Addendum #01 for RFB 0919335065

Project Name: Professional Design Services, CC Building Automation Upgrades

RFP #: 0919335065

Date: 1/14/19

The Addendum contains written information that modify, supplement, or replace information contained in the RFP dated 12/21/2018

Acknowledge receipt of this Addendum on the proposal response. Failure to do so may subject contractor to disqualification.

Addendum #1:

- Cover Page – Clarifications & Revisions (5 page)
- Attachment #01 – Pre-Bid Meeting Minutes with sign-in sheet (6 pages)
- Attachment #02 – One-Line Diagrams

Link for Attachment #02: https://dcigroupia.box.com/s/t8x2p1pumn0dl7mwq2uyxedp2kvd9cya

Addendum #1:

1) Clarifications:

The Schedule for the proposals has been adjusted to the following:

Questions Due:	January 16th, 2019 at 2:00 PM
Last Addendum Issued By:	January 18th, 2019 at 2:00 PM
Proposals Due:	January 23rd, 2019 at 2:00 PM
Selection of Engineer, Issue NOI:	January 30th, 2019
Execution of Contract	February 13th, 2019
Evaluation/Report:	February 14th, 2019 through September 31st, 2019

2) The following alternates have been added and pricing should be included in proposal:

a) ADD ALTERNATE #02- Provide a feasibility study for providing redundant emergency power to all buildings on the Capitol Complex. Evaluation shall include adding full redundancy for existing switchgear located at the Central Energy Plant, feed from a west and east power loop, potential locations for redundant switchgear, power capacity requirements, potential for building-level emergency power connections, and cost opinions for design and construction of recommendations. Proposal shall include the State holding the option to negotiate full design, bidding, and CA services based on results of the evaluation.
b) ADD ALTERNATE #03- Provide pricing to supply labor to open all electrical panels in lieu of the State of Iowa staff providing this service.

3) UNIT PRICE #01 – As part of this proposal, a unit price per panel shall be provided to perform infrared thermography imaging and provide an evaluation of the imaging results in comparison to previous results that will be provided to the successful design firm. (note this is a deduct unit price for Alternate #01 to reduce scope if needed).

4) 1.3.a.i.d- Delete and replace with "Labeling of electrical equipment as required by NFPA 70E is included in this scope of work. Labeling shall include upstream and downstream information.

5) Questions received and answers:

Q. Can you provide a list of buildings and panels per building or total panel count of panels needing the PPE updated?

A. This information can be found on the one-line drawings that will be provided as part of this addendum. Buildings included as part of this study include:

A. Central Energy Plant, except the generator control building
B. Facilities Management Center
C. Grimes Building
D. Hoover Building
E. Iowa State Capitol
F. Jessie Parker Building
G. Lucas Building
H. Ola Babcock Miller Building
I. Oran Pape Building
J. Parking Structure
K. State Historical Building
L. Wallace Building
M. Workforce Administration Center (no previous information available)
N. Workforce Development Building

O. Iowa Laboratories Facility – Ankeny
P. Iowa Utilities Board/Office of Consumer Advocate Building

Q. Are the One-Line Drawings for the buildings included in the study available before the proposals are due?
A. Yes, they will be provided as part of this addendum.

Q. Is there a preferred method or tool you would like to be used in calculating the incidental energies?
A. Calculation of exact incidental energies shall be performed using methods as detailed in Annex D.4 of NFPA 70E.

Q. What information can be provided regarding the locations with no PPE available? Who will be opening these panels for analysis?
A. As part of the base scope, the State of Iowa will be providing personnel for opening panels. As part of this proposal, and by alternate, interested firms shall provide a cost to provide these services. If there is no PPE available, DAS would like the engineer to provide recommendations on what changes could be made to decrease the level to allow for PPE. DAS will then either make the changes or arrange to open the panel during a scheduled shutdown.

Q. Are you able to shutoff power if needed?
A. This will need evaluated on a case by case basis. At this time, interested firms shall include time to evaluate options for access to these panels (assumed to be 15 panels). If additional scope is required to open these panels, it will be addressed after contracting.

Q. Are all Locations indoors, regarding labels and how weatherproof they need to be?
A. All labeling shall be assumed to be indoors or will be going in a weatherproof compartment.

Q. Will you want upstream and downstream devices be displayed on these labels?

A. Yes

Q. What information can be provided for the Grimes and Wallace buildings?

A. One-line drawings, load information, and original building drawings in PDF.

Q. Regarding Alternate 2, Are you looking for a switchgear setup identical to the one currently in use?

A. Alternate switchgear shall be capable of providing power to campus on both the west and east loop (separate switchgears are also acceptable). Switchgear does not necessarily need to have the exact features of the existing as long as it would be adequate for use in an emergency situation or when maintenance on the main switchgear is being performed.

