

Request for Proposals For Regional Resilience Hub Energy Feasibility Assessments

Date of Issue: November 24, 2025

Submission Deadline: December 12, 2026 @ 5:00 pm

Direct all inquiries concerning this RFP to:

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Purpose

Central Pines Regional Council (Central Pines) is seeking proposals from qualified firms to conduct technical feasibility assessments for a set of community-serving facilities across the region. The objective is to determine what upgrades are needed to increase each site's ability to provide reliable, resilient, and clean energy during both normal operations (bluesky conditions) and emergency events (gray-sky conditions).

All assessments will evaluate the feasibility, infrastructure requirements, and cost implications of the following technologies:

- Electrification of building systems (heating, cooling, water heating, and other fossilfuel end uses)
- Battery energy storage systems (BESS) for backup power, load management, and demand-charge reduction

Some assessments will also evaluate the following technology:

• Solar photovoltaic (PV) installations (rooftop or ground-mounted, where applicable)

Findings will guide planning for a potential regional network of resilience hubs. Because the final set of facilities is still being identified, Central Pines requires per-site pricing for the assessment work. The total number of sites will be determined based on available funding and the proposed cost structure.

Background

Central Pines is partnering with local governments to explore a regional network of community resilience hubs located in libraries, recreation centers, community centers, and similar facilities. These hubs will:

- Provide backup power and essential services for communities during disasters.
- Serve as locations for ongoing sustainability, clean energy, and community resilience programming during normal operations.

Many candidate facilities rely on fossil-fuel generators or lack sufficient backup power. This project will clarify what technical upgrades—including electrification, solar, and energy storage—are feasible at each facility and what investment would be required.

Participating jurisdictions currently include Chatham County, Orange County, Durham County, the Town of Chapel Hill, the Town of Carrboro, the Town of Hillsborough, and the

City of Durham. Additional communities may be added depending on timing and available project funds.

Central Pines supports local governments across Chatham, Durham, Johnston, Lee, Moore, Orange, and Wake counties. The resilience hub initiative is part of a broader effort to strengthen community resilience through regional collaboration and long-term sustainability planning.

Scope of Services

The firm selected will perform a technical feasibility assessment for each assigned facility. The assessment must estimate investment needs, technology options, and a potential timeline for energy resilience upgrades.

1. Site Visits & Data Collection

- Document existing electrical infrastructure, fossil-fuel equipment, HVAC and water heating systems
- Assess roof conditions and site constraints relevant to solar PV
- Identify loads essential for emergency operations (critical loads)

2. Electrification Feasibility Analysis

- Evaluate replacement options for fossil-fuel end uses
- Identify specific equipment to be replaced (with sizing and technology options)
- Estimate required electrical upgrades (service, panels, wiring, etc.)
- Provide cost estimates and expected equipment lifecycle considerations
- Identify any related impacts (structural, mechanical, or operational)

3. Battery Energy Storage Assessment

- Determine feasibility for resilience (backup power), demand-charge reduction, or both
- Identify realistic storage configurations for each facility
- Assess potential to replace or reduce reliance on existing generators
- Provide cost estimates and anticipated benefits

4. Solar PV Feasibility (as applicable)

- Evaluate rooftop or ground-mounted system viability
- Assess shading, structural considerations, and interconnection potential
- Provide preliminary system sizing ranges and cost estimates
- * Price this component separately as some sites may not require PV analysis *

5. Financial and Implementation Analysis

- Provide site-level cost estimates for each recommended technology
- Estimate operational savings (where applicable)
- Offer a general timeline for planning, procurement, and installation phases
- Identify permitting or regulatory considerations

Final Deliverables

A comprehensive technical report for each site including:

- Feasible electrification, solar, and storage options
- Recommended replacement technologies and system configurations
- Preliminary system diagrams or conceptual layouts
- Required infrastructure upgrades
- Estimated capital and operating costs
- Potential cost savings or load-management benefits
- Feasibility of generator replacement using clean energy technologies
- Potential for emergency backup power during outages
- A summary matrix comparing all assessed sites, including:
 - Technology readiness
 - Estimated costs
 - Implementation considerations

Proposal Requirements

Proposals must include:

1. Cover Letter & Project Understanding

- Overview of the firm
- Understanding of resilience hub objectives and the technical scope

2. Firm Qualifications

- Relevant experience with building electrification, solar analysis, battery storage,
 and technical feasibility studies
- Examples of similar past projects

3. Project Team

Resumes for key personnel

4. Approach & Methodology

- How site visits will be conducted
- Approach to cost estimation and timeline development

5. Schedule

Expected timeline for each assessment phase

6. Cost Proposal

- Per-site cost for the base assessment (electrification + battery storage)
- Additional per-site cost for optional solar PV feasibility analysis
- Any travel or other billable expenses

7. References

• At least three references for similar technical projects

8. Letter of Interest including:

- Relevant clean energy project experience
- Years of professional experience and certifications
- North Carolina office locations (if applicable)

Submission Instructions

All bids shall be emailed to Alana Keegan at akeegan@centralpinesnc.gov by 5:00pm on Friday, December 12, 2025. No bids will be accepted after this date and time.