTS, OR LOSS OF POWER.

#### 6. WARRANTY LIMITATIONS

THE WARRANTIES SET FORTH IN THIS LIMITED WARRANTY ARE IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, REGARDING ANY Q CELLS MODULES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.



HOWEVER, IF A Q CELLS MODULE IS SOLD AS A CONSUMER PRO-DUCT. TO THE EXTENT REQUIRED BY APPLICABLE LAW, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT ARE LIMITED TO THE PERIODS OF THE LIMITED PRODUCT AND LIMITED PERFORMANCE WARRAN-TIES SET FORTH ABOVE, OR SUCH SHORTER PERIOD AS REQUIRED BY APPLICABLE LAW. THIS LIMITED WARRANTY GIVES THE CUSTO-MER SPECIFIC LEGAL RIGHTS. AND THE CUSTOMER MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. HQC IS NOT RESPONSIBLE OR LIABLE IN ANY WAY FOR DAMAGE OR INJURY TO PERSONS OR PROPERTY, OR FOR OTHER LOSS OR INJURY RESUL-TING FROM ANY CAUSE WHATSOEVER, ARISING OUT OF OR RELA-TED TO ANY Q CELLS MODULES UNLESS OTHERWISE STIPULATED BY MANDATORY STATUTORY LAW. IN PARTICULAR, HQC'S LIABILITY FOR FRAUDULENT OR WILLFUL INTENT, GROSS NEGLIGENCE OR PERSONAL INJURY, IN EACH CASE, UNDER APPLICABLE MANDATO-RY LIABILITY LAW SHALL REMAIN UNAFFECTED.

EXCEPT AS PROVIDED IN THIS SECTION 6, THE Q CELLS MODULES, THE PRODUCT DOCUMENTATION AND ALL INFORMATION ARE PROVIDED ON AN "AS IS" BASIS.

THE CUSTOMER ACKNOWLEDGES THAT THE FOREGOING LIMITATIONS ON LIABILITY ARE AN ESSENTIAL ELEMENT OF THE RELEVANT SALES AGREEMENT BETWEEN THE PARTIES AND THAT IN THE ABSENCE OF SUCH LIMITATIONS THE PURCHASE PRICE OF THE Q CELLS MODULES WOULD BE SUBSTANTIALLY HIGHER.

SOME JURISDICTIONS LIMIT OR DO NOT PERMIT DISCLAIMERS OF LIABILITY, SO THIS PROVISION MAY NOT APPLY TO THE CUSTOMER IN SAID JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW LIMITATIONS OR THE EXCLUSION OF DAMAGES SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO THE CUSTOMER IN SAID JURISDICTION. THE CUSTOMER MAY HAVE SPECIFIC LEGAL RIGHTS OUTSIDE THIS LIMITED WARRANTY FOR Q CELLS MODULES, AND MAY ALSO HAVE OTHER MANDATORY RIGHTS THAT VARY FROM JURISDICTION TO JURISDICTION, WHICH SHALL REMAIN UNAFFECTED.

IN NO EVENT WILL HQC BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, EXEMPLARY, SPECIAL OR INCIDENTAL DAMAGES, INCLUDING LOSS OF USE, LOST REVENUE AND/OR LOST POWER, ARISING FROM OR RELATING TO THIS WARRANTY OR ANY Q CELLS MODULE OR ANY REPLACEMENT OR ADDITIONAL MODULE SUPPLIED BY HQC HEREUNDER, EVEN IF HQC IS AWARE OF THE POSSIBILITY OF SUCH DAMAGES.

THE TOTAL LIABILITY OF HQC, ANY DISTRIBUTOR, AND/OR THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES AND AGENTS ARISING FROM OR RELATING TO THIS LIMITED WARRANTY, WHETHER IN CONTRACT, TORT OR OTHERWISE, WILL NOT EXCEED THE AMOUNT RECEIVED BY HQC FOR THE Q CELLS MODULE THAT IS THE SUBJECT OF THE CLAIM OR DISPUTE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO THE CUSTOMER IN SAID JURISDICTION.

