UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Robert M. Lazo, Chairman
Marvin M. Mann, Member
Donald P. deSylva, Member

In the Matter of	
WASHINGTON PUBLIC POWER SUPPLY SYSTEM	Docket Nos. 50-460 50-513
(WPPSS Nuclear Projects No. 1 and No. 4)	

Messrs. Joseph B. Knotts, Jr., and Nicholas S. Reynolds, Washington, D.C. and Mr. Richard Q. Quigley, Richland, Washington, for the applicant, Washington Public Power Supply System.

Mr. Edward G. Ketchen, for the United States Nuclear Regulatory Commission.

INITIAL DECISION
(Construction Permit)

December 22, 1975.

I. BACKGROUND

This Initial Decision concerns the application to the United States Nuclear Regulatory Commission ("NRC" or "Commission") by the Washington Public Power Supply System ("WPPSS" or "Applicant") for construction permits for WPPSS Nuclear Projects No. 1 and No. 4 ("WNP-1" and "WNP-4").

In particular, this decision involves NRC review of the radiological health and safety considerations specified in the notice of hearing entitled "Applications for Construction Permits and Facility Licenses; Hearing: Time for Submission of Views on Antitrust Matters", published in the Federal Register (39 Fed. Reg. 33588) on September 18, 1974.

The general background of this proceeding is set forth in detail in the Partial Initial Decision (NEPA and Site Suitability Issues) issued by this Atomic Safety and Licensing Board ("Board")[1/] on July 30, 1975. Washington Public Power Supply System (WPPSS Nuclear Projects 1 and 4), LBP-75-41, NRCI-75/7 131 (July 30, 1975). In that Decision the Board held that the appropriate action to be taken is the issuance of construction permits for the facility subject to certain conditions for the protection of the environment and contingent upon the outcome of the evidentiary hearing on health and safety issues. The Board also retained jurisdiction over the environmental issues in this

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1/ On November 3, 1975, the Chairman of the Atomic Safety and Licensing Board Panel issued a "Notice of Reconstitution of Board" in which the present Board Chairman was appointed, 40 Fed. Reg. 52444 (November 10, 1975).

proceeding to the extent that any findings in the Partial Initial Decision might require modification due to information or data presented prior to completion of the radiological health and safety phase of the case. Id. at p. 150. The Partial Initial Decision is incorporated herein by reference.

Subsequent to the issuance of the Partial Initial Decision, and based upon the Board's favorable findings and determinations therein regarding environmental matters, site suitability, and certain safety matters, the Commission's Director of Nuclear Reactor Regulation by letter dated August 1, 1975, authorized the Applicant to conduct certain limited work activities at the site pursuant to 10 CFR §§50.10(e) (1) and (3). Notice of the issuance of this Limited Work Authorization ("LWA") was published in the Federal Register (40 Fed. Reg. 33740) on August 11, 1975.

Thereafter, the Board issued a "Notice and Order Setting Evidentiary Hearing On Further Limited Work Authorization Activities" on September 16, 1975, which was published in the Federal Register (40 Fed. Reg. 43776) on September 23, 1975. On September 29, 1975, in Washington, D.C., another evidentiary hearing was held to consider whether there were any unresolved safety issues which would preclude the

extension of the LWA to additional limited work activities for which the Applicant had requested authorization.

On September 30, 1975, the Board issued its "Memorandum and Order Making Findings Pursuant to 10 CFR §50.10(e)(3) Under Expedited Decisional Procedure Provided For In 10 CFR §2.761" in which it determined that there were no unresolved safety issues relating to the additional LWA activities which would constitute a good cause for withholding authorization to proceed with those activities. Washington Public Power Supply System (Nuclear Projects No. 1 and No. 4) Memorandum and Order, LBP-75-9, NRCI-75/9 573 September 1975). Based upon this determination by the Board, the Commission's Director of Nuclear Reactor Regulation, by letter dated October 3, 1975, authorized the Applicant to conduct certain limited work activities at the site pursuant to 10 CFR §50.10(e) (3). Notice of the issuance of this supplemental LWA was published in the Federal Register (40 Fed. Reg. 47545) on October 9, 1975.

The evidentiary hearing on radiological health and safety issues was conducted by the Board on November 11-13, 1975, in Richland, Washington. The parties presenting

evidence at the hearing were the Applicant and the NRC Regulatory Staff.[2/]

The decisional record in this proceeding is set forth in Appendix A to this Initial Decision. The documents received into the record as exhibits either will be cited herein by exhibit number or will be referred to by abbreviations of the titles, such as PSAR, ER, SER and FES. The transcript will be cited as "Tr.".

To fulfill its responsibilities in this uncontested proceeding, the Board will make findings of fact relating to the health and safety issues specified in the Notice of Hearing, and will make appropriate conclusions of law. Finally, the Board will set forth an order ruling on issuance of the construction permits.

2/ By letter to the Board dated November 6, 1975, the Thermal Power Plant Site Evaluation Council ("TPPSEC") of the State of Washington notified the Board that TPPSEC had no concerns relating to WNP-1 and WNP-4, and that it would not participate further in the NRC proceeding. (TR. 653-55) TPPSEC had participated in the environmental hearing as an interested state pursuant to 10 CFR §2.715(c). NRCI-75/7 at p. 133.

