

# What kind of employer are you looking for ?



One that takes you to the forefront of technology and leadership? One with a strong historical foundation and vision for the future? At Bonneville Power Administration (BPA) we are all of the above and more. BPA provides its employees with a wide array of career choices and opportunities to advance their skills while on the job. Our Student Engineering Program is just one example. Consider becoming part of our community today and see what we have to offer.

At BPA, we give our student trainees the opportunity to advance their skills in hands-on situations. All of our programs are year-round and include a comprehensive mix of beginning, intermediate, and advanced skills instruction in applying methodology and principals of planning and design elements. Consider applying for one of our student positions and take your skills to a new level.

## **Student Trainee (Electrical Engineer), GS-03**

Assist Test and Energization in the accomplishment of tasks and projects within Electrical Systems Spare Parts, High Voltage Equipment Engineering, Substation Maintenance, Laboratory Field Services, High Voltage Laboratories, and Chemistry Laboratories.

In Transmission Field Services, you may work at field sites learning processes and procedures associated with the construction, operation, maintenance, and replacement of transmission systems. Assist in collecting and analyzing information from instruction books, manuals, and information systems; preparing tables, graphs, and summary reports; reviewing data contained in information systems for accuracy; and assisting engineers and craftsmen in performing and analyzing diagnostic tests on high voltage equipment.

Required knowledge: basic or commonly used rules, procedures, or operations and basic forms and workflow of the unit. Some training or experience to perform routine and repetitive aspects of the work is often required.

## **Student Trainee (Electrical Engineering), GS-05**

Assist in testing transmission lines including initial energization and high-voltage phasing or work with a variety of substation equipment including power circuit breakers, transformers, and static capacitors.

Checks will consist of ration, polarity, impedance, and power factor for transformers, timing by oscillograph, travel recorder and insulation tests for circuit breakers. You will perform operational checks on all new or revised equipment to insure proper operation and associated

control, protective devices, indicating devices, interlocks, limiting devices and a number of others. In addition, you will learn to perform post energization in-service tests on relaying, metering, and indicating devices of new and revised facilities to assure proper functioning of all interrelated circuits and equipment. As necessary you will revise or correct drawings to reflect as-built conditions of equipment wiring and physical layout in order to insure equipment functionality.

Required knowledge: familiarity with basic principals, concepts, and methodology of professional occupation and how to apply this information in carrying out elementary assignments, operations, or procedures.

## **Electrical Engineer, GS-07**

Assist Senior and Project Engineers in development of design packages, including layout sketches, material requests, bills of material, drawing lists, and project design plans.

You will gather technical data on electrical equipment and substation design standards and apply this information to alternate designs. Assist in the coordination with operations, maintenance, construction, planning, and design organizations to gather and disseminate technical information. You may be involved in completing engineering calculations for high-voltage equipment selection and the development of substation layouts, as well as utilization of CAD or manual drafting for development of design packages.

Required knowledge: practical understanding of principles, concepts, and methodology associated with assignments and/or knowledge of a wide range of technical methods and practices. Demonstrated skill in independently carrying out routine assignments, operations, and/or other procedures required.

## **Recommended completed coursework**

### **Electrical Engineering:**

- All basic circuit theory classes
- Basic power
- Junior or senior level courses in computer modeling of power systems

### **Electronics Engineering:**

- All senior level course work involving communications and signal processing

## **Accelerated Consecutive Promotion Program for Entry-Level Engineers**

Our goal is to acquaint you quickly with the customs and practices of our engineering programs. A combination of on-the-job instruction and off-the-job self-development will be provided. Trainees entering in this program may be eligible for consecutive promotions to the next two or three levels after successful completion of six months of intensive accelerated training at each level.

For more information on BPA's engineering positions or how to apply, visit our career link at [www.bpa.gov](http://www.bpa.gov) or e-mail us at [resumes@bpa.gov](mailto:resumes@bpa.gov) As an Equal Opportunity Employer, BPA combines diverse minds in a single, powerful body. US citizenship required.

