REQUEST FOR PROPOSAL

PCCA Electrical Engineering Services – Annex Power System Study and Arc Flash Assessment

1.0 GENERAL INFORMATION

1.1 Introduction.

- a. The Pennsylvania Convention Center Authority ("PCCA" or "the Authority") is the entity responsible for the construction and operation of the Pennsylvania Convention Center ("Center"). PCCA is a body corporate and politic, created and existing as an agency and public instrumentality of the Commonwealth of Pennsylvania. The Center consists of approximately 1.3 million square feet including: 440,000 square feet of exhibit space; 125,000 square feet of ballroom/meeting space and a 125,000 square foot farmers market. The 975,000 square foot expansion of the Center completed in 2011 includes an additional approximate 260,000 square feet of Exhibition Space; 63,000 square feet of Meeting Rooms; a second Ballroom of 57,000 square feet and a multi-story Atrium Entrance on Broad Street.
- b. The purpose of this Request for Qualifications ("RFP"), including all exhibits, schedules, addenda, drawings, plans and specifications related hereto issued by the Pennsylvania Convention Center Authority ("PCCA"), is to solicit proposals from qualified <u>Electrical Engineering / Contractor Firms</u> to provide <u>Electrical Engineering Services</u> as described in this RFP at the Center. Detailed Scope of Work in Exhibit A attached.
- c. The successful Proposer must demonstrate its capability of adequately meeting the demands of PCCA with respect to the requirements of this RFP, This RFP by PCCA contains information and requirements for the Proposer to prepare and submit proposals for **Electrical Engineering Services** This RFP, with any amendments, contains the only instructions governing the proposals and material to be included therein. The Proposer must be in a position to commence provision of services at the Center upon execution of a services contract. Proposals, including all documents and addenda, (hereinafter "Proposal" or Proposal Documents") submitted by each Proposer, should be inclusive of all services and/or equipment required by PCCA, plus any additional related services and/or equipment the Proposer believes are required to ensure efficient, flexible and cost effective delivery of services. The outline of services set forth in Section 4.0 hereof is an outline of the minimum services required by PCCA. Any change in the cost to PCCA by reason of any alternative or additional services must be separately identified to the extent feasible.
- **Schedule.** The following is the anticipated schedule in connection with this RFP. This schedule may be altered at the discretion of the PCCA.

Anticipated Schedule

Element: Completed By:

Mandatory Pre-Proposal Conference May 2, 2023 (10 AM) Virtual

Site Tours To Be Scheduled

All Questions Due May 16, 2023 (2 PM)

Proposals due May 23, 2023 (4 PM)

2.0 PRE-SUBMISSION PROCEDURES AND REQUIREMENTS

2.1 Examination of Proposal Documents.

- a. Upon receipt of the Proposal Documents, each Proposer shall examine same for missing or partially blank pages due to mechanical printing or collating errors. It shall be the Proposer's responsibility to identify and procure any missing pages from PCCA.
- b. Each Proposer shall carefully review the Proposal Documents and thoroughly familiarize itself with the requirements prior to submitting a Proposal. Prospective Proposers are invited to submit <u>electronic</u> inquiries (return receipt requested) with respect to this RFQ to **Stephen Shepper** (<u>sshepper@paconvention.com</u>) and **Lisa Dobbertin** (<u>ldobbertin@paconvention.com</u>), Pennsylvania Convention Center Authority, 1101 Arch Street, Philadelphia, Pennsylvania 19107. Answers may be provided at the Pre-Proposal Conference. **Telephone inquiries will not be accepted.**
- 2.2 Pre-Proposal Conference. A mandatory Virtual Pre-Proposal Conference will be held virtually on May 2, 2023 at 10:00 AM (Virtual). After the Pre-Proposal Conference, you may arrange a tour of the project space with staff. All Proposers must attend the Pre-Proposal Conference.
- 2.3 Addenda. Changes, corrections or additions may be made in the Proposal Documents after they have been issued. In such case, a written addendum or addenda ("Addendum" or "Addenda") describing the change(s), correction(s) or addition(s) will be issued to each Proposer, who provided written notice to PCCA of its mailing address. Such Addendum or Addenda shall become part of the Proposal Documents. Each Proposer shall acknowledge receipt of all Addenda in its Proposal. No oral communications, rulings or interpretations will be held binding upon PCCA.

3.0 SUBMITTAL PROCEDURES AND REQUIREMENTS

3.1 Compliance with the RFP.

- a. Each Proposer is required to submit a complete written Proposal and to attest to the accuracy and completeness of its Proposal. In all respects, the Proposers shall comply with the instructions and the stipulations of this RFP in the preparation and submission of Proposals. Proposals **must** be signed by a duly authorized person, partner or officer of the Proposer, as applicable, and evidence of such authorization must be included with the Proposal. The Proposer's legal name and form of entity must be fully stated.
- b. Where permitted by this RFP, the Proposer must specifically identify and fully explain in the Proposal any exceptions to or deviations from the requirements of this RFP.
- c. Failure to comply with the requirements of this RFP may render the Proposal, at the sole discretion of in disqualification and the elimination of the Proposer from subsequent consideration. PCCA, as unresponsive or otherwise unacceptable and may result in disqualification and the elimination of the Proposer from subsequent consideration

3.2 Proposer Affiliations and Subcontractors.

- a. Each Proposer must disclose in its Proposal any relationship between the Proposer and any entity that has a contractual relationship with PCCA.
- b. Any services proposed by the Proposer that will be performed in whole or in part by outside parties, third-party contractors, affiliates, or subcontractors of the Proposer if permitted by PCCA, must be specifically identified in the Proposal and the business relationship between the Proposer and such third parties must be explained in the Proposal. Nothing contained herein or in the Contract shall be construed to impose any obligation on the part of PCCA to any outside party or third-party contractor.