II. FINDINGS OF FACT - HEALTH & SAFETY

A. Applicant's Financial Qualifications for WNP-1

1. WPPSS is a municipal corporation and joint operating agency of the State of Washington. Its membership consists of 18 operating public utility districts and the cities of Richland, Seattle, and Tacoma, each of which operates an electrical distribution system within the State of Washington. WPPSS is empowered to acquire, construct, and operate facilities for the generation and transmission of electric power and energy, but does not engage in the sale or distribution of electric power or energy at retail.

2. WPPSS does not have rates and is not subject to the jurisdiction of any regulatory agency having control over rates. Rather, WPPSS is reimbursed for the cost of each project, including debt service, by the participants in that project. In this regard, the entire electrical capability of WNP-1[3/] has been purchased by 104 publicly and cooperatively owned utilities ("Participants"), all

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3/ A discussion of WNP-4, which is financed independently of WNP-1, in the context of the Applicant's financial qualifications is contained herein, infra, in paragraphs 11 and 12.

of which are statutory preference customers of the Bonneville Power Administration ("BPA"), and five investor-owned utilities ("Companies"). (Applicant's Exhibit 1, Staff Exhibit 8c, §20; Perko, Tr. following p. 670)[4/]

3. The Applicant estimates the total cost of WNP-1 to be $1.147 billion. This estimate includes nuclear production plant costs ($1,042,509,000), transmission and general plant costs ($15, 426,000), and nuclear fuel inventory cost for the first core ($89,065,000).

4. The Participants have executed "Net Billing Agreements" with WPPSS and BPA which provide that the Participants' portion of the capability of WNP-1 will be sold to the Participants, which in turn will assign the capability to BPA.[5/] The Net Billing Agreements provide that each Participant will receive a credit on its BPA power and

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4/ A detailed discussion of the Hydro-Thermal Program developed jointly by utilities of the Pacific Northwest and the BPA, and of the high degree of coordination and cooperation between utilities involved in the generation and transmission of electric power in the Pacific Northwest is presented in the Partial Initial Decision issued on July 30, 1975 (NRCI-75/7, at pp. 140-42).

5/ During the period of operation from 1980 to 1996, 32.47% of the capability of WNP-1 will be purchased in equal portions by the five Companies (i.e., Portland General Electric Company, The Montana Power Company, The Washington Water Power Company, Puget Sound Power and Light Company, and Pacific Power and Light Company.) During this same period of operation, the remaining 67.53% of the capability of WNP-1 will be purchased by the Participants. After 1996, the entire (100%) capability of WNP-1 will be purchased by the Participants (Applicant's Exhibit 1; Perko, Tr. following p. 670).

service billings to the same extent that it makes payments to WPPSS for its share of the annual costs (including debt service) of WNP-1. The Net Billing Agreements provide that the Participants are obligated to pay WPPSS whether or not WNP-1 is completed, operable or operating, and notwithstanding the suspension, interruption, interference, reduction or curtailment of the output of WNP-1. Since, as noted, BPA gives credit to Participants for payments of costs made irrespective of energy actually received, there is assurance that the Participants will have funds to bear their share of costs of WNP-1 irrespective of operation of the project. In the event of default of a Participant, the remaining Participants are obligated to automatic step-ups in their billings by as much as 25% to satisfy the total obligations of the Participants.[6/] (Perko, Tr. following p. 670; Tr. 801-15; Staff's Exhibit 8c, §20)

5. The Companies have executed "Exchange Agreements" with WPPSS and BPA, which provide that the Companies' portion of the capability of WNP-1 (32.47% for the period 1980-1996 only) will be sold to the Companies, which in turn will

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6/ A form of Net Billing Agreement is contained in the Official Statement of WPPSS prepared in connection with the sale in May of 1974 of WNP-1 Revenue Notes in the amount of $77,000,000 (Applicant's Exhibit 1, Official Statement, at p. 43).

assign the capability to BPA. The Exchange Agreements provide that each Company will pay WPPSS for its respective share of the capability of WNP-1 during the period 1980-1990 an amount to be determined by applying BPA wholesale rates then in effect to the capacity and energy made available to each Company. For the period 1990-1996, each Company will pay WPPSS for its respective share based upon estimates by WPPSS of costs associated with the project. In turn, BPA will make available to each Company during the period 1980-1996 some 80,000 kilowatts of capacity and 68,000 average kilowatts (595,680,000 kilowatt hours annually). As is the case with the Participants, the Companies also are obligated to make payments whether or not WNP-1 is completed, operable or operating, and notwithstanding the suspension, interruption, interference, reduction or curtailment of the output of WNP-1.[7/] In the event of default of a Company, the nondefaulting Companies are obligated to satisfy the total commitments of the Companies. (Perko, Tr. following p. 670; Staff Exhibit 8c, §20.)

6. The sources of construction funds for WNP-1 are advances or guarantees from purchasers or prospective

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7/ A form of Exchange Agreement is contained in the record (Applicant's Exhibit 1, Official Statement, at p. 69).

purchasers of the output of the project as an interim measure followed by the issuance of tax exempt short term debt securities. Permanent financing is effected by the issuance of tax exempt long term debt securities. WPPSS debt securities are of the revenue note (short-term) and revenue bond (long-term) variety. State of Washington law provides that WPPSS may issue revenue bonds or warrants payable from the revenues of the utility properties operated by it. R.C.W (§43.52.3411).

