

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Central Nebraska Public Power and
Irrigation District

Project No. 1417-079

ORDER APPROVING FLOW ATTENUATION PLAN

(Issued October 16, 2000)

On July 25, 2000, the Central Nebraska Public Power and Irrigation District (licensee) filed a flow attenuation plan pursuant to article 412 of the Order Issuing New License¹, issued July 29, 1998, for the Kingsley Dam Project. The plan is designed to attenuate increased flows in the Platte River during the June 1 through August 15 nesting season of least terns and piping plover. The Project is located on the North Platte and Platte Rivers in Keith, Lincoln, Gosper, Dawson, and Garden Counties in South Central Nebraska.

Article 412 requires the licensee to develop a plan to attenuate increased flows in the Platte River which might occur because of rejection of irrigation water due to regional or local weather conditions during least tern and piping plover nesting season. The article requires the licensee prepare the plan in consultation with the U.S. Fish and Wildlife Service (FWS) and the Nebraska Game and Parks Commission (NGPC). The reason for the requirement is that terns and plovers build their nests near the water line. If later flows are higher than when the nests were built, the nests are flooded and eggs and chicks can be lost. These higher flows can result from rain, runoff, storage water that is released and not used for irrigation, or return flows from systems along the river.

To attenuate flows, the licensee proposes to operate Johnson Lake so as to maintain temporary capacity for use during rainfall events. Johnson Lake is the largest lake on the supply canal. The proposed minimum operating level for Johnson Lake is 2617.5 feet MSL; this elevation provides approximately 3,500 acre-feet of water for use by the irrigation canals during peak irrigation demand. However, to avoid inundating property and damage due to wave action, the maximum operating elevation should not exceed 2619.0 feet MSL. These levels allow for minimal space in Johnson Lake to capture runoff from a precipitation event. To assist in attenuating flows, the licensee can also utilize storage space in the J-2 forebay, one of the two hydropower facilities fed by Johnson Lake. When Johnson Lake, at elevation 2617.5 MSL, is combined with the J-2

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Johnson Lake. When Johnson Lake, at elevation 2617.5 MSL, is combined with the J-2 forebay there are approximately 2,500 acre-feet of space available to attenuate flows. This space could be used to attenuate 250 cfs of rejected irrigation water for about 5 days.

To determine the magnitude of the attenuation flows returned to the Platte River due to rejected irrigation water, each year, a benchmark flow will be determined for the river gage near Overton (USGS gage number 06768000). This benchmark will be determined by the licensee with the concurrence of the Environmental Account Manager (EA Manager), who is appointed by the FWS. This flow will be based on any data collected by the FWS regarding nest locations and flows that are believed to not inundate known nests, flows at the Overton gage during the preceding month, as well as the known limitations on flow attenuation given the limited space in Johnson Lake.

This plan will be in effect from June 1 through August 15 each year except in any year where article 406 of the project license requires flows at Overton. The plan may also be suspended upon mutual agreement between the licensee and the EA Manager.

To determine the rate at which flows should be attenuated, the licensee will monitor flows at the Overton gage and if flow is near the benchmark or exceeds the benchmark, the flow rate at the J-2 return will not be increased until the flow at the Overton gage declines or until the Johnson Lake elevation reaches 2618.5 to 2619.0 feet MSL. The gage will be checked at least twice daily and adjustments will be made to the J-2 return flows. Johnson Lake will be operated such that inflows to Johnson Lake and discharge through the J-2 plant are approximately matched and the lake elevation remains at 2618.5 to 2619.0 feet MSL until flows at the Overton gage begin to decline.

If the benchmark flow is exceeded because of high flows in the Platte River or the inability to attenuate flows in Johnson Lake, the benchmark will be increased to the highest daily average flow at the Overton gage that has previously occurred during the June 1 through August 15 time period.

The licensee also proposes to attenuate some of the flows using Elwood Reservoir, a holding reservoir that draws water from the supply canal above Johnson Lake. Elwood Reservoir can be utilized only if: irrigation demand is sufficiently low that the diversion capacity exceeds the current irrigation demand; power to operate the Elwood pump station is available; the structural and mechanical systems at the pump station are in working order; water rights must allow for the available water to be

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pumped into Elwood Reservoir; and if the use of Elwood Reservoir is consistent with conservation commitments.

The licensee will maintain the option for additional deliveries to habitat areas in the basin if they can be arranged in the future. In addition the licensee will continue to investigate additional storage options along the supply canal upstream and downstream of Johnson Lake. If additional storage space is constructed, the use of the reservoirs will be evaluated to determine if they can be efficiently operated to attenuate flows.

Hourly flow values will be recorded and the EA Manager will be notified of any conditions that may require attention. At the end of each June 1 through August 15 time period, a report will be sent to the EA Manager listing any occurrences where flows exceeded the benchmark and rejected irrigation water was returned to the River or if Elwood Reservoir is operated outside of its operating range. A description of the licensee's actions will be included in this report.

Any revisions to this plan may be made by consensus of representatives of the licensee, the FWS, and the NGPC. These revisions will be implemented 30 days after submission (or whatever schedule is agreed to by the parties) to the Commission. If consensus cannot be reached, the licensee and/or the other parties may petition the Commission to revise the plan.

In a letters dated July 17, 2000, both the FWS and the NGPC concurred with the plan. The filed flow attenuation plan should help protect least terns and piping plover during the nesting season. The filed plan satisfies the requirements of article 412 and should be approved.

The Director orders:

(A) The flow attenuation plan filed on July 25, 2000, pursuant to Article 412 of the Order Issuing New License, issued July 29, 1998, is approved.

(B) Any revisions to the flow attenuation plan should be filed for Commission approval. The plan should include any documentation of consultation with the U.S. Fish and Wildlife Service and the Nebraska Game and Parks Commission. The Commission reserves the right to make changes to the plan.

(C) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 CFR § 385.713.



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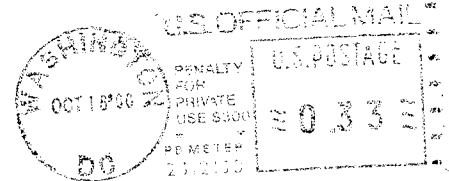
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