#### 7. ASSIGNMENT

#### **Customer Assignment**

Customer may assign this Limited Warranty for any Q CELLS Module to a new owner of the entire photovoltaic system in which such module is originally installed, provided that such system remains intact in its original place of installation. This Limited Warranty may not otherwise be assigned or transferred, and any attempt to assign or transfer in violation of this Section 7 shall be null and void.

#### 8. MISCELLANEOUS

#### a. Survival

If any provision of this Limited Warranty terms and conditions is held to be invalid, illegal or unenforceable in any respect, such provision will be changed and interpreted to accomplish the objectives of such provision to the greatest extent possible under applicable law and the remaining provisions will continue in full force and effect.

#### b. Governing Law

All matters arising from or relating to this Limited Warranty shall be governed by the laws of Germany. The UN Convention on the International Sale of Goods shall not apply.

#### c. Waiver of Jury Trial; Jurisdiction

Any dispute, controversy or claim arising out of or relating to this Limited Warranty or any of its provisions, or the breach, termination, interpretation, enforcement or validity thereof, including any dispute hereby is waived to the fullest extent permitted by applicable Law any right it may have to a trial by jury with respect to any litigation directly or indirectly arising out of, under or in connection with this Limited Warranty. Any dispute, controversy or claim arising out of or relating to this Limited Warranty or any of its provisions, or the breach, termination, interpretation, enforcement or validity thereof, including any dispute irrevocably is submitted to the jurisdiction of the courts of Leipzig, Germany, solely in respect of the interpretation and enforcement of the provisions of this Limited Warranty.

**◯** C€LLS



## **FRONIUS PRIMO**

/ The future of residential solar is here - Introducing the new Fronius Primo.



/ With power categories ranging from 3.8 kW to 15.0 kW, the transformerless Fronius Primo is the ideal compact single-phase inverter for residential applications. The sleek design is equipped with the SnapINverter hinge mounting system which allows for lightweight, secure and convenient installation. The Fronius Primo has several integrated features that set it apart from competitors including dual powerpoint trackers, high system voltage, a wide input voltage range, Wi-Fi\* and SunSpec Modbus interface, and Fronius' online and mobile monitoring platform Fronius Solar.web. The Fronius Primo also works seamlessly with the Fronius Rapid Shutdown Box for a reliable NEC 2014 solution\*\* and offers a Revenue Grade Metering option completely integrated.

#### **TECHNICAL DATA FRONIUS PRIMO**

GENERAL DATA	FRONIUS PRIMO 3.8 - 8.2	FRONIUS PRIMO 10.0-15.0			
Dimensions (width x height x depth)	16.9 x 24.7 x 8.1 in.	20.1 x 28.5 x 8.9 in.			
Weight	47.29 lb. 82.5 lbs.				
Degree of protection	NEM	A 4X			
Night time consumption	< 1	W			
Inverter topology	Transformerless				
Cooling	Variable speed fan				
Installation	Indoor and outdoor installation				
Ambient operating temperature range	-40 - 131°F (-40 - 55°C)	-40 - 140°F (-40 - 60°C)			
Permitted humidity	0 - 1	00 %			
DC connection terminals	4x DC+ and 4x DC- screw terminals for copper (solid / stranded / fine stranded) or aluminum (solid / stranded)	4x DC+1, 2x DC+2 and 6x DC- screw terminals for copper (solid / stranded / fine stranded) or aluminum (solid / stranded)			
AC connection terminals	Screw termina	ıls 12 - 6 AWG			
Revenue Grade Metering	Optional (ANSI	C12.1 accuracy)			
Certificates and compliance with standards	UL 1741-2010, UL1998 (for functions: AFCI and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC Article 690, C22. 2 No. 107.1-01 (September 2001), UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 -2013	UL 1741-2015, UL1998 (for functions: AFCI, RCMU and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC Article 690-2014, C22. 2 No. 107.1-01 (September 2001) , UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 -2013			

