



Oregon

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MEMORANDUM

TO: Water Resources Commission

FROM: Phillip C. Ward, Director

SUBJECT: Agenda Item F, January 13, 2006
Water Resources Commission Meeting

Request for an Exception to the Willamette Basin Program under ORS 536.295 by Symbiotics LLC, for a Major Hydroelectric Project at Dorena Lake Dam in Lane County

I. Issue Statement

Under ORS 536.295 the Water Resources Commission may, under certain circumstances, allow the Department to consider an application to appropriate water for a use not classified as an allowable use by the applicable basin program. Symbiotics LLC (Symbiotics) has requested an exception to the Willamette Basin Program. According to their request, use of water in their proposed hydroelectric project would be largely non-consumptive in nature and not likely to be regulated for other water rights as provided in ORS 536.295(1)(c).

The question before the Commission is whether to allow the Department to consider the application even though the use is not classified under the basin program. If the exception is granted, the application will then be reviewed in the same manner as any other major hydroelectric application.

II. Background

Basin programs are administrative rules adopted by the Commission that prescribe future allowable uses of water. The act of specifying the allowable future beneficial uses is called "classification" and is authorized under ORS 536.340. Classifying beneficial uses in a basin program involves analysis of basin-specific data and substantial public involvement. However, under ORS 536.295 (Attachment 1), the Commission may allow the Department to consider an application for a use not classified in a basin program if the use meets one or more of the criteria under ORS 536.295 (1). The Commission also must evaluate whether the proposed use is consistent with the general policies of the applicable basin program.

Commission approval of a request for an exception to a basin program does not guarantee that a hydroelectric right will be issued, or if it is issued, how it would be conditioned. The Commission is not making a public interest determination on an application. In allowing a basin program exception, the Commission allows the Department to consider an application notwithstanding the basin program classification. All other aspects of the application review process remain the same, and the Department must consider issues such as water availability, injury to existing water rights, and any other rules of the Commission. Public notice and contested case hearing opportunities are provided in the same manner as any other major hydroelectric application. If the Commission does not grant a request for a basin program exception, the application is processed but could be denied or limited because the proposed use is not a classified use in the basin program.

III. Discussion

A. Application Summary

Symbiotics is applying for a hydroelectric project that is more than 100 horsepower in size. As such, this project would be considered a "major project" under ORS 543. Symbiotics is requesting the exception to the basin program now, because the Department's rules require an applicant to consult with state and federal agencies after receiving a preliminary permit for a project. The consultation enables an applicant to learn of permit requirements; to design studies to determine impacts of the project on natural resources; and to design measures to prevent or mitigate impacts of the project, or to enhance resources values within the project boundary. A copy of the preliminary permit application is provided in Attachment 2. The preliminary permit for this project advised Symbiotics that an exception to the basin plan would be required before a final application could be approved (Attachment 3).

Symbiotics proposes to install a major hydroelectric project at Dorena Reservoir on the Row River. Symbiotics proposes to divert up to 1800 cubic feet per second (cfs) from Dorena Reservoir on the Row River, tributary to the Coast Fork of the Willamette River. The screened diversion pipeline would be about 350 feet long. Dorena dam and reservoir are owned and operated by the U. S. Army Corps of Engineers (USACE). Symbiotics intends to install a 9 foot pipe through the abutment of the dam to divert water from the reservoir. The project would have a capacity of 8.3 megawatts (MW) and would generate on average 17.5 gigawatt-hours per year (Gwh). Symbiotics would operate the project on a year-round basis releasing water according to the rule curves and direction of the USACE for ongoing flood protection, irrigation, and recreational needs.

The powerhouse would contain one Francis turbine designed to operate under maximum head conditions of 85.3 feet with flows up to 850 cfs to produce up to 4.5 MW of power. The powerhouse would also contain a Kaplan designed turbine to operate under lower head conditions up to 65.6 feet with flows up to 950 cfs to produce up to 3.8 MW of power. It is expected that only one of the two turbines would operate at a time. Water would exit the powerhouse and be returned to the river immediately below the existing mixing basin from the outlet of Dorena Dam. The Project is not expected to operate as a peaking facility, but would

follow the traditional rule curves used by the USACE for filling and drawing down the reservoir for ongoing flood protection, irrigation, and recreational needs. The Project also includes a switchyard and approximately one mile of 15 (kV) transmission line. It is expected that the transmission line would connect to the PacifiCorp distribution system.