7. The Board of Directors of WPPSS has adopted plan and system resolutions in connection with WNP-1 which authorize the issuance of securities. Specifically, resolutions were adopted both for revenue notes of $25 million bearing an effective interest rate of 4.27%, issued on February 13, 1973, and for revenue notes of $77 million bearing an effective interest rate of 6.05%, issued on May 15, 1974.[8/] Likewise, such a resolution was adopted for revenue bonds of $175 million issued on September 1, 1975. These revenue bonds bear an effective interest rate of 7.73%. The long-term securities have

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8/ A summary of the Resolution authorizing the issuance of revenue notes in the amount of $77 millior is contained in the record (Applicant's Exhibit 1, Official Statement, at pp. 21-24).

been rated Aaa by Moody's Investor Service, Inc., and AAA by Standard and Poor. The resolutions adopted by the Board of Directors serve as the indentures to the buyers of WPPSS securities. However, there are three levels of underlying security for repayment of the bonds.[9/] The first level of security is the revenues to be derived from operation of WNP-1. The second level of security is the Net Billing Agreements executed by the Participants and the Exchange Agreements executed by the Companies, under which WPPSS receives a promise from the Participants and Companies that each will pay its respective portion of the costs of acquiring, constructing and operating the facility, whether or not the project is completed, operated, or curtailed. The aggregate of these obligations must equal the total costs of the facility. The third level of security is the obligation of the United States Government (through the Bonneville Power Administration) ultimately to pay the debt securities issued by WPPSS for WNP-1.

9/ Revenues from the sale of bonds are applied to the retirement of outstanding notes. Thus, the total net funding available for WNP-1 to date is $175 million (Tr. 849).

8. WPPSS has a record of successful financing of generation projects. For example, construction of the Packwood Lake Hydroelectric Project (27,000 kw) commencing in 1962 was financed by the sale of revenue bonds of $13,700,000. The Packwood revenue bonds bear an effective interest rate of 3.66%, and are payable solely out of revenues from that project. The Packwood project output is sold to 12 public utility districts. Operating revenues for fiscal year 1975 were $749,460.

9. Fu. ther, WPPSS successfully financed and is now operating the Hanford Generating Project (860,000 kw), which utilizes by-product steam produced in the dual purpose N-Reactor of the Energy Research and Development Administration on the Hanford Reservation. Construction costs were financed by the sale in 1963 of revenue bonds of $122 million. These bonds bear an effective interest rate of 3.26%. The output of this project is sold to 76 publicly-owned and privately-owned utilities in the Pacific Northwest. Operating revenues for fiscal year 1975 were $30,210,421.

10. Based on the information contained in paragraphs 1-9, supra, the Board finds that the Applicant possesses or

has reasonable assurance of obtaining the funds necessary to cover estimated construction costs of WNP-1 and related fuel cycle costs.

11. With regard to WNP-4, the Applicant has requested that consideration of its financial qualifications to design and construct WNP-4 be deferred to a later time (Applicant's Exhibit 17). The Applicant's present plans are that the entire capability of WNP-4 will be purchased by publicly and cooperatively owned utilities through the execution of Participants' Agreements.[10/] However, execution of the Participants' Agreements for WNP-4 has been delayed pending completion of secondary environmental impact statements pursuant to the Washington State Environmental Policy Act ("SEPA"), R.C.W. §43.21C. The Applicant estimates that the secondary SEPA statements should be completed in approximately

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10/ Participants' Agreements are the second of a two-step procedure under which Participants commit to purchase a portion of the capability of WNP-4. The first step is the execution of Option Agreements under which potential participants obtain an option to purchase capability. The second step is the execution of Participants' Agreements under which Participants commit to purchase capability. Option Agreements for WNP-4 have been executed, but execution of Participants' Agreements is being delayed pending completion of secondary SEPA statements. (Tr. 825-29).

four to six months, and that execution of the Participants' Agreements will follow thereafter in due course.

12. The Board need not determine at this time when the Applicant will be in a position to demonstrate that it has reasonable assurance of obtaining financing for WNP-4. The Board will be kept informed as this matter develops, and will receive additional evidence from the Applicant and the Staff with a view toward supplementing this Initial Decision at a suitable time with appropriate findings of fact relating to the Applicant's financial qualifications in the context of WNP-4.

B. Description and Safety Evaluation of the Facility

13. The facility is to be located on a 972 acre-site on the Hanford Reservation in Benton County, Washington, approximately 8 miles north of the city of Richland. The exclusion area consists of two overlapping circles each having a radius of 1.2 miles and a center located on each containment structure.

14. The Applicant has leased the site from the United States Energy Research and Development Administration (ERDA).[11/]

11/ Partial Initial Decision, NRC-75/7 at p. 145.

Since a portion of the exclusion area lies outside the area under lease, the Applicant and the ERDA have executed a "Supplemental Agreement" to the lease and a "Memorandum of Understanding." These documents provide the Applicant with the authority necessary under 10 CFR 100.3a to determine activities within the designated exclusion area.[12/] The Board finds that the Applicant will have control over the exclusion area as required by 10 CFR 100.3a.

15. WNP-1 and WNP-4 are identical facilities. Each incorporates a nuclear steam supply system consisting of a Babcock & Wilcox pressurized water reactor with a two-loop reactor coolant system. Each unit will be designed for a core power level of approximately 3600 megawatts thermal.[13/] Water will serve as both moderator and coolant, and will be circulated through the reactor by four coolant pumps.