PROTECTIVE DEVICES	STANDARD WITH ALL PRIMO MODELS
AFCI & 2014 NEC Ready	Yes
Ground Fault Protection with Isolation Monitor Interrupter	Yes
DC disconnect	Yes
DC reverse polarity protection	Yes

INTERFACES	STANDARD WITH ALL PRIMO MODELS
Wi-Fi*/Ethernet/Serial	Wireless standard 802.11 b/g/n / Fronius Solar.web, SunSpec Modbus TCP, JSON / SunSpec Modbus RTU
6 inputs or 4 digital inputs/outputs	External relay controls
USB (A socket)	Datalogging and/or updating via USB
2x RS422 (RJ45 socket)	Fronius Solar Net, interface protocol
Datalogger and Webserver	Included

<sup>\*</sup>The term Wi-Fi® is a registered trademark of the Wi-Fi Alliance.

<sup>\*\*</sup>Fronius Primo 10.0-15.0 kW requires an external disconnect button for code compliance.

#### **TECHNICAL DATA FRONIUS PRIMO**

INPUT DATA	PRIMO 3.8-1	PRIMO 5.0-1	PRIMO 6.0-1	PRIMO 7.6-1	PRIMO 8.2-1	
Recommended PV power (kWp)	3.0 - 6.0 kW	4.0 - 7.8 kW	4.8 - 9.3 kW	6.1 - 11.7 kW	6.6 - 12.7 kW	
Max. usable input current (MPPT 1/MPPT 2)	18 A / 18 A	18 A / 18 A	18 A / 18 A	18 A / 18 A	18 A / 18 A	
Total max. DC current			36 A			
Max. array short circuit current (1.25 Imax) (MPPT 1/MPPT 2)	2) 22.5 A / 22.5 A					
Operating voltage range			80 V - 600 V			
Max. input voltage			600 V			
Nominal input voltage	410 V	420 V	420 V	420 V	420 V	
Admissable conductor size DC			AWG 14 - AWG 6			
MPP Voltage Range	200 - 480 V	240 - 480 V	240 - 480 V	250 - 480 V	270 - 480 V	
Number of MPPT			2			

OUTPUT DATA		PRIMO 3.8-1	PRIMO 5.0-1	PRIMO 6.0-1	PRIMO 7.6-1	PRIMO 8.2-1
Max. output power	240 V	3800 W	5000 W	6000 W	7600 W	8200 W
	208 V	3800 W	5000 W	6000 W	7600 W	7900 W
Max. continuous output current	240 V	15.8 A	20.8 A	25.0 A	31.7 A	34.2 A
	208 V	18.3 A	24.0 A	28.8 A	36.5 A	38.0 A
Recommended OCPD/AC breaker size	240 V	20 A	30 A	35 A	40 A	45 A
	208 V	25 A	30 A	40 A	50 A	50 A
Max. Efficiency		96.7 %	96.9 %	96.9 %	96.9 %	97.0 %
CEC Efficiency	240 V	95.0 %	95.5 %	96.0 %	96.0 %	96.5 %
Admissable conductor size AC				AWG 14 - AWG 6		
Grid connection				208 / 240 V		
Frequency				60 Hz		
Total harmonic distortion				< 5.0 %		
Power factor (cos φ <sub>ac,r</sub> )				0.85-1 ind./cap		

