

Job Title: Research Associate – Power Markets

Location: G-8 Markaz, Islamabad **Department:** Power Markets

Type: Full time **Contract:** 1 year

About Renewables First

Renewables First (RF) is a think tank for energy and the environment. Our work addresses critical energy and natural resource issues to make energy and climate transitions just and inclusive. By emphasizing inclusivity and immediate action, we are positioned to drive change that is both sustainable and equitable.

Key Responsibilities

As a **Research Associate – Power Markets,** your key responsibilities will include:

- Power System Analysis: Conduct generation & transmission system studies, including load flow analysis, generation interconnection assessments, contingency analysis, short circuit analysis, and stability studies.
- **Policy & Market Research:** Evaluate power sector planning documents, identifying gaps in integrated system planning, renewable integration, and market reforms.
- **Stakeholder Engagement:** Collaborate with policymakers, system operators, and industry experts to advance technical and regulatory frameworks.
- **Technical Writing & Advocacy:** Develop data-driven reports, white papers, and articles on power markets, distributed energy resources, and competitive market mechanisms.
- Forums & Representation: Present technical findings in industry forums, conferences, and stakeholder meetings to shape Pakistan's power sector policies.
- **Support & Coordination:** Assist in drafting reports, managing research projects, and maintaining technical correspondence.

Qualifications and Skills

The candidate should have a <u>degree in Electrical Engineering (or a related field) with 1</u> <u>to 3 years of relevant experience</u>, strong research and analytical skills, and the ability to communicate high-quality analysis both verbally and in writing.

Preferred Technical Expertise:

- **Power System Analysis**: Proficiency in conducting comprehensive transmission system studies, including load flow analysis, generation interconnection assessments, contingency analysis, short circuit analysis, and stability studies
- Load Forecasting: Experience with electricity demand forecasting methodologies, time series analysis, and application of forecasting tools for operational and planning horizons
- **Integrated System Planning:** Knowledge of holistic power system planning approaches that consider generation, transmission, and distribution resources together with demand-side options to achieve reliability, economic, and environmental objectives



- **Renewable Integration**: Experience analyzing grid integration challenges and solutions for renewable energy resources and battery storage systems
- **Operations & Control**: Background in grid operations, network control protocols, and system planning, with working knowledge of Advanced Metering Infrastructure (AMI) and SCADA systems
- Modeling & Simulation: Hands-on experience with industry-standard power generation planning and optimization tools (PLEXOS, PyPSA, or LEAP) and electrical system modeling software (PSS/E and ETAP)
- **Distributed Energy**: Sound understanding of distributed energy resource technologies, micro/mini-grid architectures, and practical implementation strategies.

Our Ideal Candidate

We are looking for candidates who, in addition to being able to work with rigor, honesty, and discipline, are strongly inclined to constantly seek self-improvement, remain steadfast in their ideas and goals, and are motivated to work for the betterment of Pakistan's power sector.

We Offer:

- Competitive salary and benefits.
- Professional growth opportunities.
- Collaborative and friendly work environment.
- Flexible working conditions and health insurance.

How to Apply:

To apply, please fill out the following form: https://forms.gle/vcv5CLHPqcwGKkhu7 Interviews will be conducted on a rolling basis, so we encourage you to apply early. Last date to apply is **23rd March**, **2025**. Female candidates are encouraged to apply.