3.3 Proposals

- a. Each Proposer is required to submit a complete written Proposal by the specified time herein. Late Proposals will not be considered.
- b. In all respects, the Proposers shall comply with the instructions and the stipulations of this RFP in the preparation and submission of Proposals. Oral or telephone Proposals or unsolicited modifications to Proposals will not be considered. affiliate, or subcontractor of the Proposer

c. Proposals must be accompanied by a transmittal letter:

1). The transmittal letter must be on an official business letterhead of the Proposer and

signed by a duly authorized person, partner or officer of the Proposer, as applicable, and evidence of such authorization must be included with the Proposal. The Proposer's legal name and form of entity must be fully stated.

- 2). The transmittal letter must include at a minimum:
 - (i.) identification of the person who will serve as the primary contact for the Authority with respect to the Proposal, and shall include the person's title, address, telephone and fax numbers, and e-mail addresses;
 - (ii.) certification that the Proposer is not currently under suspension or disbarment by the Commonwealth of Pennsylvania or any other state or federal government; and
 - (iii.) acknowledgment of receipt by the Proposer of any RFP Addenda or Amendments as required by Section 2.3.
- d. Proposals must be submitted via an electronic copy in PDF format.

3.4 Submission of Proposals; Deadline

- a. Proposals must be emailed to Lisa Dobbertin (<u>ldobbertin@paconvention.com</u>) and Stephen Shepper (<u>sshepper@paconvention.com</u>)
- b. Proposals must be received at the email addresses in Section 3.4(a) above no later than 4:00 PM (Philadelphia time) on May 23, 2023. Proposers should allow sufficient delivery time to ensure receipt of their Proposals by PCCA prior to the date and time fixed for the acceptance of the Proposals. Proposals received after this time may be rejected by the PCCA.
- c. Each Proposer shall identify its Proposal in the subject line of the email by writing the words: "Electrical Engineering Consultant / Contractor Services for the Power System Study and Arc Flash Assessment Project at the Pennsylvania Convention Center Annex (Expansion)."
- d. Each Proposal must be in a single email with four components. Each component shall be included in a separate PDF document with the proper identification named in the electronic file. The components are:
 - (i.) Technical Portion No cost information may appear in this portion.
 - (ii.) Diversity, Inclusion, and Anti-Discrimination Plan Portion
 - (iii.) Cost/Price Portion (Hourly Fee Structure)
 - (iv.) Financial Portion

- **3.5** Term of Proposal. Proposals shall remain open for acceptance and be irrevocable for a period of one hundred eighty (180) calendar days after the deadline for submission of Proposals specified in Section 3.5 hereof.
- **3.6 Withdrawal of Proposals.** Proposals may only be withdrawn personally or on written or telegraphic request received from Proposers prior to the time fixed herein for submission of Proposals. This will not preclude the submission of another Proposal by such Proposer prior to such deadline.
- 3.7 Business License. Proposers which are corporations, or that are individuals or firms doing business under fictitious names, must supply, in their Proposals, documented proof that they have registered with and obtained a certificate from the Secretary of the Commonwealth authorizing them to do business in this Commonwealth and confirming that they are in good standing. Proposers must also supply in the Proposals, documented proof that they have obtained from the City of Philadelphia the appropriate license(s) for conducting business in Philadelphia. If the foregoing proof is not available at the time of submission of the Proposals, the Proposer must, at a minimum, provide evidence that it has applied for such certificates and license(s) and, at the option of PCCA, and designated Proposed will be required to produce such certificates and licenses prior to execution of the Contract.
- **3.8 Ownership and Non-Confidentiality of Proposals**. All Proposals submitted in response to this RFP will become the property of PCCA and will not be returned. The contents of all Proposals are a matter of public record.
- **3.9 Effect of Submission**. Submission of a Proposal shall constitute agreement by the Proposer to all of the terms incorporated in the Proposal Documents. By submission of a Proposal, the Proposer is representing and warranting that (i) the information contained in its Proposal is complete and accurate and that such information shall continue to be complete and accurate at all times, and (ii) the delivery of the products and services specified in this RFP and the Proposal shall in provision of such products and services, other than as included in the Contract executed by both parties no way obligate PCCA to pay any additional costs to the Proposer.

4.0 SCOPE OF THE SERVICES

4.1. General Requirements

a. PCCA seeks a consultant to perform Electrical Power System & Coordination Studies with Arc Flash Hazard Assessments for the Pennsylvania Convention Center Annex (PACC Expansion). The RFP has been prepared for the purpose of obtaining a Vendor to provide engineering and construction services to execute the project. All engineering services must be performed by or under the direct supervision of a licensed Professional Engineer in the Commonwealth of Pennsylvania and all construction services must be performed by a Philadelphia Licensed Electrical Contractors using Union Electricians that are approved by the PCCA. The project to include but not limited to the following:

- b. As-Built Drawings and Existing Short Circuit Study, Protective Device Coordination Study, Arc Flash and Shock Hazard Analysis Review: The Vendor shall review, comment on, and validate the As-Built Drawings prepared in 2011 when the PACC Expansion was constructed and the Short Circuit Study, Protective Device Coordination Study, Arc Flash and Shock Hazard Analysis prepared in 2009. This will include documenting the findings and presenting them to the PACC. See attached detailed scope in Exhibit "A" for detailed scope of work.
- c. <u>Data Collection</u>, New One Line <u>Diagrams and New Plan Drawings</u>: The Vendor shall perform field surveys, with the assistance of an Electrical Contractor, to gather information and take and catalog photographs, needed to perform Engineering Services, and to create New AutoCAD One Line Diagrams and AutoCAD Electrical Equipment Location Plans Plan drawings that will be the basis for the New Electrical Power System and TCC Coordination Studies and New Arc Flash Hazard Assessments. <u>See attached detailed scope in Exhibit</u> "A" for detailed scope of work.
- d. <u>Engineering Services:</u> The Vendor shall perform New Electrical Power System and TCC Coordination Studies and New Arc Flash Hazard Assessments. <u>See attached Exhibit "A" for detailed scope of work.</u>
- e. <u>Arc Flash Label Installation</u>: The Vendor shall install the completed Arc Flash Labels with the assistance of the Electrical Contractor as needed. <u>See attached Exhibit "A" for detailed scope of work.</u>

4.2. Additional Requirements.

- a. The following additional information will be evaluated and must be supplied by Proposers in a detailed and complete manner:
 - (i) Description of Proposer's capability to meet service demands of the PCCA as set forth in the General Requirements, section 4.1 of the RFP;
 - (ii) Description of customer service policy and procedures.

4.3 Examination of Conditions Affecting Work.

- a. Prior to submitting a Proposal, each Proposer must familiarize itself with all current working conditions, including but not limited to the labor environment and all applicable laws, codes, ordinances, rules and regulations that will affect the delivery of the services to be provided by the Proposer.
- **4.4 Cost Proposal.** Proposers must describe the compensation elements detailed as follows:
 - a. Proposers are required to separate and identify all cost components, including but not limited to those outlined above. Any Proposal which does not completely itemize all cost components may be deemed non-responsive and may be excluded from further consideration.
 - b. PCCA is a tax-exempt entity not liable for sales tax. All price quotations for equipment and services provided by the Proposer to the PCCA must exclude sales

tax charges. A tax-exempt certificate will be provided upon request.

- **4.5 Confidentiality**. All data contained in the documents and/or files supplied by PCCA either during the RFP process or after the execution of the Contract to be awarded pursuant hereto are to be considered confidential and shall be solely for the use of the requesting Proposer. The Proposer will be required to use reasonable care to protect the confidentiality of any data.
- **4.6 Delivery Responsibilities**. The designated Proposer will be required to assume sole responsibility for the delivery of services. The Proposer may not assign or subcontract any of its responsibilities under the Proposal or the Contract except to the extent specifically provided herein or in the Contract.
- **4.7 Interpretation**. Should any question arise as to the proper interpretation of the terms and conditions of the Proposal Documents, the decision of PCCA shall be final.
- **4.8 Anti-Collusion**. The Proposer, by signing its Proposal, does warrant and represent that its Proposal has not been solicited, secured or prepared directly or indirectly, in a manner contrary to the laws of the Commonwealth of Pennsylvania, and that said laws have not been violated as they relate to the procurement or performance of the Contract to be awarded pursuant to the process described in this RFP by any conduct, including the payment or giving of any fee, commission, compensation, gift, gratuity, or consideration of any kind, directly or indirectly to any PCCA employee, officer, or consultant.

5.0 MINIMUM CRITERIA FOR THE PROPOSER

5.1 Minimum Required Qualifications.

a. **Financial Requirements**. Each Proposer must supply in its Proposal documented proof of its financial condition and financial responsibility to provide documented services to the PCCA. This includes providing financial statements certified by a public accountant or annual reports covering the two (2) most recent fiscal years, or other such documents that will allow PCCA to assess the financial viability of the Proposer. PCCA, at its discretion, may request the Proposer to provide such additional financial information as PCCA, in its discretion, deems necessary to establish the financial responsibility of the Proposer.

b. Other Requirements

- (i.) Proposer must provide and maintain during the term of any contract with the PCCA, appropriate insurance coverages in the limits required by the PCCA and in accordance with the law. The requisite insurance coverages include at a minimum, workers compensation insurance, general liability insurance, automobile liability insurance and excess liability insurance.
- (ii.) Proposer must be legally licensed to operate under all applicable laws of the Commonwealth of Pennsylvania and the City of Philadelphia.

5.2 Technical Guidelines for Meeting Requirements of the Scope of Services

- a. **References/Credentials.** Each Proposer shall provide PCCA with a minimum of three (3) written references from prior customers of the Proposer.
- b. Anti-Discrimination, Diversity and Inclusion Compliance.
 - (i.) PCCA's Diversity, Inclusion, and Anti-Discrimination Policy. PCCA has instituted an Diversity, Inclusion, and Anti-Discrimination policy to prevent discrimination against minorities and females in all PCCA subcontracting and employment opportunities and to ensure that minorities and females have an equal opportunity to participate in all contracts let for the operation, and maintenance of the Convention Center. A copy of PCCA's Diversity, Inclusion, and Anti-Discrimination Policy can be found at https://paconvention.cobblestone.software/gateway/DocumentLibrary.aspx under "Exhibit AA Anti-Discrimination Policy."
 - (ii.) <u>Diversity, Inclusion, and Anti-Discrimination Plan</u>. All Proposers are required to make their best efforts to achieve minority and female participation in subcontracting and employment opportunities at substantial and meaningful levels. Each Proposer must submit a Diversity, Inclusion, and Anti-Discrimination implementation plan specific to the services pursuant to this RFP. The successful Proposer's Diversity, Inclusion, and Anti-Discrimination implementation plan as accepted by PCCA will become an enforceable provision of the Contract. If the Proposer fails to detail its best efforts as required under this Section, the Proposal may be deemed non-responsive and may be rejected by PCCA. Please follow the directions in connection with completing the <u>Diversity</u>, <u>Inclusion</u>, <u>and Anti-Discrimination</u> Implementation Plan:
 - a.) Proposers must provide a detailed Diversity, Inclusion, and Anti-Discrimination Implementation Plan specific to this RFP. Proposers' Diversity, Inclusion, and Anti-Discrimination Implementation Plans must include levels of minority and female-owned business participation in (i) subcontracting and (ii) workforce utilization. The Diversity, Inclusion, and Anti-Discrimination Implementation Plan must briefly describe the specific task assigned to each minority and/or female-owned business listed on the Solicitation for Participation and Commitment Form, found at: https://paconvention.cobblestone.software/gateway/DocumentLibrary.aspx titled "Exhibit BB - Solicitation for Participation and Commitment Workforce utilization must indicate the employees who are Form." minorities and/or females who will be assigned to this project and indicate their status by category i.e. management, hourly, full-time, part-time etc. Proposers' workforce utilization can be in a narrative format.