16. Each reactor has 205 fuel assemblies and each assembly is arranged in a 17 x 17 (Mark C) fuel rod array. The initial reactor fuel loading will be arranged in four regions, each containing a different enrichment of U-235.

12/ Applicant's Exhibits 32, 33

13/ In the Partial Initial Decision the thermal power level was erroneously given as 3619 Mw, NRCI 75/7 at p. 145; this figure includes about 19 Mw of primary pump heat.

The fuel elements will consist of Zircaloy-clad uranium dioxide fuel pellets. All fuel rods will be internally pressurized with helium during final welding to minimize cladding compressive stresses during service.

17. Each unit will have a containment building which will be a steel-lined reinforced concrete structure, and will house the reactor, steam generators, reactor coolant pumps, and pressurizer, and certain components of the plant engineered safety feature systems. The containment buildings are designed for an internal pressure of 52.0 psig, or about 23% above the peak of 42.3 psig calculated for the most severe design basis accident.

18. A General Services Building located next to the containment houses auxiliary systems, control equipment, certain components of the engineered safety systems, storage areas, emergency diesel generators, plant support systems and office space. Other major structures are the Turbine Generator Building, the spray pond (the ultimate heat sink) and the makeup water pumphouse located near the river. The steam and power conversion system for each unit will be designed to remove heat energy from the nuclear steam supply system and convert it into electrical energy

by means of a steam turbine-generator. Waste heat rejected to steam condensers will be discharged from the closed-cycle circulating water system to the atmosphere through mechanical draft evaporative cooling towers.

19. The facility will have a number of engineered safety features designed for limiting the consequences of postulated accidents. The principal engineered safety features are the emergency core cooling systems, reactor containment systems, the containment spray system, the control room filtration system, the ultimate heat sink, the hydrogen control system, and the redundant onsite power system. These systems and components will be designed to be capable of assuring safe shutdown of the reactor under the adverse conditions of the various design basis accidents. They will be designed to seismic Category I requirements and must function even with complete loss of offsite power. Redundant engineered safety feature components and systems will be provided so that a single failure of any of these components or systems will not result in loss of the capability to achieve safe shutdown of the reactor.

20. On October 18, 1973, the Applicant submitted its preliminary Safety Analysis Report ("PSAR") pursuant to

10 CFR Part 50.[14/] The PSAR contains a description and safety assessment of the site and of the preliminary design of the facility, a description of the quality assurance program to be applied to the design, fabrication, construction and testing of the facility, a preliminary plan for the Applicant's organization, training of personnel and conduct of operations, a statement of the Applicant's technical and financial qualifications, and other pertinent information. The Applicant has submitted all information required by the Commission's Regulations for issuance of a construction permit for WNP-1.[15/]

21. The Staff performed a technical review and independent evaluation of the information and data submitted by the Applicant in the PSAR and amendments thereto. As a result of this review and analysis, the Staff prepared a Safety Evaluation Report ("SER"), issued in May of 1975.

14/ The PSAR (with amendments one through seventeen thereto) was received into the evidentiary record in this proceeding at the hearing held on May 13-15, 1975, as Applicant's Exhibit 2. Subsequently, Amendments 18 and 19 to the PSAR were filed by the Applicant. These amendments were received into evidence at the hearing held on November 11-13, 1975, as Applicant's Exhibits 37 and 38 respectively.

15/ All information required by the Commission's Regulations for issuance of a construction permit for WNP-4 has been submitted with the exception of that information which will demonstrate the Applicant's financial qualifications to design and construct WNP-4. See discussion, supra, in paragraphs 11 and 12.

Two supplements to the SER were issued on June 2 and August 8, 1975.[16/] The Staff concluded in the SER that, assuming favorable resolution of the then outstanding matters discussed therein, the facility can be constructed and operated at the proposed site without undue risk to the health and safety of the public. In SER Supp. 1 the Staff addressed and resolved certain of these outstanding matters, and noted that favorable resolution of the remaining outstanding matters would be required before construction permits would be issued. In SER Supp. 2 the Staff addressed and resolved all remaining outstanding matters except for the following: (1) evaluation of the Applicant's analysis to demonstrate compliance with 10 CFR §50.46 and Appendix K of 10 CFR Part 50 (involving acceptance criteria for emergency core cooling systems ("ECCS")); (2) the adequacy of the Applicant's authority to control the exclusion area pursuant to 10 CFR §100.3(a);[17/] (3) compliance with Appendix I of 10 CFR Part 50.

16/ The SER was admitted into evidence at the evidentiary hearing of November 11-13, 1975, as Staff Exhibit 8a, SER Supplement No. 1 ("SER Suppl. 1") as Staff Exhibit 8b, and SER Supplement No. 2 ("SER Supp. 2") as Staff Exhibit 8c.

17/ See discussion, supra, in paragraph 14.

22. At the hearing held on November 11-13, 1975, the Staff introduced testimony which set forth its conclusion regarding Applicant's compliance with the ECCS matter, viz., that with certain modifications to which the Applicant has committed, the Applicant's preliminary ECCS design will be in conformance with NRC Regulations (Cox, Tr. following p. 714.) The Board received into evidence five letters from the Applicant to the Staff which set forth commitments and provided analyses made by the Applicant regarding ECCS (Applicant's Exhibits 27 through 31). With regard to the Applicant's compliance with Appendix I of 10 CFR Part 50, the Staff introduced testimony which set forth its conclusion that WNP-1 and WNP-4 meet the design objectives presented in Appendix I (Kornasiewicz, Tr. following p. 720; Stoddart, Tr. following p. 724; Essig, Tr. following p. 727.)

