The University of North Carolina at Charlotte
Project Management
Facilities Management 2nd Floor
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Charlotte, N.C. 28223-0001
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PROJECT: **UNC Charlotte**
Electrical Grid Automation Phase 1
Design and Construction Administrative Services
Code 42426 Item 316

Thank you for your interest in the subject project. This information is being provided to all firms which express an interest in the design of the project. Limit the size of your submittal document to no greater than 12½ inches in height and 9½ inches in width. **Maximum 40 pages – including standard forms, cover letters, and University issued *Submittal Cover Sheet*s**, but excluding the cover, tabs, separators, clear covers, blank pages, or cardstock backs. **Actual page counts will be derived from the electronic pdf submittal**. Do not include covers, blank pages, tabs, separators, etc. in your electronic submittal.

Submittals are due by 2:00pm, Thursday, August 7, 2025.

Do not transmit any submittal information via email.

Submittals **must** include the cover sheet, Sections I and II of the Standard Form 330, the Designer's Supplemental Information Form, along with any additional information considered appropriate. Please deliver **one** copy of the submittal, along with **one** electronic copy in pdf format USB drive attached to a printed submittal at the address noted above. Hard copy should be bound together as a document and the digital submission should be assembled into a single pdf file.

All submittals will be reviewed by the University Designer Evaluation Committee. The preliminary evaluation process will be conducted in August 2025 and firms selected for interviews will be notified at that time.

Please deliver all submittals to LaKeya Hewlin at the address written above. Any questions about the project should be directed via email to Patrick Jones at pajones@charlotte.edu**.** Please do not contact other UNC Charlotte staff.

Sincerely,

Jeanine Bachtel
Director of Project Management

Design Services and Construction Administrative Services
Code **42426** Item **316**

I. PROJECT DESCRIPTION

The existing campus medium voltage electrical distribution grid is manually operated and does not allow Facility Management staff to monitor the grid in real time, collect data and control the campus medium voltage system. Automating the electrical grid will allow remote control capability, allow operators to open and close circuits without being exposed to electrical shock hazards, and allow for faster response time when an electrical event requires a transfer of power source. This project would replace our main campus substation switchgears (SUB-SW-1 and SUB-SW-2) which provide power to 95% of our campus buildings.

EXPECTATIONS OF THE DESIGNER

The Design team must include professionals who can demonstrate high standards of accomplishments and knowledge in the following areas:

- Demonstrated experience in design and construction of electrical projects, preferably in a higher education setting
- Demonstrated ability to provide cost-effective design measures for automated electrical facilities.
- North Carolina State Construction Office, UNC System, and Department of Insurance requirements and procedures
- Working with multiple user groups, committees, and University customers
- Designer must also verify that the firm is independent of any manufacturers, contractors, and suppliers.

II. SCOPE OF WORK:

The Designer shall provide combined SD/DD & CD documents and estimated construction costs for University Review. Designer shall also provide Bidding facilitation, contracts, construction administration, and inspection services for the electrical automation installation.

The Designer shall schedule meetings with designated University representatives to review each design phase of the project, to include budget and schedule.

The Designer shall submit all necessary documents, as required and if needed, for an informal North Carolina State Construction Office (SCO) review.

Some of the important design elements will be:

- Evaluate the advantages and disadvantages of Outdoor Pad Mounted Metal Clad and Pad Mounted Metal Enclosed Switchgears, as it pertains to the Campus needs and capabilities.
- Evaluate existing network infrastructure present at substation for access and compatibility with the new switchgear options.
- Evaluation of existing conditions and recommendations for repairs.
- Make provisions on construction documents for connecting the new switchgears to the Electrical Power Monitoring System. Coordinate with UNC Charlotte Facilities Information Systems group.

- Create a Phasing Plan to minimize downtime. The EOR shall work closely with UNC Charlotte FM group and Duke Energy to coordinate service shutdowns ahead of construction start.
- Update the Campus Medium Voltage Electrical Studies (Arc Flash, Short Circuit, and Selective Coordination).
- Provide new Breaker Settings.
- Safety of University visitors, students, and personnel
- Protection of existing facilities throughout construction

III. DESIGNER SELECTION CRITERIA

As detailed in the North Carolina Administrative Code (01 NCAC 30D .0303), the University's Design Selection Committee will use the following in evaluating qualifications:

1) Specialized or appropriate expertise in the type of project
2) Past performance on similar projects.
3) Adequate staff and expertise for the proposed project design team.
4) Current workload and State projects awarded.
5) Proposed design approach and review methodology for the project.
6) Recent experience with project costs and schedules.
7) Construction administration capabilities.
8) Proximity to and familiarity with the area where the project is located.
9) Record of successfully completed projects without major legal or technical problems.
10) HUB participation on the design team and/or consultants
11) Other factors that may be appropriate for the project

IV. SCHEDULE

The design of the project will begin immediately after a contract is executed and will proceed through bidding the project in April 2026. Actual construction will be determined based on availability of materials and coordinating with University Engineering and Duke Energy.

V. BUDGET

The total project budget is $1,350,000, which includes design fees, soft costs and all associated construction costs.

This sheet is to be the cover sheet for the submittal. If the submittal is bound in a binder, this will be the top sheet visible upon opening the binder cover.

SUBMITTAL

August 7, 2025

DESIGN SERVICES AND CONSTRUCTION ADMINISTRATION
UNC CHARLOTTE
Electrical Grid Automation Phase 1

FIRM INFORMATION

_____	_____
Electrical Engineering Firm & NC License #	Location (Headquarters & Office Serving this Project)

Electrical Grid Automation Phase 1
UNC CHARLOTTE

Design Firm _____
Contact Name _____
Phone: _____
Email: _____

DESIGNER'S STAFFING INFORMATION (To follow cover sheet)

Instructions: Provide information listed below regarding personnel who will be assigned to this project. One person may be assigned to more than one responsibility. Add additional sheets as necessary. In addition to this form, design firms are encouraged to submit resumes for all personnel who will work on the project. This information is important to the University and should accompany submittals. This form should be attached to your cover letter or located in the front of your submittal.

PRINCIPAL IN CHARGE

Name: _____ License # _____ Office Location _____
List of most recent North Carolina State-owned projects on which this person has participated:

Past or Current Projects	% Complete	Location	Responsibility

DESIGN LEADER

Name: _____ License # _____ Office Location _____
List of most recent North Carolina State-owned projects on which this person has participated:

Past or Current Projects	% Complete	Location	Responsibility

CONSTRUCTION ADMINISTRATOR

Name: _____ License # _____ Office Location _____

List of most recent North Carolina State-owned projects on which this person has participated:

Past or Current Projects	% Complete	Location	Responsibility

Submitted by: _____

Signature: _____