If there are any special business arrangements i.e. teaming, joint-venture

and/or in-association with relationships, then an explanation of that particular arrangement must be included with the Diversity, Inclusion, and Anti-Discrimination Plan for PCCA review and approval. The document must indicate all roles and responsibilities of all the participants to the business relationship.

Solicitation for Participation & Commitment Form - Proposers must complete the Solicitation for Participation & Commitment Form. Please complete all areas that apply to the Proposer's submission. In the event that a firm(s) has more than one certification designation (Minority and Women Business Enterprise), one must be selected for purpose of measuring the levels of actual participation. In order to satisfactorily complete the Solicitation for Participation & Commitment Form, the following areas must be indicated; the type of work to be performed; date of solicitation or commitment; whether or not a commitment is made, ("yes" or "no"). If "yes", indicate the amount in dollars and the percentage. If "no" commitment is made, please provide an explanation. Provide copies of all certifications of all firms listed on the Solicitation for Participation & Commitment Form.

c.) Best and Good Faith Efforts

Proposers must demonstrate, in writing, that it took reasonable steps to obtain representation of minority and female-owned businesses and/or vendors to assure equal opportunity, even if the efforts were ultimately unsuccessful. See https://paconvention.cobblestone.software/gateway/DocumentLibrary.aspx to fill out the "Exhibit CC – Best and Good Faith Efforts" form.

Proposers must provide evidence (a written description with supporting documentation) to the PCCA that it utilized its best efforts to include minority and female-owned business participation in every phase of this RFP. Evidence of "best efforts" are the following:

- 1) Providing copies of advertising in general media, trade association publications, and minority-focused media concerning subcontracting opportunities.
- 2) Participating in conferences and seminars specifically for the promotion of the <u>Diversity</u>, <u>Inclusion</u>, <u>and Anti-Discrimination</u> portion of the project.
- 3) The timely notification of minority and female-owned business enterprises and solicitation of their participation on this project.
- 4) Providing sufficient information about plans, specifications, and requirements of the project to interested to minority and female-owned

businesses.

5) Providing evidence of reasonable efforts to negotiate with minority and female-owned businesses to provide specific services and/or goods and supplies.

Proposers must comply with the aforementioned PCCA <u>Diversity</u>, <u>Inclusion</u>, <u>and Anti-Discrimination</u> requirements in order for their Proposals to be considered and/or deemed accepted "best and good faith efforts."

6.0 PROPOSAL EVALUATION AND AWARD OF CONTRACT

6.1 Evaluation Criteria.

- a. The PCCA, *in its sole discretion*, will use a variety of criteria, including, without limitation, the following criteria, which are not necessarily listed in order of importance, to evaluate the Proposals received:
 - i) General feasibility, effectiveness and clarity of the Proposal and its responsiveness to the RFP requirements.
 - ii) Proposer's demonstrated experience in delivering the required services.
 - iii) Proposer's organizational resources, depth of resources, and financial stability and capability.
 - iv) Creative or innovative and cost effective approach to service delivery, pricing, and compensation.
 - v) Initial pricing, pricing for each year of the term of the contract, and overall economic advantages.
 - vi) Evidence of Proposer's service reliability, customer support, and on-time delivery of services.
 - vii) Proposer's compliance with the PCCA's Diversity, Inclusion and Anti-Discrimination Policy.
 - viii) Implementation capabilities.
- b. The PCCA may, *in its sole discretion*, after full and careful consideration, accept the Proposal which best meets the PCCA's requirements. The PCCA is <u>not</u> required to make its selection based solely upon the lowest proposed pricing schedule.
- **6.2 Evaluation Process.** Upon receipt of the Proposals, PCCA may short-list the Proposers based on evaluation criteria including, but not limited to, that cited in Section 6.1 of this RFP. The PCCA reserves the right to then interview each of the short-listed Proposers and may require presentations to be made to PCCA by such Proposers. The proposal review and selection process is as follows:

<u>Step One – Receipt of RFP's</u> – RFQ's from Proposers will be received at the location on the day and at the time indicated in this RFQ.

<u>Step Two – Technical and Diversity, Inclusion and Anti-Discrimination Plan Review</u> - PCCA will initially review and evaluate the Technical Submittals and Diversity, Inclusion and Anti-Discrimination Plan Responses. PCCA may require all or some Proposers participate in an oral interview during this initial process. The general purpose of this session is to clarify specific aspects of the above submittals. Although the oral interview itself will not be a basis for award; responses provided in the interview will be considered. Absence of an interview does not indicate lack of interest of PCCA in a proposal.

