



Job Posting #:	14FB02102026	Posting Type:	External
Job Title:	Grid Modernization Engineer	Grade/Classification:	109/Exempt
Department:	Energy Solutions and Clean Energy	Location:	Fredericksburg, VA

Job Description

Overview

We are seeking an innovative, systems-minded Grid Modernization Engineer to help shape the future of the electric grid. This position plays a pivotal role in advancing REC’s modernization strategy — integrating battery storage, distributed generation, DERMS, smart grid devices, energy efficiency, electric transportation, and behind-the-meter technologies to enable a cleaner, more intelligent, and more resilient energy network.

The ideal candidate is a professional engineer (P.E.) or equivalent with a passion for reimagining how electricity is generated, stored, and consumed. You’ll lead initiatives that fuse engineering excellence with emerging technology, driving real-world projects that redefine how our members interact with the energy system.

Role and Responsibilities

Grid Modernization Strategy

- Lead the planning, design, and integration of advanced grid technologies including BESS, distributed energy resources (DERs), microgrids, and demand response platforms.
- Develop and execute technical roadmaps for strategic electrification, including EV charging infrastructure, fleet electrification, and smart-building energy solutions.
- Design and optimize hosting capacity models and interconnection processes to expand distributed resource adoption across the distribution network.
- Translate system data into actionable insight through DER modeling, power flow analysis, and benefit-cost evaluation for grid modernization initiatives.
- Collaborate with BrilliT, Vividly Brighter, and REC engineering teams to advance digital grid transformation through analytics, automation, and cybersecurity readiness.

Innovation and Emerging Technologies

- Evaluate, pilot, and deploy technologies in battery energy storage, distributed generation, inverter-based resources, and grid telemetry.
- Explore frontier programs such as vehicle-to-grid (V2G), vehicle-to-home (V2H), community microgrids, and distributed flexibility markets.
- Identify grant and funding opportunities (DOE, state, or cooperative innovation initiatives) to accelerate REC’s modernization and resiliency investments.
- Drive continuous improvement by incorporating learnings from pilot programs into full-scale deployments.

Technical Leadership and Collaboration

- Provide engineering leadership on multi-disciplinary project teams, from concept through commissioning.
- Collaborate with distribution planning, operations, and IT to integrate new technologies seamlessly into REC’s grid ecosystem.
- Serve as a technical liaison to state and national collaborative groups, research institutions, and standards

organizations shaping the future of distributed systems.

- Mentor early-career engineers, fellows, and interns in modern grid practices and electrification system design.

Member and Stakeholder Engagement

- Partner with C&I members to design electrification and resiliency solutions that advance their ESG and sustainability goals.
- Create and deliver technical outreach programs for members, contractors, and community stakeholders on EV infrastructure, DER participation, and distributed resource economics.
- Represent REC and its subsidiaries at industry conferences, working groups, and thought-leadership panels, amplifying our leadership in cooperative innovation.

OTHER DUTIES AND RESPONSIBILITIES

- Support various grant efforts as needed, which can include developing project concepts with input from various groups across REC, data procurements/analysis, developing project budgets, site visits, presentations to internal/external stakeholders, and execution if awarded.
- Perform other duties as assigned.

Qualifications and Education Requirements

A bachelor's degree in Electrical Engineering is required, with a master's degree or higher preferred, and a Professional Engineer license is strongly desired. Candidates should have at least five years of experience in strategic or beneficial electrification, transportation electrification technologies, electric vehicle systems, charging infrastructure, battery energy storage systems, Smart Grid applications, and emerging technologies. A solid understanding of DERMS, AMI, SCADA, power quality, and interoperability standards—such as IEEE 1547 and FERC 2222—is essential. Experience working for an electric utility is preferred, along with familiarity using power-flow modeling tools, particularly Milsoft's WindMil software. Strong financial acumen, including the ability to perform benefit-cost, lifecycle, and rate-impact analyses, is required. Additional knowledge of federal and state policies, electric legislation and grants, and utility rate schedules is also considered a plus.

The ideal candidate demonstrates strong leadership abilities, with a proven capacity to influence and inspire others, model REC's core values of Caring, Respect, Integrity, and Service, and foster a culture of accountability. They should be able to make independent decisions with limited supervision and demonstrate strong critical-thinking, problem-solving, and process-improvement skills. Excellent written and verbal communication abilities are essential, as well as proficiency with Microsoft PowerPoint, Excel, Word, and Outlook. The role also requires the ability to build and maintain positive working relationships with members, EVSE service providers, electric dealer networks, state agencies, and other electric utilities.

Candidates must demonstrate proficiency in product design, development, and deployment, supported by prior experience. They should be skilled in managing multiple diverse projects while implementing organizational policies and procedures. Experience creating templates, developing spreadsheets, and leveraging database or project-management software is required. The role also involves formulating and advising on clean energy, energy-efficiency initiatives, DER strategy, and strategic or beneficial electrification programs within REC. An in-depth understanding of distributed generation, energy storage, and the broader DER sector—particularly within product development—is essential. Knowledge of energy-efficiency practices, building retrofits, and state energy-efficiency building codes is also important. The candidate must demonstrate the ability to anticipate business or regulatory challenges and propose improvements to processes, products, or services.

This position is primarily an inside office role with typical administrative working conditions; however, extended hours may occasionally be required. Travel to meetings, seminars, and conferences is expected, and overnight travel may be necessary at times. The role is also subject to working irregular or extended hours during emergency conditions. Additionally, the position includes supporting speaking engagements and communication requests for community events within the Cooperative's service territory, as well as representing REC at conferences, webinars, and seminars.

HOW TO APPLY

Internal Applicants: Interested parties should submit an internal application via the HR HUB OR resume via rechr@myrec.coop.

Applicants: Use our <https://www.myrec.coop/careers> to apply for the opportunity. Please indicate the Job Posting ID #14FB02102026

Deadline: Open until filled

*The above statements are intended to describe the general nature and level of work being performed by people assigned to this classification. They are not intended to be construed as a complete list of all responsibilities, duties, and skills required of personnel so classified