

Washington Public Power Supply System
A JOINT OPERATING AGENCY

P.O. BOX 1223

ELMA, WASHINGTON 98541

PHONE (206) 482-4428

December 26, 1979
G03-79-2250

Docket Nos. 50-508
and 50-509

POOR ORIGINAL

Director of Nuclear Reactor Regulation
ATTENTION: O. D. Parr, Chief
Light Water Reactors Branch No. 3
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: WPPSS NUCLEAR PROJECTS 3 AND 5
GROUNDWATER DRAINAGE SYSTEM
DESIGN PARAMETERS - SIXTH SUPPLEMENT

- References:
- 1) D. L. Renberger to O. D. Parr, NRC Review of WNP-3 Groundwater Drainage Design Parameters, dated March 7, 1978
 - 2) D. L. Renberger to O. D. Parr, Groundwater Drainage System Design Parameters - First Supplement, dated June 1, 1978
 - 3) D. L. Renberger to O. D. Parr, Groundwater Drainage System Design Parameters - Second Supplement, dated September 1, 1978
 - 4) D. L. Renberger to O. D. Parr, Groundwater Drainage System Design Parameters - Third Supplement, dated December 19, 1978
 - 5) D. L. Renberger to O. D. Parr, Groundwater Drainage System Design Parameters - Fourth Supplement, dated April 26, 1979
 - 6) D. L. Renberger to O. D. Parr, Groundwater Drainage System Design Parameters - Fifth Supplement, dated June 22, 1979

Dear Mr. Parr:

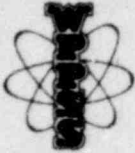
1745 357

The above referenced letters transmitted the reports of WPPSS' Engineer, Ebasco Services, Incorporated, which provided analysis of the groundwater drainage system and all pertinent data available. Reference (1) also provided the groundwater drainage system final design and other related information bearing on system performance.

The data collected during the period May 15 through November 1, 1979, has been added to the Engineer's groundwater data previously provided in reference (6) and is presented in Figures 1 and 2 enclosed.

8001110

396
[Handwritten signature]



Washington Public Power Supply System

O. D. Parr
Page Two

Quantitative conclusions are being developed regarding the adequacy of the system design based on the completion of 1) time lag recharge tests, 2) a comparison between geological mappings of both excavation faces and groundwater levels, and 3) observations of the system as it approached a steady state condition during the summer dry months. Based on these results, it is our Engineer's opinion that the design parameters used to develop the system vary from those discussed in the PSAR. However, these changes do not impact the operation or conservatism of the drainage system.

The next supplementary report on the groundwater drainage system parameters will include:

- a) The above mentioned tests, studies and collected data,
- b) A discussion of the original system model and design criteria,
- c) A discussion of the new system model based on the accumulated data to date, and
- d) The comparison of the two models

The Supply System intends to establish the adequacy of the system design with the use of this information and our on going studies. We will demonstrate the groundwater drainage system design conservatism and issue a final and conclusive report during the month of January, 1980. Should you desire further information during the interim period, please contact our Licensing Engineer, A. D. C. Kimmins at 206-482-4428.

Very truly yours,

D. L. RENBERGER
Assistant Director, Technology

DLR:ADCK:dj

cc: D. Smithpeter (BPA)
N. S. Reynolds - DeBevoise & Liberman
WNP-3/5 Files - Richland

1745 558

Docket Nos: 50-508
50-509
Letter No: G03-79-2250
D. L. Renberger to O. D. Parr
Groundwater Drainage System Design Parameters
Sixth Supplement

STATE OF WASHINGTON)
) ss
COUNTY OF BENTON)

D. L. RENBERGER, Being first duly sworn, deposes and says: That he is the Assistant Director, Technology, for the WASHINGTON PUBLIC POWER SUPPLY SYSTEM, the applicant herein; that he is authorized to submit the foregoing on behalf of said applicant; that he has read the foregoing and knows the contents thereof; and believes the same to be true to the best of his knowledge.

DATED Dec. 18, 1979

D. L. Renberger

D. L. RENBERGER

On this day personally appeared before me D. L. RENBERGER to me known to be the individual who executed the foregoing instrument and acknowledged that he signed the same as his free act and deed for the uses and purposes therein mentioned.

GIVEN under my hand and seal this 18th day of December, 1979.

John P. Thompson

Notary Public in and for the State
of Washington
Residing at Buckhead

1745 359