23. In the SER the Staff analyzed and evaluated the distribution of population and land use offsite, and the physical characteristics of the site including seismology, geology, hydrology, and meteorology. It analyzed and evaluated the design, fabrication, construction, testing and expected performance of the plant structures, systems

and components important to safety, and the response of the facility to various operating transients and to a broad specturm of postulated accidents, including design basis accidents. The Staff analyzed and evaluated the Applicant's plans for the conduct of plant operations and plans for actions to be taken in the event of an accident which might affect the general public, Applicant's organizational structure and the technical qualifications of operating and technical support personnel, and measures to be taken for industrial security. The SER also contains an analysis and evaluation of the design of the several systems provided for control of radioactive effluents from the plant, and the financial qualifications of the Applicant to design and construct the facility.

24. The Board has considered the Application, the PSAR and amendments thereto, and the SER and supplements thereto, and finds that the Staff's technical review and safety evaluation is adequate and comprehensive. Accordingly, the Board hereby incorporates by reference the conclusions reached by the Staff in the SER and Supplements 1 and 2 thereto, and the Staff's conclusions regarding compliance by the Applicant with 10 CFR 50.46,

CFR 50, and Appendix I of 10 CFR 50, except
ay be modified by the findings made by
s Initial Decision.

sory Committee on Reactor Safeguards
ed the application for WNP-1 and WNP-4
its letter dated June 11, 1975, that the
t if due consideration is given to items
r. "WNP-1 and 4, can be constructed with
e that they can be operated without
ealth and safety of the public" (Staff
x D.) The Applicant and the Staff have
are taking appropriate action to
tions of the ACRS (Staff Exhibit 8c,
ng p. 714; PSAR Amendment 18, Appli-
Q7-17; Applicant's Exhibits 25 and
wing p. 740).

t has formulated a comprehensive
ram. The Staff conducted a review
ented testimony at the evidentiary
am embodies sufficient policies,
tions to fully implement Appendix B

of 10 CFR Part 50. The program is being implemented and is functioning satisfactorily.[18] The Board finds that the Applicant's quality assurance program complies with the requirements of Appendix B to 10 CFR 50.

27. At the evidentiary hearing held on November 11-13, 1975, the Applicant informed the Board that it intended to amend Section 17.3 of the PSAR which contains the QA program of Babock & Wilcox ("B&W") for design and construction of WNP-1 and WNP-4.[19] The amendment substitues for Section 17.3 the B&W QA Topical Report[20] which has been approved by the Commission. (Applicant's Exhibit 40.) The B&W QA Topical Report was received into evidence as Applicant's Exhibit 40. The Board has considered the B&W QA Topical

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18/ Tr. 919-25, 927-42.

19/ Subsequent to the evidentiary hearing held on November 11-13, 1975, the Applicant submitted Amendment 20 to the PSAR. The Staff was aware prior to the November 11-13, 1975 hearing of the changes to be made by Amendment 20 (Tr. pp. 703-704), and with one exception had already formally received the material to be included in Amendment 20. (Applicant's Exhibit 39; Tr. 999-1002). As agreed at the hearing, (Tr. 1017) PSAR Amendment 20, now designated as Applicant's Exhibit 41, is received in evidence.

20/ "B&W NPGD Quality Assurance Program for Nuclear Equipment, BAW-10096A, Rev. 1, Topical Report (March 1975).

Report, and we confirm our previous finding that the Applicant's QA program including the B&W QA Topical Report, complies with Appendix B.

D. Applicant's Technical Qualifications

28. The Washington Public Power Supply System is a municipal corporation of the State of Washington. Currently it operates one hydroelectric project and the Hanford Generating Project, which utilizes byproduct steam energy produced by the New Production Reactor which is owned and operated by the Energy Research and Development Administration. WPPSS also has under construction WNP-2, a nuclear power plant on a site contiguous to the WNP-1, WNP-4 sites. WPPSS has a staff of approximately 340 full-time employees. About 50 professional employees, nuclear, electrical, mechanical and other engineers and operations personnel now have substantial direct involvement in the WNP-1 and WNP-4 projects. United Engineers and Constructors, Inc., has been retained by the Applicant to provide engineering, quality assurance, and construction management services for WNP-1 and WNP-4. The Babcock and Wilcox Company, which has substantial experience in nuclear power plants, will furnish the nuclear steam supply system.

29. Appropriate training programs for WPPSS personnel will be provided at existing reactors, on the site, and during preoperational testing of WNP-1 and WNP-4.

30. Based on the collective experience of WPPSS and its principal contractors, United Engineers and Constructors, Inc., and the Babcock and Wilcox Company, on the WPPSS organization and personnel, and on the WPPSS Quality Assurance Program, the Board finds that the Applicant is technically qualified to design and construct the WNP-1 and WNP-4 facility.

