WASHINGTON STATE
ENERGY FACILITY SITE EVALUATION COUNCIL

RESOLUTION NO. 350

PACIFICORP
CHEHALIS GENERATION FACILITY

Approving Purchase of Water from City of Chehalis During Low Flow in the Chehalis River

Nature of Action

A key operating condition for the Chehalis Generation Facility (CGF) is the requirement to curtail water purchase from the City of Chehalis when the Chehalis River is in low flow, defined as below 165 cubic feet per second (cfs) as measured at the United States Geological Survey Grand Mound station (USGS). The Chehalis River has been in low flow since July 7, 2021, and CGF’s stored water is estimated to run out by September 19, 2021.

The Council may approve CGF to purchase water from the City of Chehalis during low flow periods if, and to the extent that, CGF “makes municipal supply water available through funding conservation for the city's municipal water supply system.”

In this Resolution, the Council approves CGF’s proposal for funding conservation for the city’s water supply system and approves CGF’s purchase of water according to the terms of CGF’s proposal.

Background

The Chehalis Generation Facility is an air-cooled natural gas-fired combined cycle power plant. The facility includes two combustion turbines and one steam turbine. Exhaust gas from the combustion turbines is routed through heat recovery steam generators which provide steam to the steam turbine. The combustion turbines and the steam turbine are each coupled to an electric generator. Electrical energy provided by the three generators is supplied to the electric power grid.

Amendment No. 1 to the SCA, executed by Governor Locke in March of 2001, authorized Chehalis Power Generating, L.P., to construct and operate the CGF. In September 2008, Amendment No. 2 transferred the SCA to PacifiCorp, the current owner of CGF.

CGF began commercial operation in June 2003. The SCA states the nominal generating capacity of 520 MW, which is an accurate representation of the capacity under average annual conditions. An air-cooled condenser system is used in lieu of a wet cooling tower system to minimize water consumption.
Based on estimates by the Northwest Power Planning Council, one megawatt is enough power to supply 796 homes during a year. Therefore, the Chehalis Generation Facility can supply typical annual electricity consumption up to 413,920 homes per year.

The Chehalis plant executed a Municipal Services Agreement with the City of Chehalis in March 2001 to purchase water and dispose of wastewater for a 40-year term. The agreement allows CGF to purchase 540 Equivalent Residential Units per year.

Although the facility obtains its water from the City of Chehalis, the SCA imposes various requirements and limitations intended to protect against potential impacts to the Chehalis River from the use of municipal water supply during low flow periods, defined as flow below 165 cubic feet per second (cfs) as measured at Grand Mound.

Prior to commencement of commercial operation, the certificate holder was required to acquire, and permanently dedicate to the river by retirement, 102 acre feet of water rights. EFSEC Resolution 304, dated March 10, 2003, states that this condition was met.

Article VI. A of the Site Certification Agreement Between the State of Washington and PacifiCorp for the Chehalis Generation Facility (SCA) includes detailed terms addressing water use by the facility. These terms generally mirror of a settlement agreement that was reached among the prior holder of the SCA, the Department of Ecology, and the Washington Department of Fish and Wildlife when the certificate holder sought the first amendment to the SCA in 2000. See SCA Attachment 6 (“Stipulated Agreements with Washington Department of Fish and Wildlife and Department of Ecology”) and Council Order No. 753.

Article VI.A.7 imposes various restrictions on the facility’s use of water following commencement of operations. One of those restrictions, in Article VI.A.7.a, is as follows:

7. To minimize the impact of the CGF on the Chehalis River:

   a. During low flow periods (as defined in subparagraph 3) the Certificate Holder shall not purchase municipal supply water from the City unless and to the same extent that the Certificate Holder makes municipal supply water available through funding conservation for the City's municipal water supply system, with 15 days advance notice to Ecology and approval by the Council.

CGF states that the Chehalis River has been in “low flow” as defined by the SCA since July 7, 2021, when provisional data published by the USGS showed that the river had dropped below 165 CFS at the USGS Grand Mound station (12027500). On that same date, CGF ceased purchasing water for generation purposes from the City of Chehalis in accordance with the SCA. The river has remained in low flow and CGF estimates that its on-site water storage will be consumed by September 19, 2021.

On September 3, 2021, CGF submitted a request to EFSEC to approve PacifiCorp’s purchase of water from the City of Chehalis to immediately begin bringing water into CGF’s on-site storage tanks to prevent a forced shutdown.
In order to meet the requirement of SCA Article VI.A.7.a to make municipal supply water available through funding conservation for the City’s municipal water supply system, CGF states that “PacifiCorp will to the same extent provide funding in the amount of twenty-five thousand dollars ($25,000) to each of the following entities, the City of Chehalis and the Chehalis Basin Partnership (CBP) for twenty (20) acre-feet of municipal supply water.” This funding is intended to support the City’s and CBP programs to conserve water in the Chehalis River Basin and for the City’s municipal water system. The purchase of water will be per the terms of the Municipal Services Agreement between PacifiCorp and the City of Chehalis.

Mike Gallagher, Southwest Regional Program Manager for the Department of Ecology’s Water Resources Program, was provided notice in an email dated September 2, 2021. Mr. Gallagher has indicated that Ecology supports the CGF’s proposal and believes it meets the intent of the language in the SCA.

Resolution

Having considered CGF’s proposal, the comments of Ecology, and the recommendation of EFSEC staff, the Council hereby approves, pursuant to Article VI.A.7.a, PacifiCorp’s purchase of water from the City of Chehalis, effective immediately, according to the terms proposed.

PacifiCorp must submit certification that payment has been made to the City of Chehalis and to the Chehalis Basin Partnership on the terms described in this resolution by December 1, 2021.

Dated and effective this 14th day of September, 2021.

Washington State Energy Facility Site Evaluation Council By:

Kathleen Drew, EFSEC Chair

Attest: Sonia Bumpus, EFSEC Manager