Step Three – Shortlist -The PCCA will evaluate all proposals on the basis of technical merit and Diversity, Inclusion, and Anti-Discrimination response. PCCA will evaluate whether the technical portion of the Proposal provides the details of the necessary technical and personnel support, and the manner in which it will fully implement and satisfy all requirements of the Project. The Authority will also evaluate whether the Proposer's Diversity, Inclusion and Anti-Discrimination Plan achieves minority and female participation in subcontracting and employment opportunities at substantial and meaningful levels and whether Proposer's satisfactorily demonstrated their best and good faith efforts as described in the Diversity, Inclusion and Anti-Discrimination Policy. PCCA will notify selected Proposers in writing of its selection for further consideration of their proposal.

<u>Step Four – Presentations of Shortlisted Proposers</u> - Selected Proposers will be requested to participate in a one-hour meeting with PCCA. The agenda will provide for up to a thirty (30) minute presentation by the Proposer and the remainder as a question and answer period. PCCA does not require or expect the Proposers provide elaborate presentations or add information beyond their initial proposal. PCCA may request Proposers explain the basis of their cost/pricing for proposal.

Step Five – Cost Review - PCCA will review all the Shortlisted proposals and select the Proposers that it considers in its best interest. During the PCCA deliberations, PCCA may request further information from Proposers. Where similar Proposals come from several Proposers, PCCA may decide to engage in negotiations with only one, several or all Proposers submitting similar Proposals. The cost/price portion of the Proposal will be evaluated separately. It will be utilized to evaluate the Proposer's understanding of the requirements of the RFP and to determine the most probable cost to the Authority. The cost/price portion will be evaluated for reasonableness and completeness. The Authority will evaluate the reasonableness of each Proposer's cost/price Proposal, determine whether the proposed cost/price is consistent with the proposed technical approach and indicates a clear understanding of a sound approach to satisfying the requirements in the scope of services set forth in Section.

<u>Step Six – Negotiation</u> – PCCA may undertake negotiations with several Proposers for similar or different Proposals. In either case, PCCA may request "final and best offers". Based upon these negotiations, PCCA will offer a "Notice of Award" to the selected Proposer(s).

<u>Step Seven – Award of Contract</u> – Upon the completion of the Proposal Evaluations the PCCA at its sole discretion may award a Contract for this RFP.

6.3 Rights and Options of PCCA. PCCA reserves and may exercise one or more of the following rights and options with respect to this RFP:

- a. To reject any and all Proposals.
- b. To elect to award certain parts of the Scope of Services, to separate proposers or to award the entire Scope of Services to one proposer as the PCCA deems necessary.
- c. To use criteria other than price in determining the Proposer(s) with which it will contract.
- d. To supplement, amend or otherwise modify this RFP.
- e. To cancel this RFP with or without the substitution of another RFP.
- f. To issue additional or subsequent solicitations for Proposals.
- g. To conduct investigations with respect to the qualifications of any Proposer.
- h. To change any time for performance set forth in this RFP.
- i. To waive any non-compliance of any Proposal with the requirements of this RFP.
- j. To permit any Proposer to supplement, amend or otherwise modify its Proposal.
- k. To supplement, amend or otherwise modify the terms of any proposed form of Contract which may be submitted by PCCA to any Proposer.
- **Request for Additional Information**. Proposers shall furnish such additional information as PCCA may request in connection with its evaluation of the Proposals.

6.5 Acceptance or Rejection of Proposals.

- a. The PCCA reserves the right to reject any or all Proposals and to seek additional Proposals, if such action is in the best interest of PCCA. PCCA reserves the right to waive any informalities and technicalities in the Proposal process.
- b. If for any reason whatsoever, PCCA rejects a Proposal, the Proposer agrees that it will not seek to recover lost profits on work not performed nor will it seek to recover its Proposal preparation costs. By submitting its Proposal, the Proposer expressly states that it intends to be legally bound and accepts the limitation of remedies set forth in this Section.

6.6 Contract Award.

- a. After PCCA has selected a Proposer as a result of the aforesaid evaluation process, the successful Proposer shall be required to execute a Contract with the PCCA. PCCA reserves the right to modify, amend and supplement any proposed form of Contract submitted by PCCA to any Proposer, in any manner it deems appropriate.
 - The terms of the Proposal of the designated Proposer, to the extent accepted by PCCA, shall be incorporated into the Contract. PCCA reserves the right to revoke the designation of a Proposer as the designated Proposer at any time prior to execution of the Contract by the Proposer and PCCA and in the form approved by PCCA.
- b. The contents of the Proposal of the selected Proposer and the RFP. will become contractual obligations upon execution of a contract between the Proposer and the Authority; provided however, that the terms of any such contract shall supersede the

- provisions of the Proposal and the RFP. to the extent the terms of the contract are inconsistent with the terms of the Proposal or RFP.. In the event that either the designated Proposer does not execute the Contract as herein required or PCCA has revoked the designation of a particular Proposer as the designated Proposer, the PCCA, in its sole discretion, may enter into negotiations with one or more of the other Proposers or PCCA may solicit new Proposals.
- c. At or prior to delivery of the signed Contract, the designated Proposer shall deliver to PCCA the policies of insurance or insurance certificates as required by the Contract. All policies or certificates of insurance must be approved by PCCA before the designated Proposer may proceed with the delivery of the contracted services.

