

Team Profile
May 1, 2026

Reexamining Nuclear Power in the Carolinas and Beyond was a Bass Connections project that brought together Duke University students and faculty during Academic Year 2025–2026 to examine the long arc of nuclear power development in the U.S. Southeast, with particular attention to North Carolina. Building on groundwork laid by the project’s initial iteration in 2024–2025, the 2025–2026 team focused on a consequential and timely policy question: what historical forces, institutional arrangements, and regional conditions lay behind Duke Energy’s December 2025 submission of an Early Site Permit (ESP) application to the U.S. Nuclear Regulatory Commission for potential new nuclear development at the Belews Creek site? The team’s work sought to equip stakeholders and decision-makers with historical context essential for interpreting contemporary nuclear policy debates.

The 2025–2026 team was organized into five working groups, each responsible for investigating, chronicling, and interpreting a distinct historical period in the region’s nuclear history. These periods corresponded to sections of a planned Nicholas Institute report on nuclear development in the Carolinas. Part I, The Southern Power Province (1904–1949) examined the rise of electric power in the South and the institutional foundations established by early utilities and public–private partnerships. Part II, Temple of the Atom (1949–1966) analyzed the postwar embrace of nuclear technology and the roles of universities, federal programs, and scientific optimism. Part III, A Great Bandwagon Market (1966–1978) traced the rapid expansion of commercial nuclear power driven by vertically integrated utilities and favorable regulatory structures. Part IV, Turning Points (1978–2013) addressed accidents, cost overruns, regulatory reform, and intensified public scrutiny. Part V, A “New Era” (2013–2025) situated advanced reactor designs, decarbonization pressures, and Duke Energy’s ESP filing within this longer historical arc.

Across these periods, the team identified a consistent pattern: nuclear development in the Southeast was shaped by a durable alignment among research universities, business-friendly political administrations, vertically integrated utilities, and regulatory frameworks designed to support large, long-term capital investments. This institutional continuity helped explain both the region’s early leadership in nuclear power and renewed interest in new nuclear capacity.

A defining challenge shaped the 2025–2026 iteration of the project. In April 2025—near the close of the first team’s work—the National Endowment for the Humanities unexpectedly canceled an awarded Humanities Collections and Reference Resources grant intended to support the project’s continuation. As a result, the second iteration was forced to pivot quickly and refocus its goals in real time. The team pursued smaller funding opportunities through applications to the Hagley Museum and Library and the American Historical Association, which were ultimately unsuccessful. These setbacks nevertheless prompted productive reassessment of scope, audience, and feasible outcomes.

In response, the 2025–2026 team made a strategic decision to concentrate on producing a rigorously researched, policy-relevant publication through the Nicholas Institute for Energy, Environment & Sustainability. Experiential learning remained central to

the project, including a late-March site visit to the Barnwell Disposal Facility and the Alvin W. Vogtle Nuclear Power Plant. Together, the team's adaptability, collaborative structure, and sustained engagement beyond the classroom demonstrated the strengths of interdisciplinary research through Bass Connections.