INPUT DATA	PRIMO 10.0-1	PRIMO 11.4-1	PRIMO 12.5-1	PRIMO 15.0-1
Recommended PV power (kWp)	8.0 - 12.0 kW	9.1 - 13.7 kW	10.0 - 15.0 kW	12.0 - 18.0 kW
Max. usable input current (MPPT 1/MPPT 2)		33.0 A / 18	3.0 A	
Total max. DC current		51 A		
Max. array short circuit current (1.25 Imax) (MPPT 1/MPPT 2)		41.3 A / 22	2.5 A	
Operating voltage range		80 V - 60	0 V	
Max. input voltage		600 V		
Nominal input voltage	415 V	420 V	425 V	440 V
Admissable conductor size DC	AWG 14 - AWG 6 copper direct, AW up to 60A, from 61 to 100A minin		6 aluminium has to be used), AV	
MPP Voltage Range	220 - 480 V	240 - 480 V	260 - 480 V	320 - 480 V
Integrated DC string fuse holders		4- and 4+ for MPPT 1 / no fusi	ing required on MPPT 2	
Number of MPPT		2		

OUTPUT DATA		PRIMO 10.0-1	PRIMO 11.4-1	PRIMO 12.5-1	PRIMO 15.0-1
Max. output power	240 V	9995 W	11400 W	12500 W	15000 W
	208 V	9995 W	11400 W	12500 W	13750 W
Max. continuous output current	240 V	41.6 A	47.5 A	52.1 A	62.5 A
	208 V	48.1 A	54.8 A	60.1 A	66.1 A
Recommended OCPD/AC breaker size	240 V	60 A	60 A	70 A	80 A
	208 V	70 A	70 A	80 A	90 A
Max. Efficiency		96.7 %			
CEC Efficiency		96.0 % 96.5 %			96.5 %
Admissable conductor size AC  Grid connection  Frequency		AWG 10 - AWG 2 copper (solid / stranded / fine stranded)(AWG 10 copper or AWG 8 aluminium for overcurrent protective devices up to 60A, from 61 to 100A minimum AWG 8 for copper or AWG 6 aluminium has to be used) , AWG 6 - AWG 2 copper(solid / stranded) MultiContactWiringable with AWG 12			
		208 / 240 V			
		60 Hz			
Total harmonic distortion			< 2.5 %	, D	
Power factor (cos $\phi_{ac,r}$ )			0-1 ind./c	ар.	

/ Perfect Welding / Solar Energy / Perfect Charging

#### WE HAVE THREE DIVISIONS AND ONE PASSION: SHIFTING THE LIMITS OF POSSIBILITY.

/ Whether welding technology, photovoltaics or battery charging technology – our goal is clearly defined: to be the innovation leader. With around 3,300 employees worldwide, we shift the limits of what's possible – our record of over 900 granted patents is testimony to this. While others progress step by step, we innovate in leaps and bounds. Just as we've always done. The responsible use of our resources forms the basis of our corporate policy.

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v05 May 2015 EN





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# Raising the bar in innovative DC MLPE solar power systems



# **RSD-S-PLC**

- Meets NEC 2017 & 2020 (690.12)
   requirements
- Executes rapid shutdown of system when Transmitter-PLC signal is absent
- Meets SunSpec requirements