E. Research and Development Required

31. The 17 x 17 (Mark C) fuel assembly to be supplied by Babcock & Wilcox will be identical in design to those previously reviewed and approved by the Staff for use in the Bellefonte Nuclear Plant, Units 1 and 2[21/] now under construction. While no new research and development programs are necessary to support the issuance of construction permits for WNP-1 and WNP-4, the Applicant has identified the ongoing research and development programs being conducted by B&W which may have an effect on the design for these facilities. These programs are intended to verify the 17 x 17 (Mark C) fuel assembly design and confirm the design margins of the nuclear steam supply system. Principal elements of the B&W

21/ Tennessee Valley Authority (Bellefonte Nuclear Plant, Units 1 and 2) NRC Docket Nos. 50-438 and 50-439.

research and development programs are fuel assembly flow tests, fuel assembly mechanical tests, critical heat flux tests, reactor vessel flow tests, component mechanical tests, control rod tests, and fuel densification tests. (PSAR §1.5.) The Staff has concluded that the test program outlined in the PSAR will provide the information necessary for the design and safe operation of WNP-1 and WNP-4 (SER §1.7). The Board finds that the Applicant has complied with the requirements of 10 CFR §50.35(a) with respect to required research and development programs.

F. Common Defense and Security

32. The activities to be conducted under the construction permits will be within the jurisdiction of the United States. All of Applicant's directors and principal staff members are citizens of the United States, and the Applicant is not owned, dominated, or controlled by an alien, foreign corporation, or a foreign government. The activities to be conducted do not involve any restricted data, but the Applicant has agreed to safeguard any such data which might become involved in accordance with the Commission's Regulations. The Applicant will rely on obtaining fuel from sources of supply available for civilian purposes.

Thus, no diversion of special nuclear material from military purposes is involved. The Board finds that the issuance of construction permits for WNP-1 and WNP-4 will not be inimical to the common defense and security.

G. Compliance with Appendix I to 10 CFR 50

33. The Applicant has elected to exercise the option provided in paragraph II.D of Appendix I, as amended. 40 Federal Register 19439, May 5, 1975; 40 Federal Register 40818, September 4, 1975.

34. At the evidentiary hearing held on November 11-13, 1975, the Staff presented a detailed assessment of maximum individual doses to be expected offsite.22/ To determine compliance with Paragraphs II.A, II.B, and II.C of Appendix I, doses from WNP-1 and WNP-4 were calculated on a per reactor basis. To determine compliance with the Annex in the September 4, 1975 amendment to Appendix I (and in lieu of Paragraph II.D of Appendix I), doses were calculated on a per site basis, combining doses from WNP-1, WNP-4, and WNP-2.

35. For liquid effluents, the annual total body dose was calculated to be 2.6 millirems per reactor, and the

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22/ Certain Staff dose models were revised to reflect the mandate contained in the Opinion of the Commission (April 30, 1975) in the Appendix I rulemaking proceeding prescribing realism wherever possible in the definition of input parameters for the dose models (Essig, Tr. following p. 727).

annual dose to any organ was calculated to be 3.4 millirems per reactor. These doses are within the Appendix I design objectives set forth in Paragraph II.A (3 millirems and 10 millirems, respectively). For noble gas effluents, the annual air doses for gamma radiation and beta radiation were calculated to be 0.21 millirad per reactor and 0.57 millirad per reactor, respectively. These doses are well below the design objectives set forth in Paragraph II.B.1 of Appendix I (10 millirads and 20 millirads, respectively). In addition, for noble gas effluents, the annual total body dose was calculated to be 0.087 millirem per reactor, and the annual skin dose was calculated to be 0.24 millirem per reactor. These doses are well below the design objectives set forth in Paragraph II.B.2 of Appendix I (5 millirems and 15 millirems, respectively). For radioiodines and other radionuclides released to the atmosphere, the annual dose to any organ was calculated to be 0.55 millirem per reactor, which is well below the design objectives set forth in Paragraph II.C of Appendix I (15 millirems). (Essig, Table 2, Tr. following p. 727.)

36. Since the Applicant elected to exercise the option of satisfying the Annex to Appendix I, the calculated doses from WNP-1, WNP-4, and WNP-2 (on a per site basis) were compared with the Annex to Appendix I. For liquid effluents, the Staff calculated the annual dose to the total body or to any organ to be 2.3 millirems, well below the design objective set forth in Paragraph A.1 of the Annex to Appendix I (5 millirems). For gaseous effluents, the annual air dose from gamma radiation and beta radiation was calculated to be 1.2 millirads and 1.7 millirads, respectively. These doses are well below the design objectives set forth in Paragraphs B.1 and B.2 of the Annex to Appendix I (10 millirads and 20 millirads, respectively). For gaseous effluents, the annual total body dose was calculated to be 0.45 millirem and the annual skin dose was calculated to be 1.0 millirem. These doses are well below the design objectives set forth in Paragraph B.3 of the Annex to Appendix I (5 millirems and 15 millirems, respectively). For radioiodine and other radionuclides released to the atmosphere, the annual dose to any organ was calculated to be 5.2 millirems, which is well below the design objective set forth in Paragraph C.1 of the Annex to Appendix I (15 millirems). (Essig, Table 1, Tr. following p. 727.)

