RFP Arc Flash Study

Questions

1. Page 1 of 14 section 2 outlines the desired Scope of Work, however in this section it is unclear on the number of electrical assets that will require the systems modeling. Please provide clarification on the approach to pricing, without visibility on the size electrically.
    a. The approach to pricing on this project is based on the Qualification Based Selection (QBS) process developed by congress as part of the *Brooks Act*. Detailed facility One-Line drawings will be made available to the top ranked firm based on qualifications and competence in relation to the general scope of work. It is during this time that a detailed scope of work will be negotiated with the top ranked firm. Fees, price, work-hours, and other price-related terms will be negotiated after a detailed scope of work has been agreed upon.

2. Page1 of 14 section 2 states that the A-E will use ARCPRO software to determine the incident energy and SC current values. For a seamless model of electrical safety and reducing risk, it's recommended that from the PCC (Point of Coupling) (Utility), that the systems model be continuous. Using different modeling software loses this continuity. SKM Power Tools without a doubt has the ability to model on our medium voltage system and our transmission systems. Would you comment if SKM would be allowed for the complete systems model for a more coherent systems approach to electrical safety?
    a. The use of ARCPRO software is the only OSHA recognized method for calculating incident energy on system voltages exceeding 15 kV. More information can be found in 29 CFR 1910.269 Appendix E, Section III.A.

3. page 1 of 14 section 2 states NFPA 70E-2018, however their are no instructions on the "condition of maintenance" found in article 200-250 of the NFPA 70E-2018 standard. Please provide instructions/scope on maintenance condition existing, or if an unsolicited approach to electrical maintenance is what desired?
    a. The A-E may assume that the devices located at SURF have been installed and maintained per their manufacturers' recommendations, are in good working order, and will trip according to their published time-current characteristic curves.

4. page 1 of 14 section 3. Without an electrical one-line provided, would you mind providing a bus count that the bidder can quote to, which would level the field on price. The decision criteria would be vetted based on experiences and capability, and pricing would most nearly return to you competitive as long as the electrical size is clear to each of the bidders.
    a. Detailed facility One-Line drawings will be made available to the top ranked firm based on qualifications and competence in relation to the general scope of work. It is during this time that a detailed scope of work will be negotiated with the top ranked firm. Fees, price, work-hours, and other price-related terms will be negotiated after a detailed scope of work has been agreed upon. A precise count of the number of buses and system components to include in the study will be available after the detailed scope of work has been negotiated with the top ranked A-E. Please see one-line document

SDSTA Power Overview.pdf for a high-level overview of the power distribution system at SURF.

5. page 2 of 14 section 4. Please provide additional instructions on the format for the pricing of this response. i.e. how you want the pricing broke out?
    a. Project specific technical qualifications proposal only as stated in RFP

6. Please provide details on electrical safety training and or NFPA 70E training?
    a. Personnel performing the data collection and other work where electrical hazards may be present will need to meet Section 110.2 of NFPA 70E-2018. A complete list of A-E Services responsibilities with regard to environmental, safety, and health can be found under Exhibit B of the *2019-14 ARCH Flash Study Draft Contract*. A copy of this draft contract is available at http://sanfordlab.org/contract/rfp-architect-engineer-services-arc-flash-study. All persons at SURF performing electrical work shall at a minimum wear 8 cal/cm^2 arc rated clothing, steel toed shoes, safety glasses, hard hat, and reflective vests. Special PPE for underground access shall be provided by SDSTA. The A-E shall attend general safety orientation provided by SDSTA prior to performing work at the facility.

7. Do you have a defined stopping point which defines the equipment which will be included in the scope of this study? For example, due to cost, some of our clients only want to include distribution equipment, while others want to include everything fed by 60A protective devices and other clients want everything to be labeled. This significantly affects the amount of time to perform the study.
    a. The full extent of the study will be negotiated with the top ranked A-E and at this point a detailed scope of work will be developed and agreed upon. The initial intent is to have the study performed such that all electrical equipment can be labeled to comply with NFPA 70E and OSHA requirements for equipment arc flash and shock hazard labeling.

8. Do you have any onelines, plan view drawings, panel schedules, mcc drawings, or other documentation of the electrical distribution for the site?
    a. Detailed facility One-Line drawings and documentation related to MCCs, switchgear, switchboards, and panelboards included in the study will be made available while the detailed scope of work is under negotiation. Please see one-line document *SDSTA Power Overview.pdf* for a high-level overview of the power distribution system at SURF.

9. Will SURF provide an escort to assist with navigating the above-ground and below-ground data collection?
    a. Yes. Electrical personnel who are familiar with the facility's power system will be provided by SDSTA to assist with navigating the above-ground and below-ground data collection. These personnel may be needed to open necessary equipment doors, locks, etc. to assist in the collection of nameplate data, protective device settings, and to confirm whether exposed conductors inside the equipment are fixed or movable.

SDSTA personnel will de-energize and re-energize electrical equipment as needed for the collection of data.

10. Please quantify the 'high' voltage levels that require ARCPRO instead of SKM.
    a. The use of ARCPRO software is the only OSHA recognized method for calculating incident energy on system voltages exceeding 15 kV. There are relatively small portions (less than 5%) of the power distribution system at SURF that operate above 15 kV. This portion includes the 69 kV distribution between the two points that SURF connects to the utility and the transformers that step 69 kV down to 12.5 kV and 2.4 kV at two facility substations.

11. Please provide one-line diagrams of the system so we can quantify the effort.
    a. Detailed facility One-Line drawings will be made available to the top ranked firm based on qualifications and competence in relation to the general scope of work. These drawings will be made available during the time that a detailed scope of work is under negotiation. Please see one-line document *SDSTA Power Overview.pdf* for a high-level overview of the power distribution system at SURF.