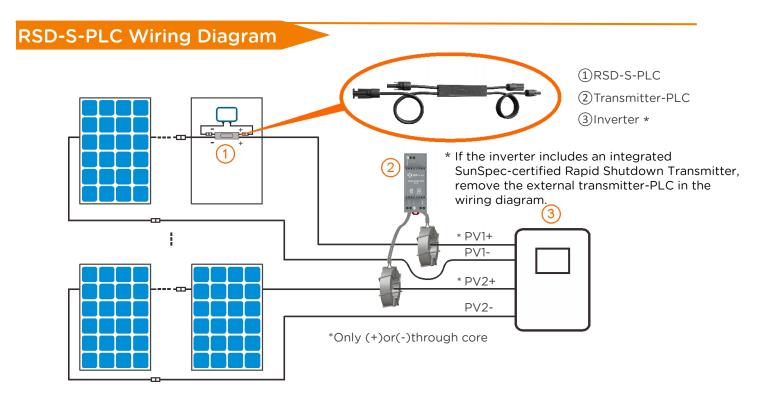
## **RSD-S-PLC Technical Data**

Model	RSD-S-PLC
Input Data (DC)	
Input Operating Voltage Range	8-80V
Maximum Cont. Input Current (Imax)	15A
Output Data (DC)	
Output Operating Voltage Range	8-80V
Maximum System Voltage	1000V/1500V
Mechanical Data	
Operating Ambient Temperature Range	-40 °F to +185 °F (-40 °C to + 85 °C)
Dimensions (without cable & connectors)	5" x 1.2" x 0.6"(129 mm x 30 mm x 16 mm)
Cable Length	Input 250mm/Output 1200mm
Cable Cross Section Size	TUV:4mm²/UL:12AWG
Connector	MC4 or Customize
Enclosure Rating	NEMA Type 6P/IP68
Over Temperature Protection	Yes
Features & Compliance	
Communication	PLC
Safety Compliance	NEC 2017 & 2020 (690.12); UL1741; CSA C22.2 No. 330-17; IEC/EN62109-1; 2PFG2305
EMC Compliance	FCC Part15; ICES-003;IEC/EN61000-6-1/-2/-3/-4

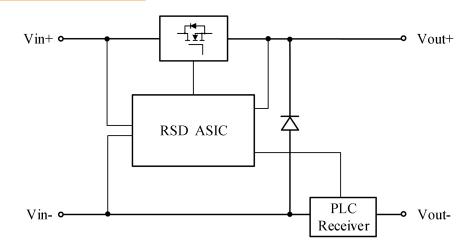
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The RSD-S-PLC meets SunSpec requirements, maintaining normal function by continually receiving a heartbeat signal from the APsmart Transmitter. The RSD executes rapid system shutdown when the Transmitter signal is absent. Users can manually execute rapid shutdown using Transmitter breaker switch.



### Working Schematic Diagram



#### ORDERING INFORMATION

415002 1500V UL/1000V TUV, 1.2m cable, MC4 415001 1000V UL/TUV, 1.2m cable, Customized connector