7.0 MISCELLANEOUS

- 7.1 Penalty for Non-Compliance. Proposals received after submission deadline will be disqualified. Failure to comply with the requirements of this RFP may render the Proposal, at the sole discretion of PCCA, as unresponsive or otherwise unacceptable and may result in disqualification and the elimination of the Proposer from subsequent consideration.
- **7.2 Handling of Proposals.** All Proposals submitted in response to the RFP. will become the property of the Authority and will not be returned.
- **7.3 Cost Liability.** The PCCA shall not, in any way, be responsible for any costs incurred by any Proposer in preparing, reproducing, distributing and presenting its Proposal.
- **7.4** Additional Clarification of Proposals. The Authority may ask a Proposer to clarify in writing the technical or cost/price portions of the Proposer's Proposal at any time prior to the execution of a contract between a Proposer and the Authority. Where permitted by this RFP, the Proposer must specifically identify and fully explain in the Proposal any exceptions to or deviations from the requirements of this RFP.
- 7.5 Disclosure of Relationships.
 - a. Each Proposer must disclose in its Proposal any relationship between the Proposer and any entity that has a contractual relationship with PCCA.
 - b. Any services proposed by the Proposer that will be performed in whole or in part by outside parties, third-party contractors, affiliates, or subcontractors of the Proposer if permitted by PCCA, must be specifically identified in the Proposal and the business relationship between the Proposer and such third parties must be explained in the Proposal. Nothing contained herein or in the Contract shall be construed to impose any obligation on the part of PCCA to any outside party, third-party contractor, affiliate, or subcontractor of the Proposer.
- **7.6** Compliance with Laws, Rules, Etc. The Proposers shall comply with all federal, state, and local statutes, laws, rules, regulations, and ordinances.

7.7 Taxes.

- a. PCCA is a tax-exempt entity not liable for sales tax. All price quotations for goods and services provided by the Proposer to PCCA must therefore exclude sales tax charges. A tax-exempt certificate will be provided upon request.
- b. The designated Proposer shall be responsible for all taxes related to the provision of goods and services pursuant to the Contract and shall apply to the respective taxing authorities for all applicable account numbers and file appropriate tax returns as required by law.

EXHIBIT "A" OVERVIEW - SCOPE OF WORK

PCCA is soliciting Electrical Engineering Services for Electrical Power System & Coordination Studies with Arc Flash Hazard Assessments for the Pennsylvania Convention Center Annex (PCC Expansion).

DETAILED SCOPE OF WORK

- 1. As-Built Drawings and Existing Short Circuit Study, Protective Device Coordination Study, Arc Flash and Shock Hazard Analysis Report Review
 - a. As-Built Electrical Drawings for the Pennsylvania Convention Center (PACC) Expansion and Renovation, hereafter referred to as the "PACC Expansion" were prepared in 2011.
 PDFs of the As-Built Electrical Drawings and of the Power System and TCC Coordination Studies and Arc Flash Assessments prepared in 2011 will be provided to the Vendor.
 - b. The Vendor's proposal shall be based on the assumption that the As-Built Drawings are 90% accurate. The Vendor shall perform a field survey to assess the accuracy of the information shown on the As-Built Drawings, to identify discrepancies between the drawings and what presently exist and to formulate a data collection plan with project schedule, both of which shall be presented to the PCCA.
 - c. The Vendor shall review the 2009 "Short Circuit Study, Protective Device Coordination Study, Arc Flash and Shock Hazard Analysis" Report. The Report, which given the time it was issued cannot be considered As-Built, contains information not shown on the As-Built One Line Diagrams, recommended settings for circuit breakers, relays, and equipment evaluations, assumptions, recommendations and power systems studies and TCC coordination studies for the emergency systems, arc flash and shock hazard reports. No arc flash labels were prepared or installed. The Vendor shall review the 2009 "Short Circuit Study, Protective Device Coordination Study, Arc Flash and Shock Hazard Analysis" Report and prepare a "Report Review Document" for the PACC that addressing its relevance and content because of the assumptions and the recommendations contained within it. The SKM files used to create the report are not available.

2. <u>Data Collection, New One Line Diagrams and New Plan Drawings</u>

- a. Following the Data Collection Plan developed during the As-Built Drawing Review phase of the project, an initial version of which shall be included in the Vendor's Proposal, the Vendor with the assistance of the Electrical Contractor, shall survey and photograph the Existing Electrical Power Distribution Systems in the PACC Expansion.
- b. The Vendor shall create New One Line Diagrams based on the Vendor's field surveys using AutoCAD LT. The New One Line Diagrams shall be the <u>basis</u> for the Power System Studies and accurately reflect the Existing Power Distribution Systems.
- c. The New One Line Diagrams shall show 3 Phase Distribution Systems.
- d. The New One Line Diagrams shall be similar to and include the field verified installations and equipment shown on the As-Built One Line Diagrams plus changes and additions made to the PACC Expansion's Electrical Systems after 2011.
- e. The New One Line Diagrams shall include the service entrances, feeders, branch circuits and equipment from the Utility or Emergency Generators down to and including: Substations, Equipment directly fed from Substations, Switchboards, Panelboards, Dimmer Boards, Bus Ducts, Disconnect Switches that feed Bus Ducts, Column Disconnect Switch fed from Bus Ducts, Utility Floor Boxes in Exhibit Halls, Motor Control Centers (MCC), Transformers, Automatic Transfer Switches (ATS), Load Bank, Elevator and Escalator Control Panels, Capacitors, Surge Arrestors, Individual Motors rated higher than 50 HP, and the following if they are fed from circuit breakers rated 100 Amps and higher: Industrial Control Panels, Individual Motor Controller/Starters, Variable Frequency Drives and Company Switches.
- f. In addition to information needed for the power system studies, show the number of poles for Automatic Transfer Switches. This is intended to verify that power system neutrals are only grounded at one point.
- g. The New One Line Diagrams shall include service entrance information obtained from PECO including the source of power and the description of the service entrances which is needed for the power systems studies. Information on conductors and raceways can be obtained from PECO and the "As-Built" One Line Diagrams.