37. Based upon the foregoing, the Board finds that the proposed radwaste system for WNP-1 and WNP-4 is capable of meeting the criteria presented in Appendix I, as amended, and that levels of radioactive material in effluents to unrestricted areas will be "as low as practicable."[23/]

H. Boron Recovery System

38. At the evidentiary hearing held on May 13-15, 1975, the Board indicated that it wished to explore the basis for the Staff's assumption (FES §3.5.1.1) that approximately ten percent (one million gallons per year) of the evaporator condensate stream in the Boron Recovery System ("BRS") for each plant would be discharged to the Columbia River (Tr. 490). At the evidentiary hearing held on November 11-13, 1975, the Staff testified that the BRS is defined as a liquid radwaste system, and that the Staff's Standard Review Plan for evaluation of liquid radwaste systems assumes ten percent discharge to the environment after treatment. The Staff indicated that

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23/ The Staff has proposed that the term "as low as is reasonably achievable" to be substituted for the term "as low as practicable" in 10 CFR §§20.1, 50.34a, and 50.36a, and 10 CFR Part 50, Appendix I. 40 Fed Reg. 33029 (August 6, 1975). This change is proposed pursuant to the direction of the Commission in its decision in the Appensix I rulemaking proceeding. See 40 Fed. Reg. 19440 (May 5, 1975).

this assumption is based on experience at similar operating plants. Further, the Staff testified that current Staff evaluation practice is to use a minimum of ten percent discharge even though the liquid radwaste system is designed for maximum waste recycle and the system capacity is sufficient to process wastes for reuse during equipment downtime and anticipated operational occurrences. (Stoddart, Tr. following p. 729.)

39. It is anticipated that the annual liquid waste to be processed through the liquid radwaste system will be approximately one million gallons (PSAR §11.2.2). Thus, the Staff's annual discharge assumption of one million gallons per plant from the BRS to the environment represents 100% of the total anticipated liquid radwaste input for each plant. The Applicant believes that this assumption is unrealistic for WNP-1 and WNP-4 and notes that the BRS is designed for total recycle (PSAR §9.3.4.2; Tr. 980), and that leakage from the BRS can only reach the liquid radwaste system through floor drains. There is no other direct connection between the BRS and the liquid radwaste system, and there are no other means by which BRS water could be released to

the environment. (PSAR Figures 9.3-12 through 9.3-7; Tr. 985).

40. The Board believes that experience with this type of Boron Recovery System is not yet sufficient to provide a sound basis for judgment as to whether the Applicant's BRS assumptions or those of the Staff are the more realistic. In any event, since it appears that the proposed radwaste system for WNP-1 and WNP-4 is capable of meeting with comfortable margin the criteria presented in Appendix I, as amended, of 10 CFR Part 50, on the basis of either assumptions, the Board believes that further inquiry into this matter is unnecessary at this time.

I. Reactor Pressure Vessel Supports

41. In its letter to the Commission dated June 11, 1975, regarding WNP-1 and WNP-4, the Advisory Committee on Reactor Safeguards ("ACRS") indicated that a question had arisen on a generic basis concerning loads on reactor pressure vessel ("RPV") support structures during certain postulated loss-of-coolant accidents in pressurized water reactors. The ACRS recommended that the RPV supports matter be resolved for WNP-1 and WNP-4 in a manner satisfactory to the Staff. (Staff Exhibit 8c, Appendix D)

At the evidentiary hearing held on September 29, 1975, the Board indicated that it would inquire at the later hearing into the matter of RPV support design and analysis (Tr. 635-36). At the evidentiary hearing held on November 11-13, 1975, the Applicant and Staff presented documentary evidence and testimony concerning the RPV support matter.

42. The Staff testified that it has initiated a systematic generic review of the RPV support matter for pressurized water reactors. It also testified that a preliminary review of Applicant's calculations indicates satisfactory results. The Staff anticipates that the generic review will be completed in approximately one year, and that should any modification of design be necessary ample time is available to provide an acceptable solution.

43. The Board finds that the preliminary design for the reactor pressure vessel supports, and design criteria, have been adequately described, that this is a generic matter, and that the final design and analysis will be resolved during the construction stage.

III. FINDINGS OF FACT - ENVIRONMENTAL

A. Compliance With Water Quality Standards

44. On August 8, 1975, the Thermal Power Plant Site Evaluation Council of the State of Washington issued a final National Pollutant Discharge Elimination System Waste Discharge Permit ("NPDES Permit") to the Applicant for WNP-1 and WNP-4. The final NPDES Permit was received into evidence as Applicant's Exhibit 34. A draft NPDES Permit had been received into evidence at the environmental hearings as Applicant's Exhibit 16. The final NPDES Permit, inter alia, establishes boundaries for the mixing zone and prohibits the discharge of any effluent which will cause a violation outside the prescribed mixing zone of any applicable State of Washington Water Quality Criteria or Standards contained in Washington Administrative Code ("WAC") §173-201, as they now exist or are hereafter amended. The mixing zone established in the final NPDES Permit, is identical to that proposed in the draft permit.

45. In the Partial Initial Decision, the Board noted that the mixing zone proposed in the draft NPDES Permit

would, if adopted, bring the chlorine discharge for WNP-1 and WNP-4 into compliance with the EPA Blue Book criteria.[24/] As noted, the mixing zone prescribed in the final NPDES Permit is identical to that proposed in the draft NPDES Permit. Accordingly, the Board confirms its conclusion in the Partial Initial Decision that there is reasonable assurance that the discharge from WNP-1 and WNP-4 will comply with the water quality standards adopted by the Washington Department of Ecology on July 19, 1973, which were approved by the United States Environmental Protection Agency on March 18, 1974, pursuant to Section 303 of the Federal Water Pollution Control Act Amendments ("FWPCA"), 33 U.S.C. §125, et seq. (FES §4.2.5.1).[25/]

24/ The EPA Blue Book is the current version of the "Report of the National Technical Advisory Committee on Water Quality Criteria, 1968", as revised in 1973. The 1968 Report on Water Quality Criteria is commonly known as the EPA Green Book. See NRCI-75/7 at p. 154. It should be noted that the Blue Book is not binding in a determination of the permissible levels of deleterious concentrations of toxic materials such as chlorine, since the State of Washington Water Quality Criteria merely provide that such a determination be made "in consideration of" the Blue Book. WAC §173-201-040(11).