B. Basin Program Exception

The portion of the Willamette Basin Program that applies to the Dorena Lake area states:

OAR 690-502-0070 “The Coast Fork Willamette River Subbasin includes the Coast Fork Willamette River and tributaries above the confluence with the Middle Fork Willamette River south of Springfield:

(1) Surface water classification:

(a) The Coast Fork Willamette River and tributaries below Cottage Grove Dam to the mouth and the Row River below Dorena Dam to the mouth are classified for domestic, livestock, irrigation, municipal, industrial, agricultural, commercial, power, mining, fish life, wildlife, recreation, pollution abatement, wetland enhancement and public instream uses from December 1 through April 30, and only for domestic, commercial use for customarily domestic purposes not to exceed 0.01 cfs, livestock and public instream uses from May 1 through November 30.

(b) The Coast Fork of the Willamette River and tributaries above Cottage Grove Dam and the Row River and tributaries above Dorena Dam are classified for domestic, commercial use for customarily domestic purposes not to exceed 0.01 cfs, livestock and public instream uses.”

Symbiotics requested a basin program exception in a letter received by the Department on October 24, 2005 (Attachment 4). ORS 536.295 authorizes the Commission to allow the Department to consider an application to appropriate water for a use not classified in the applicable basin program if the use is consistent with any one or more of the statutory criteria (Attachment 1). Symbiotics has requested a basin program exception to use water on a year-round basis. They request to divert water from Dorena Reservoir, upstream of the dam, and return water from the powerhouse to the river immediately below the dam. Under this operating scheme, the proposed use is largely nonconsumptive and not likely to be regulated for other water rights as provided for under ORS 536.295(1)(c).

As discussed in Symbiotics’ request for an exception, the project will not alter the USACE’s management of Dorena Reservoir or the releases from the dam. Operations will not change because of the existence of the new power project. Water diverted through the pipeline to the powerhouse will be returned to the river immediately below the existing mixing basin from the outlet of Dorena Dam. Therefore, the use is largely non-consumptive and not likely to be regulated for other water rights.

Department Analysis: The Department agrees that the use conforms to ORS 536.295(1)(c), in that the use is largely nonconsumptive in nature and not likely to be regulated for other water rights.

C. General Policies of the Willamette Basin Program

ORS 536.295(4) requires the Commission to evaluate whether the proposed use is consistent with the general policies of the Willamette Basin Program (Attachment 5). In their request, Symbiotics suggests that the USACE's guidelines for the management of Dorena Reservoir and the lower Row River are currently compatible with the policies of the Willamette Basin Program (OAR 690-502-0020(4)(b)). Since the hydroelectric project would continue those same guidelines for management of the reservoir, then the project would also be compatible with the basin program.

Department Analysis: The Department agrees that the proposed use is consistent with the general policies of the Willamette Basin Program, including the policy to use reservoir operation guidelines of the Corps of Engineers to meet state water management objectives.

IV. Conclusion

To approve a basin program exception request under ORS 536.295, the Commission must find that the request meets one or more statutory criteria and the proposed use is consistent with the general policies of the applicable basin program. Staff believe that the request for basin program exception submitted by Symbiotics meets the criterion under ORS 536.295(1)(c) and that the proposed use is consistent with the general policies of the Willamette Basin Program.

V. Alternatives

The Commission may consider the following actions:

1. Approve the request by Symbiotics for a basin program exception, recognizing that if a right was approved for a hydroelectric project, it may be conditioned to protect the public health, safety and welfare.
2. Deny the request by Symbiotics for a basin program exception.
3. Take no action and direct staff to continue to work with the applicant.

VI. Recommendation

Staff recommend Alternative 1, that the Commission approve the request by Symbiotics for an exception to the Willamette Basin Program. A hydroelectric right, if issued, may be conditioned to protect the public health, safety and welfare.