- h. The New One Line Diagrams shall include feeder and branch circuit information that are needed for the power systems studies. Information on conductors and raceways can be obtained from the "As-Built" One Line Diagrams or can be based on estimates using the requirements of the National Electrical Code (NEC).
- The New One Line Diagrams in AutoCAD LT format shall be stored on a Shared File
 Folder within DROPBOX" by the Vendor. The Shared File Folder shall be accessible to the
 PCCA and could be used by PCCA or others for future projects.
- j. The Vendor shall create New Plan Drawings based on the As-Built Plan Drawings and the Vendor's field surveys using AutoCAD LT. The New Plan Drawings shall be the <u>basis</u> for the Power System Studies and accurately reflect the Existing Power Distribution Systems.
- k. The New Plan Drawings shall show 3 Phase Distribution Systems Equipment and shall be used to estimate service, feeder and branch circuit lengths for the power system studies. These will include, but may not be necessarily limited to the Utility Service Locations, Emergency Generators, Load Banks, Substations, Switchboards, Panelboards, Dimmer Boards, Bus Ducts, Motor Control Centers (MCC), Transformers, Automatic Transfer Switches (ATS), Motor Controller/Starters, Variable Frequency Drives, Company Switches, and Individual Motors rated higher than 50 HP.
- 1. The New Plan Drawings in AutoCAD LT format and in pdf format shall be stored on a Shared File Folder within DROPBOX" by the Vendor. The Shared File Folder shall be accessible to the PCCA and could be used by PCCA or others for future projects.
- m. Photographs taken, data collection forms completed, or field notes created during the field surveys shall be stored in files in a fashion that facilitates the creation of the software models.
- n. Photographs in jpg format and data collection forms and field notes in pdf format shall be stored in files that are identified by the name of the equipment and are in sub-folders that contains the equipment in various rooms, the names of which correspond to the room names shown on the New One Line Diagrams and the New Plan Drawings. The files shall be placed into a Shared File Folder within DROPBOX" by the Vendor. The Shared File Folder shall be accessible to the PCCA and could be used by PCCA or others for future projects.

3. Engineering Services

- a. The Vendor shall model the electrical power distribution system using the latest version of SKM PowerTools for Windows (PTW) software. The version and number of buses that are supported by the Vendor's SKM PowerTools for Windows (PTW) software license shall be stated in the Vendor's proposal.
- a. The Software utilized for this project must be able to support all of the buses needed to create one model of the power system shown on the attached One Line Diagram.
- b. The Vendor must demonstrate that they have performed power system studies using SKM PTW software for a minimum of ten years or have attended training course so as to be proficient in accurately creating the SKM model and using the Software Module listed herein.
- c. At a minimum the latest versions of the following SKM PTW Software Modules shall be used in the execution of the power system studies:
 - DAPPER
 - A FAULT
 - CAPTOR
 - Equipment Evaluation
 - Arc Flash Evaluation
- d. The software modules shall be used to create the SKM reports in pdf format that will be contained in the appendices to the Full Report that will be presented in paper and electronic format to the PCCA.
- e. SKM generated One Line Diagrams shall show all pertinent input data and represent how the equipment is modeled for the purpose of performing calculations. Examples of this would be how Uninterruptable Power Supplies and Variable Frequency Drives are modeled. The basis for the modeling shall be described in the Final Report.
- f. Power system studies and arc flash hazard assessments shall be performed for the following:
 - i. Electrical power systems are fed from each of the two (2) 13,200 Volt, 3 Phase, PECO 13.kV Utility Services, <u>separately</u>.
 - ii. Electrical power systems are fed from each of the two (2) 1,750 KW, 2,188 KVA, 3 Phase, 480/277 Volt Diesel Engine Generator Sets, separately.

- g. Short circuit studies shall create the Short Circuit Reports of the electrical power system electrical systems that is shown on the New One Line Diagrams. An estimate of the motor load contribution for all motors under 50 HP shall be added to motor control center, panelboard, bus duct and switchboard buses for short circuit calculations only, these should not be used for arc flash assessments. Assuming all VFDs for HVAC equipment are passive front end and do not include the motor load contribution for these. Ignore the motor load contribution for VFDs that serve elevators and escalators. Which are active front end. Short circuit calculation shall use the highest available short circuit current from the Utility.
- h. Utility service available short circuit currents and X/R ratios shall be obtained from PECO. PCCA shall provide the PECO contact to the Vendor.
- i. Short circuit analysis shall be performed using SKM's A_FAULT (ANSI) software module for the portions of the electrical power systems that are 1,000 volts or higher.
- j. Short circuit analysis shall be performed using SKM's DAPPER, comprehensive software for the portions of the electrical power systems below 1,000 Volts.
- k. Equipment Evaluations shall be performed using SKM;s Equipment Evaluation software that will compare the results of the above short circuit calculations to the nameplate or manufacturers' rating for each piece of power distribution equipment which include Switchboards, Panelboards, Dimmer Boards, Bus Ducts, Motor Control Centers (MCC). Other equipment such as Large Motor Controller/Starters, Variable Frequency Drives and Load Banks shall be evaluated if the short circuit current ratings are noted on the equipment.
- Passing and Failing Equipment Evaluation Report shall be prepared. For equipment in the Failing Report, provide recommendations for correcting the problem, such as replacing the circuit breaker or fuse or marking the equipment as series rated. Where correcting the problem requires further investigation, this should be noted and no further action is required.
- m. Using CAPTOR software, prepare New TCC Curves for the electrical system for line faults and ground faults, similar to the Existing TCC Curves.
- n. The New TCC Curves will be based on the overcurrent protective device settings obtained during the filed survey and notes on the NEW SKM One Line Diagrams. Pdfs of the New TCC Curves are to be included in an appendix of the Full Report.