Q. Regarding Alternate 2, What will the main purpose of this additional switch gear be?

A. To provide emergency switchgear operations in the even the main switchgear cannot be used. This includes when maintenance is being performed on the main switchgear.

Q. Regarding Alternate 2, Will feeder information be provided to create an alternate power feeding plan?

A. This will be provided to the successful engineering firm, but DAS does not anticipate the need for an additional power feed.

Q. Regarding the model, there isn't one available but was there one used in creating the previous study?

A. Yes

Q. Could you elaborate on what type of model you are wanting?

A. The model used to calculate the incidental energy for each panel.

Q. Do you have preferred modeling software?

A. No

Q. How long has it been since the last arc flash study was conducted?

A. The studies were last performed between 2009 – 2011, depending on the building.

Q. What level of detail is expected regarding the documentation of differences between the current arc flash study and the previous arc flash study?

A. I believe this comparison evaluation was only requested on the thermography. If so, evaluation shall include identification of, but not necessarily limited to:

a. High resistance connections
b. Hot spots
c. Over loaded cables
d. Over loaded fuses or breakers
e. Overheating in distribution equipment
f. Phase load imbalance
g. Heat build-up in overcrowded trunking
h. Thermal insulation breakdown (hot or cold)
i. Thermal loss
j. Damp ingress

Comparison between the previous thermography testing and new shall identify changes in the above items and to what degree of change.

End of Addendum #1

State of Iowa – RFP for Professional Design Services

RFP: 0919335065
Project Name: 9091.00 CCM Arc Flash & Power Distribution Improvements
Proposals Due: January 16, 2019 at 2:00 PM CST
Schedule:

Post TSB:	December 19th, 2018
Pre-Proposal Meeting On-Site:	January 7th, 2019 at 1:00 PM
Questions Due:	January 9th, 2019 at 2:00 PM
Last Addendum Issued By:	January 11th, 2019 at 2:00 PM
Proposals Due:	January 16th, 2019 at 2:00 PM
Selection of Engineer, Issue NOI:	January 23rd, 2019
Execution of Contract	February 6th, 2019
Evaluation/Report:	February 7th, 2019 through August 30, 2019

1. Overview:

a) The State of Iowa Department of Administrative Services ("DAS") is currently seeking design services from qualified design firms to update the existing Arc Flash study, create a power distribution preventative maintenance plan, and provide power distribution improvement recommendations for State owned buildings on Capitol Complex in Des Moines, IA and the Iowa Labs in Ankeny, IA.
   i) The following scope(s) and project characteristics have been identified for this project:
      (1) Arc Flash Evaluation
         (a) Evaluate existing panels at the Capitol Complex and Iowa Labs for compliance with the latest National Fire Protection Association (NFPA) 70E.
         (b) Calculate exact incidental energies
         (c) Provide recommendations for removing and/or mitigating electrical arc flash hazards, particularly where the existing label states no PPE available (approximately 10 - 20 locations).
         (d) Review labeling of electrical equipment and provide recommendations for corrections if deficiencies are discovered.
         (e) Review and identify safe work zones.
         (f) Identify the appropriate personnel protective equipment (PPE)
         (g) Provide a customized power distribution preventative maintenance plan.
      (2) Power Distribution
         (a) During the arc flash evaluation, the design team should also note any recommended improvements/maintenance to the power distribution system (including budgetary costs and prioritization/phasing). In particular, DAS would like the following issues examined, but others may be discovered during the arc flash analysis:
            (i) The Grimes building currently does not have the capacity to add electrical circuits if needed. Evaluate and provide recommendations to provide additional power capacity to the Grimes building.
            (ii) Evaluate the existing power distribution at the Wallace building to identify any degradation in systems, potential hazards, and suggested improvements. Scope of work will be limited to electrical panels, transformers, and electrical rooms with in the building.
   ii) ALTERNATE #01 – Provide a separate cost to provide infrared thermography imaging of all existing panels and provide an evaluation of the imaging results in comparison to previous results that will be provided to the successful design firm.

iii) ALTERNATE #02 (Coming by addendum) - Evaluate options for installing a redundant switchgear to the main switchgear, with the option to negotiate full design, bidding, and CA services based on results of the evaluation.
iv) As part of the RFP, the State holds the option to negotiate the design of future repairs and modifications with the successful design firm based on the results of the above evaluation.

2. Administrative

A. Construction Manager (DCI Group) has been engaged for this project to serve as an advisor to the Owner and to provide assistance in administering the Contract for Design between Owner and the Designer according to separate contract between Owner and Construction Manager.
B. Use of the State of Iowa's construction management software EADOC.
C. Agreement between the Owner and Designer will be a modified ConsensusDoc 803.
D. Designer shall acknowledge that all documents are copyright to the State of Iowa and need to be turned over in their native computer format.
E. The Engineer shall develop and distribute agendas and meeting minutes for all meetings during the design phase.
F. Proposal shall include Engineers proposed schedule for investigations, document development, and final deliverables.

