Hydrologist/Engineer I or II

Tracking Code 2931
Job Location Boise, ID
Wage $61,318.40 – 95,804.80 (Exempt)
Application Deadline 2/17/2016

JOB DESCRIPTION
The Engineer/Hydrologist provides services related to the management of Idaho Power Company's (IPC) water resources within a team environment. Produces streamflow forecasts for the Snake River basin upstream of the Hells Canyon Complex using models and other tools. Participates in the development of a streamflow forecast model to be used to evaluate operations for IPC hydroelectric projects. Collects, processes, and performs various analysis on hydrologic data, including frequency analysis, economic analysis, and statistical analysis. Develops flow scenarios, using statistical and frequency analysis, to evaluate various hydrologic and operations scenarios. Determines economic and hydro generation impacts for reservoir and streamflow operational requests. Identifies opportunities to increase power supply through knowledge of present and future hydrologic conditions. Uses sound technical and hydrologic judgment as required to appraise changing streamflow conditions.

Performs studies to determine economic and hydrologic impacts to IPC operations due to institutional and weather-related changes in water conditions. Performs modeling to determine downstream impacts due to power plant operations for regulatory compliance, navigation, and recreation. Acts as an IPC and Water Management representative to internal groups, as well as public, professional, and regulatory organizations and agencies. Responds to requests for information pertaining to reservoir and river operations. Using knowledge of internal and external operating restrictions, hydraulic characteristics of the Snake River Basin dams and reservoirs, and the Snake River Basin hydrology, provides support, direction, and planning for internal and external fieldwork, public events, and other special hydro-operating conditions. Helps coordinate hydro operations with other interested or affected parties.

REQUIRED SKILLS

Knowledge of:
- Water resource engineering and hydrologic concepts related to the management of water for the production of energy.
- Computer software used in hydraulic and hydrologic engineering analysis, hydrologic model development, statistics, graphing, report writing, and database management (FEWS, NWSRFS, MODFLOW, RiverWare Excel, and SSARR).
- Working knowledge in various programming languages (Python, R, C#, Visual Basic, PERL, and FORTRAN), including SQL and relational database design.

Skills in:
- Managing and coordinating multiple projects while demonstrating excellent organization, prioritization and time management skills.
- Establishing and maintaining effective working relationships with others.
- Forecasting, computer modeling, and performing analytical research.
- Presenting technical information in a professional, effective manner both verbally and written.
- Use of computer programming software for statistical analysis, hydrologic and hydraulic modeling as well as commonly used applications (Microsoft Outlook, Word, Excel, and SQL).
- Programming and testing.

Ability to:
- Assist in the development of hydrologic forecast and planning models.
- Synthesize complex concepts in the development and utilization of hydraulic models to evaluate downstream impacts due to power plant operations for operational studies related to regulatory compliance, navigation, and recreation.
- Work as a team member and independently to perform technical research to solve technical problems with the ability to scope, develop, and execute a project to completion.
- Develop and analyze alternatives, read and interpret detailed drawings, diagrams, and
specifications, meet project deadlines, and balance multiple tasks.

- Study components including water rights issues, flow augmentation for anadromous fish migration, aquifer recharge, flood control, conjunctive management of ground and surface water, reservoir management, and other engineering and hydrologic analyses associated with hydro system operations planning
- Provide support for short- and long-term streamflow forecasting.

## MINIMUM REQUIREMENTS

| Education/Experience: | (Hydrologist I) BS degree and 3 years applicable experience or MS degree. Experience should be in hydrologic or hydraulic modeling, stream flow forecasting, meteorological forecasting or modeling, or other water resources modeling.
|                        | (Hydrologist II) BS degree and five years of applicable experience or MS degree and two years of applicable experience. Experience should be in hydrologic or hydraulic modeling, stream flow forecasting, meteorological forecasting or modeling, or other water resources modeling.
|                        | (Engineer I) BS degree in engineering. Zero to two years engineering experience.
|                        | (Engineer II) BS in civil engineering or water-resources-related engineering. Two plus years experience in civil engineering or water resources related engineering.
| Preferred             | MS degree and three years applicable experience OR BS degree and six years applicable experience.
|                        | Experience using analytical techniques including computer programs and statistical methods in developing river basin evaluations and forecasts using stream flow, diversions, snow surveys, precipitation, and reservoir storage.
|                        | Experience in stream flow forecasting in the Snake River Basin.

| Licenses & Certifications | Valid driver’s license with acceptable driving record according to the driving requirements of the position.
| Preferred                | EIT/FE at the level I and PE at the Level II

## JOB COMPETENCIES


## ADDITIONAL REQUIREMENTS

- Travel may be required occasionally, with overnight stays.

To be considered for this position, please visit our website at [www.idahopower.com/careers](http://www.idahopower.com/careers) and complete our online application.

Idaho Power is an Equal Opportunity Employer

All qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex (including pregnancy), age, sexual orientation, gender identity, genetic information, veteran status, physical or mental disability, marital status, and any other status protected by applicable federal and state laws.

If you have questions, or require assistance or accommodation to complete the online application, please contact us at:

Phone: 208-388-2965 or Email: jobs@idahopower.com