- o. After completing the Arc Flash Assessments, for both minimum and maximum utility fault contributions as is described below, perform coordination studies to enhance the selectivity of the power distribution systems and to reduce the incident energy on equipment while maintaining coordination. The result of the coordination study shall be documented in Recommended TCC Curves that will be included in an appendix of the Full Report.
- p. The Recommended TCCs should be used for the Arc Flash Assessment.
- q. Using SKM Arc Flash Evaluation Software determine the arc flash protection boundary and incident energy in front of exposed energized bus or conductors based on the 2021 version of NFPA 70E, Standard for Electrical Safety in the Workplace and using the methods and equations published by the IEEE 1584-2018 Calculation Method for the electrical power distribution shown on the New One Line Diagram.
- r. Arc flash boundaries and incident energy levels shall be calculated using the bolted short circuit current at equipment, which is calculated using the SKM Arc Flash Evaluation Complex Number method, the Recommended TCC and both the "highest" and the "lowest" available utility short circuit current.
- s. Arc Flash Reports will be created for both the "highest" and the "lowest" available utility short circuit current, the results will be compared, and the arc flash label will show the higher incident energy values and the longer arc protection boundary based on the tripping time of the overcurrent protecting device for the equipment.
- t. Arc Flash Reports will also be created for both the "highest" and the "lowest" available utility short circuit current, the results will be compared, based on the tripping time of the fastest tripping overcurrent protecting device within two tiers if the equipment.
- u. The Vendor will provide monthly status reports that include the schedule when surveys will be performed.
- v. Two (2) sites visits or (Virtual) Meetings will be held discuss the results of the power system study prior to the compilation of the Final Report and to present the Final Report.
- w. The SKM Power System Model shall be stored on a Shared File Folder within DROPBOX" by the Vendor. The Shared File Folder shall be accessible to the PCCA and could be used by PCCA or others on future power system studies projects.

2. Arc Flash Label Installation:

a. Vendor shall install labels on all buses and panels included in this study. Where needed, the PACC will provide lifts and an operator to assist the Vendor when accessing overhead bus ducts.

SECTION II: DELIVERABLES AND SCHEDULE

1. Deliverables

- a. Provide two (2) full report binders and one (1) electronic copy. Binders and electronic copy will be included in executive summary, input data report, short circuit analysis, protective device settings, arc flash analysis, and single line diagrams. The report covers will be signed and sealed by a professional engineer.
- b. Provide and install one (1) set of Arc Flash Hazard labeling of equipment described in 1 and 2, unless otherwise noted.
 - i. Labels for all 13.2kV, 480V and 208V switchboards, panels, and motor control centers are included.
 - ii. Labels provided shall be Brady nominal 4" by 6" self-adhesive vinyl labels or approved equal.

SECTION III: ASSUMPTIONS

The fees should be based on the following assumptions:

- **A.** Vendor will perform the site survey and data gathering for the entire site. Information required to include, not limited to:
 - a. Panel/Breaker manufacturer, model number, KAIC rating and existing trip unit, plugs, existing settings, and series number for all panels, switchboards, MCC, and switchgear.
 - b. Feeder conduction size, material, and lengths.
 - c. CT ratios, fuse manufacturer and model.
- **B.** PCCA will provide access to vendor to obtain all requested information pertaining to equipment types, settings, CT ratios, fuse sizes, etc. Contractor may request to open equipment to gather information upon client permission. Contractor, however, will not direct

- switching, energizing, or de-energizing of any equipment. The energizing or de-energizing of systems is at PCCA's sole discretion.
- C. Drawings attached are assumed to reflect an accurate single line diagram and scope of study. A reasonable amount of additional equipment is included and will be verified during the data collection process.
- **D.** PCCA will provide contractor with a contact at the utility for available utility service fault currents on the incoming medium voltage line(s) as follows:
 - a. Primary Voltage
 - **b.** High side line to line symmetrical fault current with associated X/R ratio
 - **c.** High side to ground symmetrical fault current with associated X/R ratio.
 - d. MVA of utility service
- **E.** The Vendor will be provided with an electronic copy of the floor plans showing electrical panel locations for feeder length take offs. If electrical floor plans are not available, hard copy prints will be made available to vendor for copying. Feeder lengths will be estimated by site walk-through and information provided by client.
- **F.** Feeder sizes on existing one line diagrams are assumed to be accurate; feeder sizes will not be verified. Where feeder sizes are unknown, wiring in compliance with NEC will be assumed.
- **G.** All work is during normal business hours.

SECTION IV: PRICING/COST

The Pricing / Costs for the RFP should be broken out as follows:

- **A.** As-Built Drawings and Existing Short Circuit Stu1dy, Protective Device Coordination Study, Arc Flash and Shock Hazard Analysis Review
- **B.** Data Collection, New One Line Diagrams and New Plan Drawings
- C. Engineering Services
- D. Arc Flash Label Installation

Additional Documents:

- 1. As-Built Drawings and Reports:
 - a) Electrical As-Built Drawings of PCCA Annex (Expansion): (130 Pages)
 - b) Short Circuit Study: (264 Pages)
- 2. Convention Center Exhibits
 - a) Exhibit AA Anti-Discrimination Policy
 - b) Exhibit BB Solicitation for Participation and Commitment Form
 - c) Exhibit CC- Best and Good Faith Efforts
 - d) Exhibit DD- Code of Conduct
 - e) Exhibit EE Drug-Free Workplace Policy
 - f) Exhibit FF Contractor Safety Checklist
 - g) Exhibit GG Sustainability Commitment Form and Guidelines
 - h) Exhibit HH Contractor Compliance Form

Download all Exhibits from PCCA Website:

https://paconvention.cobblestone.software/gateway/DocumentLibrary.aspx