3. Design & Construction Requirements

A. Staff for the State of Iowa will be responsible for opening panels for the engineer's analysis.
B. 10-20 panels have previously been identified as no personal protective equipment (PPE) available. Engineering firm shall first make recommendations for modifications to bring the equipment to a state where PPE is available to conduct further evaluations and modifications.
C. Existing Arc Flash reports, Thermography reports, and CAD drawings will be provided to the successful design firm. Accuracy of drawings shall be verified by the design firm. A 15-kv system level preventative maintenance plan is also available.
D. Existing models from the previous Arc Flash study are not available. As part of this project, the engineer shall turn over to the State all models in their native format and give full ownership to the State of Iowa.
E. Engineer shall determine the exact level of incidental energy as part of their analysis.
F. Perform one (1) kick-off meeting on-site to discuss overall project scope and needs.
G. Provide all disciplines necessary to accomplish the complete scope of the request for proposals.
H. Engineer shall provide detailed input of evaluation schedule to Construction Manager for overall incorporation into master schedule. Engineer shall prioritize arc flash reviews by building and provide reports for each building as the work is done.
I. Engineer shall include sufficient site visits and meetings to complete design work.
J. The Engineer shall include a meeting to review and discuss the draft of each building report. Review will be conducted with DAS Owner Representative, Construction Manager, and Facility Representative.
K. Engineer shall include any and all survey work required for completion of project.
L. Engineer shall include cost opinion of suggested repairs/modifications identified in their reports.

4. Deliverables

A. A draft of each Arc Flash report, Power Distribution Evaluation, and the preventative maintenance plan shall be provided in electronic format for review and comments by the State prior to finalizing.
B. A final Arc Flash report, by facility, in both electronic and bound hard copy. Reports shall be turned over a building at a time as evaluations are being completed.
C. A final power distribution preventative maintenance plan, in both electronic and bound hard copy.
D. A final evaluation, by building, for power distribution improvements, in electronic copy.
E. All Arc Flash models, drawings and other documents in their native format.

The Department requests the fee proposal from the respondents to this RFP be broken down as follows. These breakdown prices will be used as the schedule of values for billing purposes.

- Arc Flash Study
- Power Distribution Preventative Maintenance Plan
- Power Distribution Improvement Evaluation
- Reimbursable Expenses (Not-to-Exceed)

5. Open Discussion:

Q. What software would DAS like to be used for the arc flash modeling?

A. No preference on software, but the model must be turned over in the native format and with all files needed to make updates in the future.

Q. Is the model used for the previous arc flash studies available?

A. No.

Q. Have changes been made to the system since the original arc flash studies were done?

A. No major changes have been made to the power distribution into the building.

Q. Which buildings will be covered?

A. All buildings for which a one-line is attached, except for the generator control building at the Central Energy Plant (being done under a separate project).

Q. Can DAS provide existing one-line drawings?

A. Yes, they will be released by addendum

Q. Is there a target category or incident-level that DAS would like recommendations to reach?

A. Provide recommendations and budgetary costs on what, if any, modifications would be necessary to achieve each level of incident energy/hazard risk category.

Q. What kind of recommendations are needed for the Grimes distribution study? Does it include the replacement of the entire building switchgear?

A. Engineer should provide recommendations that can be implemented in phases, based on the current condition of the equipment and the arc flash ratings.

Q. Can DAS provide a drawing of the medium voltage distribution loop?

A. Yes, will be released by addendum.

Q. Does DAS want completely new labels everywhere?

A. Yes.

Q. Should the arc flash labels include upstream and downstream information?

A. Yes.

Q. Is there any design standard for the label? Is most of the equipment indoors?

A. No design standards exist for the Capitol Complex. The majority of the equipment to be labeled is indoors.

Q. What are the facility operating hours?

A. DAS electricians are available to escort from 6 am to 3 pm. Engineers may work until 5 pm if they do not require an escort.

Q. Will DAS provide electricians to open panels?

A. Yes, but engineer should also respond to Alternate #03 to provide an electrical contractor to open the panels.

Q. Can some panels be shut down to determine information needed for study?

A. This will be determined on a panel by panel basis.

Q. Are there any other known issues in addition to the Grimes capacity constraint and Wallace power distribution age?

A. Yes, there may be an issue with the transfer switch at the Historical Building that should be examined as part of this study.

Q. Can the engineer take pictures of the equipment for use in the study?

A. Yes, pictures may be taken of the equipment only.

DCI GROUP
DESIGN + CONSTRUCTION INTEGRATION

Project Name: 9091.00 Arc Flash Power Distribution Improvements

Meeting Purpose: Pre-Proposal Meeting

Date: Jan 7th, 2019 at 1:00 PM

Attendees

Name	Company	Phone Number	E-Mail Address
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