



SOUTH FEATHER WATER & POWER AGENCY

TO: Board of Directors

FROM: Michael Glaze, General Manager

DATE: January 12, 2010

**RE: New Position – Hydrographer
Agenda Item for 1/26/10 Board of Directors Meeting**

Attached is a job description for a proposed new position – Hydrographer. This is the position that will be needed (as discussed with the Board at its meeting last April) to operate and maintain the Agency's new hydrologic monitoring system that has been designed by Innovative Hydrology and will be installed this year.

Part of the Agency's obligation under its FERC license is the installation, operation and maintenance of stream-flow gauging stations throughout the project and the reporting of the data gathered to the U.S. Geological Survey (USGS).

Presently, SFWPA operates 34 stations (including flows at the powerhouses that are calculated from generation); stretching from one on the South Fork Feather River above Little Grass Valley Reservoir to several at Miners Ranch Reservoir (nine of the stations are for consumptive-water deliveries and not part of the FERC-license requirement).

Presently, each gauging station has stream-flow monitoring equipment that mechanically determines flow quantities or water surface-elevation data and records that data onto memory devices in 15-minute intervals. That data is collected monthly, tabulated and reported annually to the USGS by Surface Water Data, Inc. which, for the last 22 years, has been the Agency's contract operator of the gauging stations, and has been responsible for reporting the stream-flow data to the USGS. The contract with Surface Water Data expires this year.

As the Agency moves into a new FERC license, controlling and ensuring correct volumes of water released for environmental purposes becomes more complex than under the current license conditions. Also, as the Agency moves into a new power purchase agreement with PG&E, the value of water for generation purposes increases significantly, making efficient and non-wasteful releases for consumptive purposes economically imperative. Although the present stream-flow gauging system and its historical operational methodologies would continue meeting the needs and requirements of the USGS, Agency staff will need much more immediate and reliable information for operational decision making.

That is why the Board last April approved converting the existing gauging stations to real-time data loggers that will report via a satellite communication system to a central computer where the data is stored and available for analysis by staff and system-modeling software. Not only will the real-time data allow for a better balancing of operations, it will be available to operators at PG&E's dispatch center, and will also provide more immediate advance warning of any event that would require activation of an emergency action plan. Further, once the system's satellite communication link and data retrieval software are in place, stream-flow monitoring/gauging stations can be added at strategic locations throughout the Water Division's irrigation system to also make the distribution process more balanced and efficient.

As noted above, the proposed new position will be responsible for operating and maintaining the Agency's new hydrologic monitoring system. While working directly and cooperatively with the Power Division Manager and Regulatory Compliance Manager, this position would be a direct report of the Water Division Manager and be a part of the Water Treatment and Distribution Employees Unit.

Given the technical training that the position will involve and the level of operational independence the person in the position will have, the proposed compensation range is the same as that of the Maintenance Technician to make it comparatively equivalent. This range also bookends the range paid by Nevada Irrigation District for the same position.

Funding for the position (beginning after June) is in the 2010 budget, but I'd like to have the description approved now so that the job can be posted as soon as possible for an in-house recruitment so that the successful applicant can begin the training process right away (even though the promotion won't take effect until July).

The attached classification specification has been reviewed by union representatives who expressed no objections

The action requested is:

"I move approval of the classification specification for the Hydrographer as a position within the Water Treatment and Distribution Employees Unit, including the proposed compensation range, and for the General Manager to fill the position as needed after July 1, 2010."

Exhibit B-18

CLASSIFICATION SPECIFICATION

Job Title: Hydrographer

General Job Description

Under the supervision of the Water Division Manager, and also with direction from the Power Division Manager and the Regulatory Compliance Manager, and with a minimum of supervision:

Performs a variety of duties related to the operation and maintenance of hydrographic equipment for the purpose of measuring water levels in reservoirs and water flow and pressure in streams, conduits, and pipelines, and the recording and reporting of water level, temperature and flow data for regulatory compliance purposes.

Manages and maintains stream and reservoir gauges, ensuring proper calibration and data retrieval from field stations.

Processes water level, temperature and flow data and develops reports thereof for both Agency needs and operational decisions, and to comply with the respective requirements of the United States Geological Survey (USGS), the Federal Energy Regulatory Commission (FERC), and the California Department of Water Resources' Division of Safety of Dams (DSOD).

Effectively works as a member of a problem solving team to develop and improve the Agency's water measurement techniques.

Effectively works as a member of a construction/maintenance crew in the repair and construction of Agency recreational facilities within the boundaries of the South Feather Power Project.

Effectively works as a member of a team conducting snow surveys to determine the amount of potential runoff from watersheds.

Occasionally, under the direction of an Equipment Operator or Ditch Tender, the Maintenance Foreman, Construction Foreman, or Water Treatment Plant Superintendent works as a member of a crew to efficiently and productively provide assistance as needed in the repair, replacement, operations and maintenance of the Agency's water treatment and distribution facilities.

Prerequisite Qualifications

High school diploma or the equivalency thereof, preferably with an emphasis in mathematics up to and including geometry, and specialized training in computer and electronics.

Ability to successfully pass a background security check.

Ability to complete the Agency's *Arithmetic Computation Test* with a score of 70% or higher prior to the award of the position.

Personal physical condition sufficient to tolerate helicopter travel and to work in challenging environments, including snow, steep terrain, heights and temperature variations.

