

**Consultant Submittal Guidelines
for the**

***Center for Applied Energy Research
Purchase / Construct CO₂ Capture Process Plant
Facility Relocation***

***for the
UNIVERSITY OF KENTUCKY
Remote Research Location
Nucor Steel Gallatin (NSG) Plant
Ghent, Kentucky***

PROJECT NO. 2596.0

The University of Kentucky is requesting the services of a consultant to provide design services for the Purchase/Construct CO₂ Capture Process Plant Relocation located at University of Kentucky, Nucor Steel Gallatin Plant, Ghent, Kentucky. The design team's SF330 submittal should include ONLY the names of individuals that will comprise the project team, clearly indicating the specific role each will play in the overall project from schematic design (Phase 1) through contract administration (Phase 5). This is necessary for the primary design firm as well as for each technical consultant that the prime firm plans to use on the project.

ONLY DESIGN FIRMS THAT ARE PRE-APPROVED TO PERFORM WORK AT THE NUCOR STEEL GALLATIN PLANT CAMPUS IN GALLATIN, KENTUCKY WILL BE REVIEWED FOR SELECTION ON THIS PROJECT.

A LIST OF THE CURRENT APPROVED DESIGN FIRM IS INCLUDED WITH THIS POSTING. PROPOSALS FROM FIRMS NOT PRE-APPROVED WILL NOT BE CONSIDERED FOR SELECTION. ALL FIRMS SUBMITTING PROPOSALS SHOULD BE IN GOOD STANDING WITH NUCOR STEEL GALLATIN.

THE UNIVERSITY RESERVES THE OPTION TO SELECT THE DESIGN TEAM BASED ON THE INITIAL SUBMITTAL WITHOUT CONDUCTING INTERVIEWS. PROPOSALS SHOULD ADDRESS AND INCLUDE ALL INFORMATION REQUESTED IN THIS RFP TO ALLOW THE SELECTION COMMITTEE TO UNDERSTAND THE PROPOSING TEAM'S QUALIFICATIONS AND EXPERIENCE APPLICABLE TO THIS PROJECT.

The following list is the criteria, including the multiplication factors; by which each design team's submittal will be evaluated. Bearing this in mind, each team's submittal should clearly and thoroughly address all criteria to allow objective evaluation of the team's previous experience and capability to successfully complete this project. All submittals should be in .PDF format and give

specific project examples, including photographs, drawings, resumes, schedules, budget analyses, etc. to properly substantiate the firm as well as individual experience in all categories.

The submittal should include a BRIEF EXECUTIVE SUMMARY (maximum of 2 pages) as a cover to the submittal, summarizing all evaluation criteria: BE SURE TO SPECIFY WHO THE PROJECT MANAGER WILL BE IN THE EXECUTIVE SUMMARY.

The consultant should focus their presentation toward the issues and needs that are unique to this project. Firms expressing interest in this project should demonstrate what special experience or attributes the firm/team has that makes it the most qualified for this project.

The University of Kentucky is dedicated to promoting minority participation in University work. Consultants are encouraged to consider using the services of minority sub-consulting firms where the demands of the project will permit. Please ensure that your submittal includes any initiatives related to meeting the university's goal of 10% minority/disadvantages business enterprise participation.

EVALUATION CRITERIA

(Scoring for each category will be as indicated herein).

The following criteria will be used in the evaluation of the submittals using an overall 100 point scale:

I. PRIMARY FIRM'S QUALIFICATIONS (35 pts)

Indicate relative experience coordinating and managing a design team for projects of similar size, type, and complexity as this one. The firm shall demonstrate detailed methods that will be used to ensure that the schedule is met, and the project budget is maintained during design and construction. The submittal should outline proven procedures for monitoring construction and resolving issues in the field. Provide the organizational structure of the firm and the background of individuals that will be assigned to this project.

II. TEAM'S RELEVANT EXPERIENCE (35pts)

Members of the consulting team should have a previously established working relationship. The team should demonstrate experience working together on similar projects. Include a list of projects highlighting this experience. The scope of services required for this project is heavily focused in industrial engineering, specifically in mechanical piping and utility services. Structural services will be needed to address foundations

III. PROJECT MANAGER'S QUALIFICATIONS (30 pts)

Indicate the Project Manager's experience with planning, managing, and coordinating all aspects of a project of this scale and complexity, and the management of sub-consultants in a professionally competent manner. The project Manager should have recent experience with other projects of a Nucor Steel Gallatin facility; the submittal should explain the significance of each project listed. The Project Manager should demonstrate expertise in addressing and successfully solving problems in an efficient and architecturally creative manner. (Please include a maximum of three projects to demonstrate experience.) The Project Manager should show the commitment necessary to adequately manage and coordinate the project, including any sub-consultants, through all phases of research, design, contract documents, and construction administration, maximizing project funds, while maintaining an aggressive project schedule. The submittal shall also list the size and number of projects that the Project Manager is currently assigned.

