



Oregon

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Water Resources Department

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MEMORANDUM

TO: Water Resources Commission

FROM: Phillip C. Ward

SUBJECT: Agenda Item E, November 19, 2009
Water Resources Commission Meeting

**Request from the City of Walla Walla to amend Application HE 523
for additional hydroelectric purposes as allowed under ORS 537.835**

I. Issue Statement

Oregon Revised Statute (ORS) 537.835 is exclusive to the City of Walla Walla, Washington (City), and its right to appropriate, impound, or divert certain waters from Mill Creek, which courses through both Oregon and Washington. The Applicant, the City, seeks an additional 10 cubic feet per second (cfs) between November 1 and April 15 for hydroelectric purposes. Using ORS 537.835 and Oregon Administrative Rule (OAR) 690-053, the Applicant seeks to amend its existing time-limited hydroelectric water right, HE 523, to allow augmentation of flows. "Augmentation of a hydroelectric water right" means diverting more water beyond the volume provided in the applicable hydroelectric water right over a calendar year.

This report summarizes the information provided by the Applicant and seeks the Commission's consent to the additional terms, conditions, reservations, restrictions and provisions, including minimum streamflow, for the protection and benefit of the State of Oregon for an amended water right for the Project.

II. Background

On April 29, 2009, the City applied to the Oregon Water Resources Department (Department) for 10 cfs from Mill Creek to be used between November 1 and April 15 for hydroelectric generation. This request was for water to augment the City's existing hydroelectric water right, HE 523, which authorizes the City to withdraw up to 28 cfs for combined municipal and hydroelectric uses. Since HE 523 limits the water that can be withdrawn to what is also needed for municipal use, the amendment (which assumes water will be returned to Mill Creek or placed in temporary underground storage) would allow more hydroelectric production at times when there are high flows available in Mill

Creek and the additional conditions are being met. In addition, less water would be used for both municipal and hydroelectric purposes during the low flow times of the year.

The Department determined that the application, maps, and information required by ORS 537.835 and OAR 690-053 were complete.

Notice of open comment period and public hearing was included in the Department's weekly public notice published on May 26, June 2, 9, and 16, 2009. In addition, notice was published on May 29, June 5, and 12, 2009, in the Valley Herald, a weekly newspaper serving the Walla Walla Valley and Milton-Freewater areas.

A public hearing was held at the public library in Milton-Freewater on June 18, 2009 at 6:30 p.m. Representatives of the City gave an overview of the project details. Water Resources Commissioner Ray Williams attended the meeting. There were three members of the general public attending. The comment period remained open until June 29, 2009. No written comments were received.

The amendment application was noticed on August 11, 2009, for a 30-day public comment period and distributed to those entities identified in OAR 690-053-015(4). No comments were received as a result of that notice.

The City has entered into a settlement agreement with the Department regarding the diversion of an additional 20 cfs of water for municipal purposes under Permit S-54483. The conditions of that settlement agreement are also included in this proposed water right as they relate to the hydroelectric water use.

III. Discussion

A. *Project Summary*

The City's Twin Reservoirs Hydroelectric Project was originally allocated up to 28 cubic feet per second, measured at the point of diversion from Mill Creek, to develop 3,683 theoretical horsepower (thp) utilizing a gross head of 1,157.3 feet under HE 523. An existing reinforced concrete dam 10 feet in height diverts water through 14.5 miles of 30-inch pipe to the powerhouse located adjacent to the city's municipal reservoirs near Walla Walla, in the State of Washington. A Pelton-type wheel drives a 2,250 kilowatt generator¹. The project connects to Pacific Power and Light Company transmission lines crossing the City's property.

The Project was approved for a Federal Energy Regulatory Commission (FERC) exemption under docket p-10376. The FERC approval anticipated additional flows for hydroelectric use if additional instream flow requirements were agreed to by the

¹ See FERC Order Amending Exemption, Project 10376-004, October 30, 1992.

appropriate fish and wildlife agencies.

The City has applied for an additional 10 cubic feet per second of water from Mill Creek to develop an additional 1,313 thp of capacity at the hydroelectric project. This capacity will be managed within the existing generation capacity of the Project. No construction changes are required to accommodate the additional water use at the Project. The existing pipeline can divert up to 38 cfs. Turbine upgrades are not anticipated in the near term.

