

RESOLUTION NO. 170

*Closed out by
Resolution #217 - 5/23/83*

WHEREAS, the Washington Public Power Supply System submitted plans and documents with letters dated October 9, 1979 and April 1, 1980, for the Make-up Water Well System in accordance with Paragraphs III.F.2 and III.F.3 of the Site Certification Agreement for WNP 3 and 5 to the Energy Facility Site Evaluation Council; and

WHEREAS, the Council has reviewed these plans and documents and has no objections to any of the particulars of the materials submitted;

NOW, THEREFORE, BE IT RESOLVED that the Energy Facility Site Evaluation Council approves construction of the Make-up Well System as proposed by the Ranney Method Western Corporation, subject to the following conditions;

1. Erosion and sediment control will be further exercised as detailed in the attached Ranney Method Western Corporation letter of March 10, 1980.
2. During preliminary pump testing, the test water will be piped from the pumps directly into the river such that no bank erosion can occur.
3. The water quality criteria set forth in WAC 173.20.030 (2)(c)(vi) will not be exceeded.
4. No discharge of visible oil or grease shall be permitted to reach any receiving water.
5. Excavated spoil materials shall be spread so as not to impede floods flows and shall be erosion stabilized equivalent to adjacent undisturbed areas.

Dated this 28th day of April, 1980.

Attachment

WASHINGTON STATE ENERGY FACILITY
SITE EVALUATION COUNCIL

By

Nicholas D. Lewis

Nicholas D. Lewis
Chairman

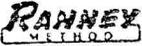
ATTEST:

By

William L. Fitch
William L. Fitch
Executive Secretary

RANNEY METHOD WESTERN CORPORATION

WATER SUPPLY ENGINEERS AND CONTRACTORS



80 MAR 12 AM 11:15 March 10, 1980

P. O. BOX 6387

KENNEWICK, WASHINGTON 99338

TELEPHONE: (509) 586-6947

RANNEY COLLECTORS
SURFACE WATER INTAKES
ARTIFICIAL RECHARGING
CONSTRUCTION DEWATERING

Mr. William J. Talbott
Division Manager, WNP-3/5
P. O. Box 1223
Elma, Washington 98541

Re: WPPSS NUCLEAR PROJECTS 3 AND 5
CONTRACT 3240-241
MAKE-UP WATER WELL SYSTEM
EFSEC PERMIT

Dear Mr. Talbott:

This is to reply to your letter of March 4, 1980 and your request for additional information regarding our proposed erosion and sediment control plan for the above referenced project. The specific information requested is set forth as follows:

a) Estimated volumes from caisson dewatering (maximum and minimum):

During projection of the horizontal screen laterals, the maximum pumping rate will be 2500 GPM (occurring when a lateral has been completed and the last section of sandline is being removed) and the minimum pumping rate will be zero (occurring when the sandline valve is closed). It is estimated that the average pumping rate during an 8-hour working shift will be 1000 GPM, which is equivalent to a volume of 480,000 gallons or 64,200 cubic feet of water.

b) Size and retention time of holding pond:

The proposed holding pond will have a length to width ratio of 4:1 with a channel width of 40 feet. The bottom of the pond will be 40 feet wide by 160 feet long. With a side slope of 2:1 and an estimated depth of 10 feet (Elevation 0 (MSL)), the top of the pond will be 80 feet wide by 200 feet long. The total volume of the pond will be 109,300 cubic feet. With the river stage at an average

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summer level of Elevation +2.5 (MSL) (2000 cfs flow), the volume of the pond available for storage is 90,750 cubic feet, which is about 40 percent in excess of the 8-hour working shift pumpage.

The vertical cross-sectional area of the pond is 600 square feet. For the estimated average pumping rate of 1000 GPM (2.23 cfs), the velocity of flow through the pond will be 0.0037 feet per second (13.4 feet per hour). Thus, during the 8-hour working shift the water pumped will travel only 107 feet and will not reach the overflow outlet. Since no pumping will occur during the succeeding 16 nonworking hours, the detention time will be in excess of 24 hours.

c) Size and settling rate of settleable material from dewatering:

During projection of the horizontal screen laterals, the fine gravel and coarse sand removed will collect in the bottom of the caisson where it will be hand-mucked and bucketed to the surface. The pump discharge water will contain a small amount of silt and fine sand. The estimated particle size and settling rates for this material are as follows:

Material	Particle Size (mm)	Estimated Settling Rate	
		mm/sec	ft/hr.
Fine sand	0.06	3.8	44.9
Silt	0.01	0.15	1.8

Thus, it is estimated that it will take about 5½ hours to settle out the fine silt particles.

d) Estimate of suspended sediments in discharge from ponds:

It is our preliminary opinion that no discharge will occur from the holding pond. It is planned to excavate the pond to a depth of about 10 feet, where water-bearing sand and gravel is expected to be encountered, in order that the pumped water will seep back into the water-bearing formation. With a pond bottom area of 6,400 square feet (40' x 160') and a total estimated pumpage of 480,000 gallons in a 24-hour period, the total infiltration rate of the pond bottom needs to be only 75 gallons per day per square foot (3.3 MGD/acre) to accept all of the water pumped. With a head of 7.5 feet above river level when the pond is full, this is equivalent to an infiltration