Basic proficiency in typing and in the use of Microsoft Word (word-processing software) and Excel (spreadsheet software).

Valid California driver license and satisfactory driving record.

Basic Work Hours: 7:00 AM to 4:30 PM, Monday through Friday.

Hourly Compensation Range: \$24.11 – \$37.16 hourly (2010 – same as Maintenance Technician)

Essential Job Duties:

1. Task: Installs, maintains and replaces hydrographic equipment.

Physical Demand: Sitting; standing; twisting; walking; hiking in steep terrain, lifting, pushing, pulling and carrying (regularly up to 25 lbs., frequently up to 50 lbs., and infrequently up to 75 lbs.); kneeling; stooping; bending; squatting; close color vision; use of hands to finger, handle, or feel objects, tools or controls.

2. Task: Occasionally works as a member of a maintenance or construction crew repairing or building recreational facilities operated by the Agency, including water distributions, storm drainage systems, streets and parking lots and spurs, picnic tables, fire rings, boat launching ramps, boat docks, hiking trails, etc.

Physical Demand: Sitting; standing; twisting; walking; hiking in steep terrain, lifting, pushing, pulling and carrying (regularly up to 25 lbs., frequently up to 50 lbs., and infrequently up to 75 lbs.); kneeling; stooping; bending; squatting; close vision; use of hands to finger, handle, or feel objects, tools or controls.

3. Task: Analyzes and troubleshoots computer and hydrographic equipment and makes minor corrections, adjustments and repairs.

Physical Demand: Sitting; standing; twisting; walking; hiking in steep terrain, lifting, pushing, pulling and carrying (up to 25 lbs.); kneeling; stooping; bending; squatting; close color vision; use of hands to finger, handle, or feel objects, tools or controls, driving vehicle.

4. Task: Processes data from hydrographic equipment and develops reports thereof for both Agency needs and operational decisions, and to comply with the regulatory requirements.

Physical Demand: Sitting; standing; walking; working in confined spaces; close color vision; use of hands to finger, handle, or feel objects, tools or controls.

5. Task: Collects sample data at various locations to confirm accuracy of data gathered by automatic hydrographic monitors.

Physical Demand: Sitting; standing; twisting; walking; hiking in steep terrain, lifting, pushing, pulling and carrying (up to 25 lbs.); kneeling; stooping; bending; squatting; close vision; use of hands to finger, handle, or feel objects, tools or controls, driving vehicle.

6. Task: Coordinates other Agency personnel and assists in the design and installation of new water temperature, level and flow measurement facilities.

Physical Demand: Sitting; standing; twisting; walking; hiking in steep terrain, lifting, pushing, pulling and carrying (regularly up to 25 lbs., frequently up to 50 lbs., and infrequently up to 75 lbs.); kneeling; stooping; bending; squatting; close vision; use of hands to finger, handle, or feel objects, tools or controls.

7. Task: Conducts snow surveys by helicopter or ground vehicles.

Physical Demand: Sitting; standing; walking in snow; lifting, pushing, pulling and carrying (regularly up to 25 lbs., frequently up to 50 lbs.); kneeling; stooping; bending; squatting; close vision; use of hands to finger, handle, or feel objects, tools or controls; driving vehicle.

Marginal Job Duties:

1. Task: Assistance of and interaction with regulatory agency employees, vendors, contractors, consultants, etc., in office and by telephone.

Physical Demand: Sitting; standing; walking; kneeling; stooping; bending; squatting; close color vision; speaking; hearing; use of hands to write, type and use telephone.

2. Task: Assists in the repair of pipe leaks on Agency's distribution system.

Physical Demand: Sitting; standing; walking; lifting, pushing, pulling and carrying (regularly up to 25 Lbs., frequently up to 50 Lbs., and infrequently up to 100 Lbs.); kneeling; stooping; bending; squatting; close vision; distance vision; use of hands to finger, handle, or feel objects, tools or controls; driving vehicle.

Environmental Demands:

Outside: Frequently works outside in environments including steep terrain, heights and a variety of weather conditions ranging from snow to +100° F.

Inside: Infrequently works indoors in temperature-controlled environment.

Fumes/Gases: Exposure to fumes from internal combustion engines; exposure to dust generated during construction operations.

Noise/Vibration: Moderate exposure to noise, and minimal vibration from construction tools and equipment.

Mental Requirements:

Reading: Reads letters, reports, memos, messages, operating manuals for hydrographic equipment.

Writing: Writes reports, letters, memos, emails, messages; fills out forms and documents.

Math: Ability to perform math calculations. Ability to apply concepts such as fractions, percentages, ratios, proportions, and basic statistics to practical situations.

Attention to Detail: High level concentration and attention to detail for extended periods of time required to accurately collect data and produce reports, correspondence, and documents.

Repetition: Routine daily work practices, including driving long distances and operation of hydrographic equipment.

Judgment: Ability to work without close supervision. Ability to be self-motivated and work independently, prioritize work and make decisions regarding correct formatting of work and implementation of same. Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret regulations, policies and schematics. Ability to work with others and formulate appropriate instructions to achieve desired goals. Ability to work safely.

Social Skills: Must demonstrate personal integrity and have the ability to relate cooperatively with members of the public, as well as Agency and regulatory personnel.

Communication Skills: Ability to quickly organize and effectively communicate thoughts orally and written. Ability to understand communications from others.