The City of Walla Walla has senior water rights on Mill Creek (1866 priority) for year-round municipal water use. Under the original Project hydroelectric license HE 523, water was allowed to be diverted only at times when it was also needed for municipal purposes. Under this amendment, additional water up to 10 cfs may be diverted from Mill Creek, between November 1 and April 15 of each year, when higher instream flows are being satisfied and when the stream's water quality is suitable for treatment at the City's water treatment facility. Water would be diverted at the City's existing point of diversion and would flow via existing pipeline to the existing powerhouse. The water would then either be: 1) injected into an underground aquifer for storage and recovery under the City's existing water rights, 2) returned directly to Mill Creek, or 3) a combination of 1 and 2. Water is recovered during summer months from underground storage to offset diversions that would otherwise deplete Mill Creek during low flow times of the year. The City has agreed to reduce the maximum amount of its 1866 priority municipal water right to 25.5 cfs (a 2.5 cfs reduction) during a two-month low-flow period. Therefore, this project provides a public benefit. Furthermore, revenue from the hydroelectric project makes it possible for the City to fund the underground storage and streamflow enhancement elements of this project.

B. Review Standards

ORS 537.835 allocates certain waters of Mill Creek to the City of Walla Walla providing that the City applies to the Water Resources Commission (Commission), and that the Commission has an opportunity to determine additional terms and conditions; including minimum streamflows for the protection and benefit of the State of Oregon.

The Department has applied the process rules under OAR 690-053 for hydroelectric licenses, power claim, and certificate amendments to this application. The standards of OAR 690-053 are met as described in the attached proposed final order that was issued by the Department on October 6, 2009. See Attachment 3.

The City, in conjunction with the Oregon Department of Fish and Wildlife, Washington Department of Ecology, and WaterWatch of Oregon, agreed to the operational conditions listed below for the issuance of Permit S-54483 and are included in the proposed certificate of water right in Attachment 4.

Bypass Flow Condition:

For diversion of additional water up to 10 cfs under the priority of April 29, 2009, flows equal to those described below must be satisfied at the USGS gage 14013000 on Mill Creek near Kooskoosie:

November	December	January	February	March	April 1-15
100 cfs	110 cfs	110 cfs	125 cfs	150 cfs	150 cfs

Peak Flow Condition:

The permittee shall not divert water when the flows at the Kooskoosie gage are higher than 525 cfs.

Limit of Water Right:

The amount of water to which this right is entitled is limited to an amount beneficially used without waste. This right is expressly made inferior in right and subsequent in time to any appropriation of water from this source which may hereafter be made for domestic, municipal, irrigation, or any other beneficial consumptive use.

Other Conditions:

Other conditions of the water right concerning water measurements, use of Washington water right Permit 13121, fees, and other restrictions are detailed in the proposed certificate in Attachment 4.

IV. Conclusions

The City of Walla Walla's augmentation and redistribution of water diverted for hydroelectric purposes is proposed at its existing diversion at Mill Creek and is to be used at its existing hydroelectric project in the State of Washington. The Commission may approve an amended project for the City of Walla Walla under ORS 537.835 upon such additional terms, conditions, reservations, restrictions and provisions, including minimum streamflow, as the Commission shall impose for the protection and benefit of the State of Oregon.

The proposed Project as conditioned is sufficient to meet the standards of ORS 537.835, 543A.025 and OAR 690-053.

V. Alternatives

The Commission may consider the following actions:

1. Accept the conditions in the proposed order and proposed certificate and direct the Department to complete the processing of the application.
2. Amend the conditions in the proposed order and proposed certificate and direct the Department to complete the processing of the application.
3. Take no action and direct staff to continue to work with the applicant.

VI. Recommendation

The Director recommends Alternative 1, where the Commission accepts the conditions in the proposed order and proposed certificate and directs the Department to complete the processing of the application.

Attachments:

1. ORS 537.835 and ORS 537.810
2. OAR 690-053
3. Copy of proposed final order
4. Copy of proposed certificate

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