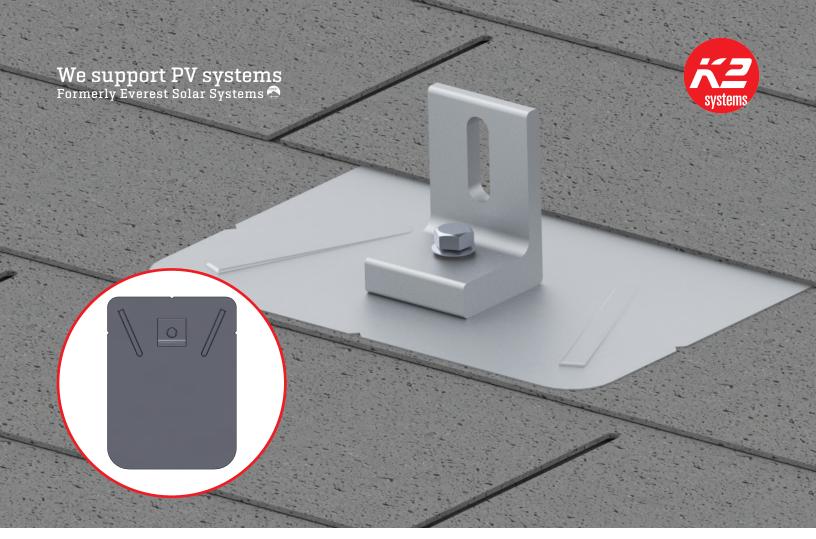










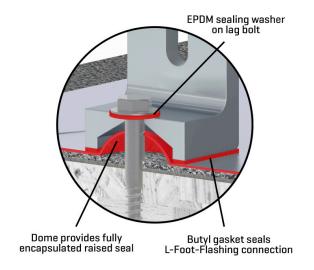


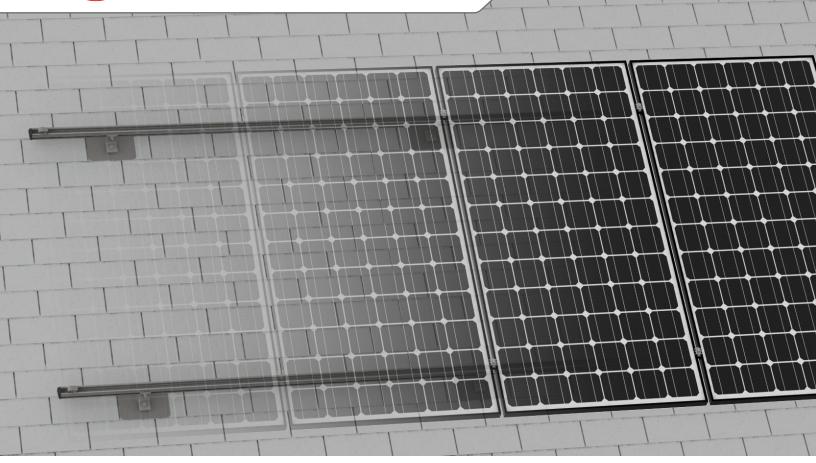
# **EverFlash XP Comp Kit**

# PRODUCT SHEET

Part Number	Description
4000057	EverFlash XP Comp Kit, Mill LF, Dark Flash
4000060	EverFlash XP Comp Kit, Dark
4000061	EverFlash XP Comp Kit, Mill

- ▶ K2's very own comp shingle flashing and mount
- ▶ Best in class 3 stages of waterproofing
- ► All CrossRail hardware included and preassembled
- ▶ UL 441 Section 27 rain test
- ▶ TAS 100-95 wind driven rain test
- ▶ Full submersion water test





- ▶ High quality, German-engineered system for residential and commercial installations
- 4 rail sizes available to suit all structural conditions
- Universal components for all rail types
- Use 2 innovative components to turn this system into Shared Rail or Tilt Up
- ▶ MK3 technology provides highest rail engagement
- ▶ Roof attachments for all roof types
- ▶ 100% code compliant, structural validation for all solar states
- Fast installation with minimal component count result in low total installed cost
- ▶ Simple to design using our code compliant online design tool, Base



## Components



#### CrossRail 44-X

Part Number	Description
4000019	CrossRail 44-X 166", Mill
4000020	CrossRail 44-X 166", Dark
4000021	CrossRail 44-X 180", Mill
4000022	CrossRail 44-X 180", Dark



#### CrossRail 80

Part Number	Description
4000508	CrossRail 80 168" Rail Mill



#### Yeti Clamp

Part Number	Description	
4000050-H	Yeti Hidden EC for CR, Mill, 13 mm Hex	



#### **L-Foot Slotted Set**

Part Number	Description
4000630	L-Foot Slotted Set, Mill
4000631	L-Foot Slotted Set, Dark



#### EverFlash eComp

Part Number	Description
4000015	EverFlash eComp + SRS Slide Kit, Mill
4000366	EverFlash eComp Kit, Black
4000679	EverFlash eComp Kit, Mill LF, Dark Flash
4000367	EverFlash eComp Kit, Silver
4000027	EverFlash eComp+SR Slide Kit, Dark
4000029	EverFlash eComp+SR Slide, LF Mill, Dark



#### CrossRail 48-X

Part Number	Description
4000662	CrossRail 48-X 166", Mill
4000663	CrossRail 48-X 166", Dark
4000675	CrossRail 48-X 180", Mill
4000665	CrossRail 48-X 180", Dark



#### CrossRail Mid Clamp Standoff

Part Number	Description	
4000601-H	CR MC Silver, 30-50mm, 13 mm Hex	
4000602-H	CR MC Dark, 30-50mm, 13 mm Hex	



#### **Aluminum End Clamp**

Part Number	Description
4005344	CrossRail EC Silver, AL 32-33mm
4005169	CrossRail EC Silver, AL 34-36mm
4005290	CrossRail EC Silver, AL 37-38mm
4005170	CrossRail EC Silver, AL 39-41mm
4005291	CrossRail EC Silver, AL 42-44mm
4005171	CrossRail EC Silver, AL 45-47mm
4005292	CrossRail EC Silver, AL 48mm
4005172	CrossRail FC Silver AL 49-50mm



