Hydro Engineer I or II

Tracking Code 2887
Job Location Boise, ID
Wage $61,318.40 – 95,804.80 (Exempt)
Application Deadline 01/25/2016

JOB DESCRIPTION

Under limited supervision and in a team environment, the Engineer:

- Provides services related to hydrologic forecasting, hydrologic studies, operations coordination, and detailed data analysis for the Snake River Basin.
- Provides in-depth analysis, design, development and ongoing support of the company’s stream flow forecasting needs through new and existing applications.
- Facilitates hydro operations planning, coordination, and system analysis and design for in-house development and/or 3rd party software integrations in ongoing support of the company’s stream flow forecasting.
- Performs complex query, analysis and reporting activities. Designs and/or utilizes the appropriate tools/models to perform simple to complex studies, analyses, or projections.
- Performs operational impact studies related to regional changes in water conditions due to institutional controls.
- Assists in planning, coordinating and oversight of special flow and reservoir operations for external and internal customers.

The group supports power load forecasting, hydroelectric generation planning and long term resource adequacy planning. In addition, the group provides subject matter expertise in quantitative hydrologic forecasting, and probabilistic analysis of stream flow and water supply.

REQUIRED SKILLS

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<th>Knowledge of:</th>
<th>Water resource engineering and hydrologic concepts related to the management of water for the production of energy.</th>
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<td>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).</td>
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<td>Working knowledge in various programming languages (Python, R, C#, Visual Basic, PERL, and FORTRAN), including SQL and relational database design.</td>
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<td>Snow hydrology, statistical analysis related to hydrologic and environmental data, preparing hydrographs and charts, and flow routing techniques.</td>
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<td>Skills in:</td>
<td>Managing and coordinating multiple projects while demonstrating excellent organization, prioritization and time management skills.</td>
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<td>Establishing and maintaining effective working relationships with others.</td>
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<td>Forecasting, computer modeling, and performing analytical research.</td>
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<td>Presenting technical information in a professional, effective manner both verbally and written.</td>
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<td>Use of computer programming software for statistical analysis, hydrologic and hydraulic modeling as well as commonly used applications (Microsoft Outlook, Word, Excel, and SQL).</td>
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<td>Programming and testing.</td>
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Abilities 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:**
- Bachelor’s degree in Civil, Water Resources or related Engineering field.
- Prefer:
  - Advanced degree with graduate level coursework in hydrologic processes, statistical analysis, and mathematics.

**Experience:**

**Level I**
- 0-2 years of professional engineering experience that provides the desired knowledge, skills and abilities.

**Level II**
- Three or more years of professional engineering experience that provides the desired knowledge, skills and abilities.
- Prefer:
  - Experience with and understanding of the hydrologic characteristics of the Snake River basin.
  - Computer modeling and program experience.

**Licenses & Certifications**
- Valid driver’s license with an acceptable driving record based on driving requirements for the position.
- Prefer:
  - EIT/FE at the level I and PE at the Level II.

**JOB COMPETENCIES**


**ADDITIONAL REQUIREMENTS**

- Occasional travel 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.

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*All qualified applicants will receive consideration for employment without regard to sex, race, age, disability, religion, national origin, color, sexual orientation, gender identification, protected veteran status, or any other protected class. 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*