

Job Posting #:	52FB09162025	Posting Type:	External
Job Title:	RF (Radio Frequency) Engineer	Grade/Classification:	108/ Exempt
Department:	Advanced Metering Infrastructure	Location:	Fredericksburg, VA or Bowling Green, VA

JOB DESCRIPTION

OVERVIEW

The RF (Radio Frequency) Engineer is responsible for the design, deployment, maintenance, and optimization of the Landis+Gyr Gridstream RF mesh network used in the Cooperative's Advanced Metering Infrastructure (AMI) system. This position ensures reliable communication between grid edge meters, routers, gateways, and back-end systems across the cooperative service territory.

The RF Engineer will perform RF propagation studies, field validations, and network performance analyses, while working closely with metering, engineering, IT, and operations teams. The role also involves staying current with evolving RF technologies and industry best practices to help enhance the cooperative's smart grid capabilities.

ROLE AND RESPONSIBILITIES

I. AMI RF Network Planning and Design

- Perform RF planning and propagation analysis for new and existing Gridstream deployments.
- Analyze terrain, foliage, and other local conditions that impact mesh network performance in rural areas.
- Recommend optimal placement for routers, collectors, and repeaters to achieve required signal coverage and network reliability.

II. Deployment and Integration

- Assist with installation, commissioning, and configuration of Landis+Gyr RF infrastructure.
- Support integration with Meter Data Management Systems (MDMS), Outage Management Systems (OMS), and SCADA where applicable.
- Collaborate with vendor representatives and field technicians during deployment phases.

III. Network Monitoring and Troubleshooting

- Monitor network health using Landis+Gyr tools and provide regular performance reports.
- Diagnosing and resolving RF communication issues affecting meters, endpoints, and backhaul links.
- Assist with firmware upgrades, system tuning, and network reconfiguration to improve data reliability.
- Configure and support cellular routers and modems (e.g., Sierra Wireless, Cradlepoint) used in collector backhaul scenarios.
- Manage and troubleshoot fiber optic links connecting AMI infrastructure to central systems.

IV. Field Support and Documentation

- Conduct site surveys and validate field data to ensure real-world alignment with RF models.
- Maintain accurate records of deployed equipment, signal strengths, and coverage maps.
- Train cooperative staff and field crews on AMI-related RF concepts and best practices.
- Ensure high availability and failover strategies for hybrid backhaul environments (RF, cellular, and fiber).
- Work closely with REC's Metering, Engineering, and IT departments on cross-functional projects related to grid modernization, data analytics, and demand response programs.

V. Regulatory and Compliance

- Ensure all RF designs comply with FCC regulations and internal engineering standards.
- Assist with documentation required for audits, inspections, or grants related to infrastructure.
- Attend and actively participate in training, conferences, and seminars to remain up to date on advancements in AMI technologies, utility industry standards, and best practices for metering and data management systems.
- Perform other duties as assigned.

QUALIFICATIONS AND EDUCATION REQUIREMENTS

A bachelor's degree or equivalent in Electrical/Electronic Technology, Telecommunications, or a related field is required. Alternatively, eight (8) years of directly related experience may substitute for the college degree requirement. Four (4) years of RF engineering experience, preferably within utility AMI environments, including familiarity with RF test equipment such as spectrum analyzers and site survey tools, is required.

Candidates must have a strong technical foundation in RF engineering—covering RF propagation, antenna theory, and wireless mesh network design—paired with hands-on experience in utility or AMI environments such as Landis+Gyr Gridstream. They should possess a thorough understanding of smart grid communication protocols to support advanced metering infrastructure communications; a strong grasp of cellular networking (LTE/5G) and remote management of cellular modems and routers; and solid IP networking fundamentals, including subnetting, routing, IPv4/IPv6, VLANs, and VPNs. Practical experience with fiber optics—media converters, SFP modules, and fiber routing and diagnostics—is required, along with strong troubleshooting skills demonstrated through field validation, spectrum analysis, and root-cause investigation of RF issues. Exceptional communication skills are also essential to clearly convey complex technical information to diverse audiences, including field technicians and cross-functional teams.

This position is primarily based at the headquarters office; however, periodic field trips for installation, inspection, and maintenance of equipment in all types of weather will be required. The candidate must be available for 24-hour on-call duty to maintain the Cooperative's AMI communication systems and support other cooperative communication infrastructure. Overtime may be necessary during outages and other system interruptions. Attendance at seminars, meetings, and conferences several times a year may also be required. The candidate is expected to strictly adhere to and comply with all the Cooperative's safety rules, policies, and procedures.

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 #52FB09162025**

Deadline: Thursday, October 16th, 2025 @ 5:00 PM EST

***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.**