Attachments:

1. ORS 536.295
2. Copy of Symbiotics Application
3. Preliminary Permit
4. Symbiotics request for exception to basin program
5. General Policies of the Willamette Basin Program

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Attachment 1

ORS 536.295 Conditions for consideration of application for use not classified in basin

program; rules. (1) Notwithstanding any provision of ORS 536.300 or 536.340, the Water Resources Commission may allow the Water Resources Department to consider an application to appropriate water for a use not classified in the applicable basin program if the use:

- (a) Will be of short duration during each year;
 - (b) Will be for a continuous period of no longer than five years;
 - (c) Is largely non-consumptive in nature and not likely to be regulated for other water rights;
 - (d) Is necessary to ensure public health, welfare and safety;
 - (e) Is necessary to avoid extreme hardship;
 - (f) Will provide a public benefit such as riparian or watershed improvement; or
 - (g) Is of an unusual nature not likely to recur in the basin, and unlikely to have been within the uses considered by the commission in classifying the uses presently allowed in the applicable basin program including but not limited to:
 - (A) Exploratory thermal drilling;
 - (B) Heat exchange;
 - (C) Maintaining water levels in a sewage lagoon; or
 - (D) Facilitating the watering of livestock away from a river or stream.
- (2) A permit granted on or before January 1, 1993, for a quasi-municipal use of water shall be considered a permit for a classified use under ORS 536.340 if at the time the application was submitted or the permit was granted, the basin program identified municipal use as a classified use.
- (3) The commission by rule may determine the specific uses permitted within a classified use.
- (4) In making the determination under subsection (1) of this section, the commission shall evaluate whether the proposed use is consistent with the general policies established in the applicable basin program.
- (5) The Water Resources Department shall process and evaluate an application allowed by the commission under subsections (1) to (4) of this section in the same manner as any other water right application, including determining whether the proposed use would result in injury to an existing water right. [1989 c.9 §1; 1993 c.591 §1; 1999 c.703 §1]

Attachment 5

General Policies of the Willamette Basin Program

OAR 690-502-0020 Water Resources Commission and Department activities which affect the waters of the Willamette River Basin shall be compatible with the policies established in this rule. Surface water allocation, groundwater management, municipal and domestic water systems, reservoir coordination, conservation and land use coordination are important issues in the Willamette Basin. The Commission's policies on these issues are as follows:

(1) Surface water allocation:

- (a) Protect undeveloped streams with instream values for public instream uses;
- (b) Seek a balance in the future appropriation of water between instream and total out-of-stream uses on those streams already significantly developed for out-of-stream purposes;
- (c) Preserve opportunities for future economic development by reserving water for future use;
- (d) Minimize the likelihood of over-appropriation due to new uses;
- (e) Manage stored waters which have been released for instream purposes to meet flow needs reflected in established instream water rights;
- (f) Allow irrigation use for the longest period possible between March 1 and October 31 provided sufficient water is available.

(2) Groundwater management:

- (a) Prevent excessive water level declines, restore aquifer stability in areas of decline and preserve with limited storage capacity for designated uses;
- (b) Identify low-yield aquifers and inform local agencies of probable groundwater capacity limitations for some uses;
- (c) Ensure safe municipal and domestic groundwater supplies by participating with the Department of Environmental Quality and the State Health Division in a formal monitoring program to document changes in quality and provide data for aquifer management;
- (d) Minimize impairment of surface water uses resulting from hydraulic connection between groundwater and surface water;
- (e) Encourage the development of programs for making groundwater resource information available to the public and local agencies.

(3) Municipal and domestic water systems: Support coordinated water service planning and

consolidation by water purveyors to preserve and protect adequate and safe drinking water supplies for human consumption in the Willamette Basin.

(4) Reservoir coordination:

(a) Promote funding to study and implement the Willamette River Basin Review Study reconnaissance phase recommendations with significant potential to assist the state in meeting its resource management objectives;

(b) Formalize reservoir operation guidelines with the Corps of Engineers to meet state water management objectives and enter into a memorandum of understanding or other agreement that defines the reservoir coordination process and water management objectives.

(5) Water conservation:

(a) Implement programs to eliminate wasteful water use;

(b) Improve the efficiency of water use through implementation of voluntary conservation measures;

(c) Give priority to developing subbasin conservation plans and providing public assistance in areas of known over-appropriation of surface water and groundwater and in water quality problem areas as listed by the Department of Environmental Quality.

(6) Land use coordination: Promote effective state and local water resource planning and protection and efficient water use through coordination with land use programs