The consultant should be careful to address each criterion, as neglect of any section will result in a lower total score for the firm. Do not assume those reviewing your submittal are already familiar with your firm. Your presentation should be concise and to the point. Emphasis should be given to a few examples, which clearly show the team's qualifications, rather than numerous examples, which are unrelated to the project.

For further information concerning the scope of this project, contact Keith Ingram, Project Manager, at (859) 218-3108, or kingram@uky.edu.

Please use the "Submit Proposal" button next to the project listed on CPMD's website to submit your documents electronically in pdf format

AND

Please provide six (6) hard copies of your proposal delivered to:

**University of Kentucky
Capital Project Management (CPMD)
Attn. Quentine Stone
411 South Limestone Street
Room 222 Peterson Service Building
Lexington, KY 40506-0005**

**BOTH ELECTRONIC AND HARD COPY SUBMITTALS MUST BE RECEIVED NOT LATER
THAN 3:00 PM EST,
ON DECEMBER 12, 2022.**

Submittals received after this time will not be reviewed.

Executive Summary
for the

Center for Applied Energy Research
Purchase / Construct CO₂ Capture Process Plant
Facility Relocation

for the
UNIVERSITY OF KENTUCKY
Remote Research Location
Nucor Steel Gallatin (NSG) Plant
Ghent, Kentucky

PROJECT NO. 2596.0

PROJECT SCOPE. \$1,775,000

A. INTRODUCTION

The University of Kentucky has been selected by the U.S. Department of Energy National Energy Technology Laboratory for a re-engineer, relocate, operate, and study a small pilot Carbon Capture Process Facility. The current program is located at the E.W. Brown Generating Station in Harrodsburg, Kentucky. All current research equipment will be relocated to the Nucor Steel Gallatin Plant, in Ghent, Kentucky. Koch Modular Process Systems (KMPS) completed the original design and construction of the small pilot Carbon Capture Process as six (6) interconnected process modules plus several separately installed pieces of equipment. Four of the six modules will be removed from the E.W. Brown Station, relocated, and reinstalled at Nucor Steel Gallatin in a similar configuration. KMPS will complete the re-engineering Carbon Capture Process of the four modules, plus separately installed equipment.

B. PROJECT DESCRIPTION

The design will consist of preparation of design documents in accordance with the Proposed Project Schedule.

The University of Kentucky desires the services of an experienced and highly qualified firm to provide:

1. Detailed engineering design of the balance of plant required for installation of a pilot scale carbon capture system at NSG per input from UK.
2. Preparation of a bid package for a general contractor for site preparation, installation, and start-up of the pilot scale carbon capture system and balance of plant.



Existing Pilot Scale Carbon Capture Process Facility
Installed at E.W. Brown Station, Harrodsburg, Kentucky

C. PRELIMINARY PROJECT BUDGET

TOTAL CONSTRUCTION BUDGET* \$1,000,000

TOTAL PROJECT SCOPE \$1,775,000

* The Consultant's Phase 1, 2 & 3 cost estimate submittals for the project are not to exceed this specified amount. Budget compatibility is the responsibility of the Consultant and design of the project beyond the available construction dollars listed above is unacceptable.

D. PRELIMINARY PROJECT SCHEDULE

The following is the tentative schedule presently proposed for this project:

**Proposed Project Schedule
Center for Applied Energy Research
Purchase/Construct CO₂ Capture Process Plant
University of Kentucky
Posting Date: November 28, 2022**

NO.	ACTIVITY BEGINS	ACTIVITY	DUR
1	Mon, 28 Nov 2022	Post Advertise for Consultant RFP	14
2	Mon, 12 Dec 2022	Consultant Submittals Due	2
3	Wed, 14 Dec 2022	Consultant Shortlist / Selection Meeting	7
4	Wed, 21 Dec 2022	Consultant Fee Negotiation Meeting	2
5	Fri, 23 Dec 2022	Consultant Fee Finalized	5
6	Wed, 28 Dec 2022	Consultant Contract Routed for Approval	5
7	Mon, 02 Jan 2023	Consultant Contract Sent to Frankfort	0
8	Mon, 02 Jan 2023	Initial Design Kick-off Meeting	42
9	Mon, 13 Feb 2023	25% Complete Design Review Meeting	35
10	Mon, 20 Mar 2023	50% Complete Design Review Meeting	35
11	Mon, 24 Apr 2023	75% Complete Design Review Meeting	42
12	Mon, 05 Jun 2023	100% Complete Bid Documents Review Meeting	7
13	Mon, 12 Jun 2023	Bid Documents Submitted to CPMD	2
14	Wed, 14 Jun 2023	Bid Documents transmitted to University Purchasing	42
15	Wed, 26 Jul 2023	Receipt of Bids	14
16	Wed, 09 Aug 2023	Award of Low Bidder Contractor	182
17	Wed, 07 Feb 2024	Substantial Completion	14
18	Wed, 21 Feb 2024	Final Completion	350
19	Wed, 05 Feb 2025	One Year Warranty Completion	