#### **Everest Ground Lug**

Part Number	Description
4000006-H	Everest Ground Lug Set, 13 mm Hex



#### Flat Tile Hook

Part Number	Description
4000034	Flat Tile Hook, Set, W/ lags



#### CrossRail 48-XL

Part Number	Description
4000695	CrossRail 48-XL 166", Mill
4000705	CrossRail 48-XL 166", Dark



#### CrossRail End Clamp

Part Number	Description	
4000429	CR EC Silver, 30-50mm, Shared RL 30-45mm	
4000430	CR EC Dark, 30-50mm, Shared RL 30-45mm	
4000003	Shared Rail EC Silver, SS 46-50mm	
4000004	Shared Rail EC Dark, SS 46-50mm	



#### **CrossRail Structural Rail Connector**

Part Number	Description
4000051	Rail Connector CR 44-X, Set, Mill
4000052	Rail Connector CR 44-X, Set, Dark
4000385	RailConn CR 48-X,48-XL Struct Set, Mill
4000386	RailConn CR 48-X,48-XL Struct Set, Dark



#### **EverFlash XP Comp**

Part Number	Description
4000054	EverFlash XP Slider Kit, Mill
4000055	EverFlash XP Slider Kit, Dark
4000057	EverFlash XP Kit, Mill LF, Dark Flash
4000060 EverFlash XP Comp Kit, Dark	
4000061	EverFlash XP Comp Kit, Mill



#### TC Wire Management Clip

Part Number	Description
4000069	Wire Management Clip, TC



From: Erik Meyerhoffer <<a href="mailto:cerik@sesre.com">cerik@sesre.com</a> Sent: Monday, February 28, 2022 11:17 AM

To: Sondra Stone <<a href="mailto:ssstone@lexingtonky.gov">ssstone@lexingtonky.gov</a> Subject: RFP 5-2022 Solar PV Installation

You don't often get email from erik@sesre.com. Learn why this is important

[EXTERNAL] Use caution before clicking links and/or opening attachments.

Sincere apologies for the mix-up in our submission for the RFP 5-2022 Solar PV Installation. The Canadian Solar 330-watt module, model CS1H-330MS, is the correct module for this bid, with a quantity of 66. I am attaching specification sheet with model highlighted. The Helioscope simulation is the correct document. Apologies again for the error.

Erik Meyerhoffer
Commercial Sales Project Manager
Solar Energy Solutions
Lexington | Louisville | Bloomington | Cincinnati | Evansville
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# **HiDM Black**

**HIGH DENSITY MONO PERC MODULE** 

POWER RANGE: 320 W ~ 330 W

(EQUIVALENT TO 60 CELL FORMAT)

CS1H-320|325|330MS

With Canadian Solar's innovative module technology and Mono-PERC cell technology, we will offer our customers high power modules up to 330 W with enhanced aesthetics appearance. Through maximizing the light absorption area and removing the loss of ribbon resistance, the module efficiency can reach up to 19.57 %.

#### **MORE POWER**



Maximize the light absorption area, module efficiency up to 19.57 %



Low NMOT:  $43 \pm 3$  °C Low temperature coefficient (Pmax): -0.37 % / °C



Better shading tolerance

#### **MORE RELIABLE**



Lower hot spot temperature



Minimizes micro-cracks



Heavy snow load up to 5400 Pa, wind load up to 2400 Pa

\*For detail information, please refer to Installation Manual.





linear power output warranty



product warranty on materials and workmanship

#### **MANAGEMENT SYSTEM CERTIFICATES\***

ISO 9001:2008 / Quality management system
ISO 14001:2004 / Standards for environmental management system
OHSAS 18001:2007 / International standards for occupational health & safety

#### **PRODUCT CERTIFICATES\***

IEC 61215 / IEC 61730: VDE / CE (Expected July 2018)
UL 1703: CSA (Expected August 2018)

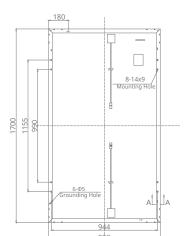
\* As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

CANADIAN SOLAR (USA), INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. As a leading PV project developer and manufacturer of solar modules with over 26 GW deployed around the world since 2001, Canadian Solar Inc. (NASDAQ: CSIQ) is one of the most bankable solar companies worldwide.

