

DATE: August 14, 2017

SUBJECT: **Design-Build Contract with a Guaranteed Maximum Price
Letter of Interest**
Combined Heat and Power Expansion
University Park - West Campus Steam Plant
Project #00-04966

TO: Design-Build Teams:

The Pennsylvania State University intends to add a Combined Heat and Power (CHP) unit at the facility's West Campus Steam Plant (WCSP). The purpose of this project is to address continued campus growth and associated steam demand.

An Engineering Study has been completed to identify a CHP system that will best fit the parameters of our thermal and electrical demands. A 7 Mega-Watt combustion turbine has been identified as the system best suited. This capacity may be re-evaluated during program validation.

The project objectives include:

1. Design and Build a nominal 7 MW CHP System, including but not limited to a waste heat recovery boiler, duct burner, new stack, and natural gas compressor.
2. Include Black Start capability for the CHP system incorporating into or modifying the existing utility systems.
3. Replace the oldest steam source (Boiler 8).
4. Demolish Boiler 6, all associated appurtenances, and existing coal handling equipment.
5. Reduce greenhouse gas emissions by meeting or exceeding 16,000 MTCOe.

The Design-Build with a Guaranteed Maximum Price (DB/GMP) delivery method has been selected for this project. The initial phase for preconstruction/design will include the professional design services, CM preconstruction services and the preparation and submission of the GMP. This will be followed by the construction phase for actual construction work. Construction GMP will be established via a change order to the Design-Build agreement when the design is complete. Early involvement of key Design-Assist trade contractors is encouraged. Construction trade packages will be required to be competitively bid unless approved by the owner. Trade contractors identified as critical and included in your team's proposal will ultimately be required to provide detailed breakdown pricing and participate in third party review of pricing. If agreement on pricing is not reached, PSU will require competitively bid package(s). If you plan to self-perform any of the construction work please note this in your submission. Final confirmation of basis of design will be needed once a design-build team is selected.

Certain additional engineering analysis is expected to be included in the scope of work. This includes emissions modeling, noise/sound studies, and energy modeling. The design-build team will be required to prepare and submit all permitting documentation and applications for this project. This includes meeting

the requirements of state and local regulatory agencies. The team shall lead the project through public meetings that may be required by regulatory agencies. The team will lead the project through an environmental justice process that may be required by specific permitting agencies. A stack height variance may be required through the local municipality. The University will require the team to complete our environmental checklist at certain points in the design process. It is expected that all designs will be completed using 3D modeling/BIM/VR.

The WCSP must be kept fully operational during design and construction.

The total project budget, including all equipment and soft costs is \$35.0M. The budget is based on \$26.7M in construction costs, \$3.1M in design-build team soft costs, \$900,000 in owner soft costs, \$2.8M in owner contingency and \$1.5M in escalation/design-build team contingency. Improvements to the project schedule are anticipated but quality design and installation will remain a priority. Final project schedule will be coordinated with the selected design-build team.

Design is expected to start upon execution of the pre-construction contract (November 2017). Construction completion is expected by October 2021. The target date of November, 2019 has been established for Board of Trustees approval to commence construction.

Project site visits to the West Campus Steam Plant may be scheduled on August 21 or August 23, between 9:00am and Noon. Contact Paul Moser at pem4@psu.edu, as soon as possible, to schedule a date and time.

If you are interested in pursuing this project, please submit the following information:

1. Clearly identify the proposed design and construction entities that make up your team and describe their legal structure (ie: joint venture, etc.). Clearly identify your key project team members, such as project manager and project superintendent.
2. Include a statement detailing your team's unique qualifications for designing and constructing facilities of this type and scope. Include a sampling of your previous relevant project experience in this project type and design-build delivery method. Clearly identify who from your team is responsible for the examples shown.
3. Please discuss some of the key issues and risks that, in your opinion, are important in the design and construction of this project. Identify the key contractor disciplines that will be needed to make this project a success.
4. A brief statement outlining your design-build approach for this project and the added value that your team's process(es) provides.

Please submit to my office ten (10) hard copies of your response by **Noon on September 1, 2017** and please limit your submission to five (5) single-sided, 8-1/2 x 11 pages. If a cover letter is desired, include as a part of your (5) page submission. Include the name, phone number, and email address of your team's contact individual for this selection process on the first page of the submission. Send a pdf version of the submission to gak21@psu.edu, no later than the submission deadline. If you have any questions regarding this request please contact myself or Jeff Spackman, the Project Manager, at 814-863-2496 or djs47@psu.edu.

The University will use a qualifications based selection process with long list, short list and interviews. The Screening Committee will select a long list of approximately ten teams from the respondents to this letter. The long list results and Request For Proposal (RFP) will be posted to this website by **September 12, 2017**. PSU may require critical contractors to be identified in the RFP phase of selection. The RFPs will be due in my office, at **Noon on September 29, 2017**. Three teams will be chosen from the RFP respondents by **October 14, 2017**, with results posted to our web site. The Selection Committee will interview three teams, likely **between October 30 and November 6, 2017**. The results of the interviews will be announced at the Board of Trustees' meeting on November 10, 2017 and posted to our web site.

The University reserves the right to waive any informality in any or all proposals, and to reject or accept any proposal or portion thereof.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Kufner', with a stylized flourish at the end.

Greg Kufner
University Architect
(814) 865-8177, E-mail: gak21@psu.edu

cc: Screening Committee
William E. Sitzabee