North Carolina State University

Electrical Testing - Centennial Campus Substation – Reconstruction and Upgrades

Project Summary

January 29, 2026

Project Description

This project reconstructs and upgrades the portion of the Centennial Campus Substation that failed in April 2021. Replacement of the power transformer, 230kV high-side bus work and dead-end structure, 23kV low-side bus work and dip structure, high-side circuit switcher, and protection and control circuits. This project will also require coordination with Duke Energy Progress for high-side terminations and low-side metering.

Project Budget & Scope

NC State seeks the services of an Electrical Testing Firm to join the team to provide services for the project through construction and commissioning in support of a $5,500,000 overall project to reconstruct a portion of the Centennial Campus Substation.

The scope summary includes, but is not limited, to:

1. Providing, connecting, and operating testing equipment, including cables, power supplies, safety equipment, and other appurtenances necessary to perform the tests specified by the commissioning script and by the referenced sections in the NETA AT-1 testing standard for each system
2. Relay testing, including but not limited to operating test sets and making connections.

Project Site

The project is located at 2340 Circuit Drive in the Centennial Campus Precinct.

Project Schedule

The construction of the new substation began in 2025, with the new transformer for the project being set in December 2025. Construction of the rest of the substation will continue through the first half of 2026, with all pre-energization testing beginning in April 2026 to be completed by September 2026. Project anticipates energizing the new substation in October 2026, with some post-energization testing and commissioning to occur in November 2026.

Critical Selection Factors

Testing firm must be NETA accredited to perform this testing, but does not need to be a licensed Professional Engineer.

Interested firms can participate in the process by submitting a current SF 330 form and addressing the following in a written proposal. Please note that only electronic copies of the proposal, submitted via email to the project manager, are requested. Most of the criteria listed below can be accommodated in sections A-G of the 330 form. Section H can be used for any additional information. The total submittal, including letter of interest, is limited to twenty (20) sheets of paper. Submit the one page reference form as a separate document in the submission email. Firms are requested to assure receipt of proposals at the address listed below by 2:00 PM on February 20, 2026.

Criteria

1. Experience and expertise with similar projects.
2. Past performance on similar projects.
3. ~~Experience in design projects to be part of an existing campus context.~~
4. Adequate staff and proposed consultant team – qualifications and examples of previous collaborations.
5. ~~Historically Underutilized Business representation in the proposed consultant team~~
6. Current workload and State projects awarded.
7. Proposed testing approach or methodology.
8. ~~Recent experience with project cost estimates and schedule adherence.~~
9. ~~Construction administration capabilities.~~
10. Record of successfully completed projects without major legal or technical problems.
11. A minimum of three references with **current** contact information, including a phone number and an email address.
12. Other (which may be appropriate to the project)
    -NETA Certifications
    -References must use the attached Reference Form, and references are preferably from municipal, co-op, or other educational clients.

Selection Process

Following the receipt of proposals, a University Interview Committee, appointed by the Secretary to the University Board of Trustees Building and Property Committee, will shortlist, interview, and make a recommendation of selection to the University Board of Trustees Buildings and Property Committee.

Questions/Proposal Submittal

In order that the selection process is as objective as possible, do not contact members of the Board of Trustees, or any university officials other than the project manager. All questions and project submittals are to be directed to:

James Cox
Jrcox4@NCSU.edu

Submit Questions to: CC Substation Testing Questions or directly to the Project Manager, James Cox.

- Responses to Questions will be posted at: NCSU Question Responses
- All questions must be submitted by February 10, 2026 at 5:00 pm
- Responses will be posted by February 13, 2025 at 5:00 pm