#### **ENGINEERING DRAWING (mm)**

**Rear View** 

#### Frame Cross Section A-A





#### **Mounting Hole**



#### **ELECTRICAL DATA | STC\***

CS1H	320MS	325MS	330MS
Nominal Max. Power (Pmax)	320 W	325 W	330 W
Opt. Operating Voltage (Vmp)	35.8 V	36.0 V	36.2 V
Opt. Operating Current (Imp)	9.01 A	9.10 A	9.19 A
Open Circuit Voltage (Voc)	43.3 V	43.5 V	43.7 V
Short Circuit Current (Isc)	9.51 A	9.58 A	9.65 A
Module Efficiency	18.98% 19.27% 19.57%		
Operating Temperature	-40°C ~ +85°C		
Max. System Voltage	1000 V (IEC) or 1000 V (UL)		
Module Fire Performance	TYPE 1 (UL 1703) or		
	CLASS C (I	EC 61730)	
Max. Series Fuse Rating	20 A		
Application Classification	Class A		
Power Tolerance	0 ~ + 5 W		

<sup>\*</sup> Under Standard Test Conditions (STC) of irradiance of 1000 W/m2, spectrum AM 1.5 and cell temperature of 25°C.

#### **ELECTRICAL DATA | NMOT\***

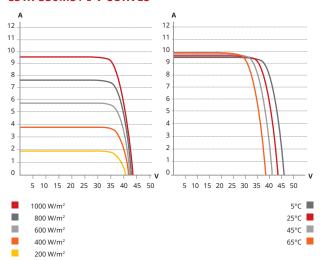
CS1H	320MS	325MS	330MS
Nominal Max. Power (Pmax)	238 W	242 W	245 W
Opt. Operating Voltage (Vmp)	32.7 V	32.8 V	33.0 V
Opt. Operating Current (Imp)	7.28 A	7.36 A	7.43 A
Open Circuit Voltage (Voc)	40.6 V	40.8 V	41.0 V
Short Circuit Current (Isc)	7.67 A	7.73 A	7.79 A

<sup>\*</sup> Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m2, spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to on-going innovation, research and product enhancement, Canadian Solar Inc. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Caution: For professional use only. The installation and handling of PV modules requires professional skills and should only be performed by qualified professionals. Please read the safety and installation instructions before using the modules.

#### CS1K-330MS / I-V CURVES



#### **MECHANICAL DATA**

Specification	Data
Cell Type	Mono-crystalline, 156.75 × 31.35 mm
Dimensions	1700 ×992 ×35 mm
	(66.9 × 39.1 × 1.38 in)
Weight	19.2 kg (42.3 lbs)
Front Cover	3.2 mm tempered glass
Frame	Anodized aluminium alloy
J-Box	IP67, 3 bypass diodes
Cable	4.0 mm <sup>2</sup> (IEC), 12 AWG (UL),
Cable Length	1300 mm (51.2 in), 740 mm (29.1 in)
(Including Connector)	is optimal for landscape installation
Connector	T4 series (1000 V)
Per Pallet	30 pieces
Per Container (40' HQ)	780 pieces

#### **TEMPERATURE CHARACTERISTICS**

Specification	Data
Temperature Coefficient (Pmax)	-0.37 % / °C
Temperature Coefficient (Voc)	-0.29 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	43 ±3 °C

#### **PARTNER SECTION**