25/ As the Board noted in the Partial Initial Decision, the Section 401 Certification issued for WNP-1 and WNP-4 precludes the Board from determining compliance with effluent limitations. NRCI-75/7 at p. 155. The Board concluded in that decision that since the 401 Certification relating to WNP-1 and WNP-4 did not address compliance with pertinent water quality standards, the Board had the authority and responsibility to make such a determination. The Board notes that the issuance by TPPSEC of the final NPDES Permit (Applicant's Exhibit 34), (Footnote 25 cont'd on page 36)

B. Anti-Biofouling Measures

46. With regard to anti-biofouling measures to be utilized for WNP-1 and WNP-4, the Board found in the Partial Initial Decision "[b]ased upon current information . . .that the proposed chlorine system is environmentally preferable to other biocides, and that no mechanical systems are adequate substitutes for chlorine." NRCI-75/7 at p. 139. At the evidentiary hearing held on May 13-15, 1975, the Board requested that the parties conduct certain studies concerning the effect of chlorine and other biocides on aquatic biota (Tr. 587-89). On June 16, 1975, the Applicant presented a proposed scope and schedule for submission of the studies. On June 26, 1975, the Staff responded to the Board's request by indicating that it would review and

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25/ - Cont'd.
which was duly reviewed by EPA (Applicant's Exhibit 35), establishes the effluent limitations, standards and other water-related requirements for WNP-1 and WNP-4. In finding that there is reasonable assurance that discharges from WNP-1 and WNP-4 will comply with current water quality standards, the Board does not reach the question presented by the parties in their respective appeals of August 8, 1975 from the Partial Initial Decision, viz., that the Board's action in making an independent determination of water-related issues was improper.

comment on the results of the Applicant's studies. The Staff maintained that a thorough and adequate evaluation had been conducted by the Staff in the Final Environmental Statement, and that the existing record supported its conclusion that no measurable adverse effects on fish due to chlorine are expected. By Memorandum and Order dated July 29, 1975, the Board confirmed that it approved the proposed scope and schedule for submission of the studies. See NRCI-75/7 at p. 152.

47. On September 29, 1975, the Applicant transmitted to the Board a report titled "Applicant's Critical Review and Study as Requested by the ASLB, Relative to WNP-1 and WNP-4 and the Columbia River". The Staff reviewed the Applicant's report and concurred in the conclusions set forth therein. The report was received into evidence as Applicant's Exhibit 36 at the evidentiary hearings held on November 11-13, 1975. Upon review of the report, the Board concluded that the Applicant's report was objective and comprehensive (Tr. 783). The Board finds that the report confirms the Board's findings in the Partial Initial Decision that the proposed chlorine system is environmentally preferable to other biocides, that

no mechanical systems are adequate substitutes for chlorine, and that there is reasonable assurance that there will be no measurable effects on fish due to exposure to chlorine. NRCI-75/7 at p. 139.

C. Supplemental Cost-Benefit Analysis for WNP-1

48. On October 22, 1975, the Applicant requested that the Staff defer consideration of the issue of financial qualifications for WNP-4 and delay issuance of the construction permit for WNP-4 (Applicant's Exhibit 17). The Applicant indicated that the Washington State public utilities could not sign participation agreements for WNP-4 until certain secondary environmental impact statements required by State law are completed. The Staff reviewed the Final Environmental Statement and the Board's findings in the Partial Initial Decision in light of the Applicant's request to delay both consideration of the financial qualifications for WNP-4 and the issuance of a construction permit for WNP-4. The Staff addressed the effect of the requested delay by assuming, conservatively, an indefinite postponement of WNP-4. That assumption bounds an evaluation of any effects a limited

delay (e.g., for six months) might have on the environmental effects evaluated in the FES and the findings by the Board in the Partial Initial Decision. The Staff also conservatively assumed that the majority of the impacts resulting from construction and operation of the project are assigned to WNP-1. The environmental effects due to construction and operation of WNP-1 alone are set out in Supplemental Table A to the FES (Sharma and Conner, Tr. following p. 734). The Staff concluded, and the Board so finds, that in view of the generally small environmental costs from construction and operation for either WNP-1 and WNP-4 together, or WNP-1 alone, the cost-benefit balance is favorable for both cases.

49. The Staff also concluded, and the Board so finds, that the environmental analysis for WNP-1 and WNP-4 reflected in the FES, as supplemented by the further assessment with respect to the environmental impacts and the cost-benefit analysis for WNP-1, complies with the requirements of the National Environmental Policy Act of 1969 ("NEPA") and 10 CFR Part 51. Accordingly, the Board, after balancing the environmental, economic, technical and other benefits

against environmental and other costs, and considering available alternatives, confirms its NEPA and site suitability findings made in the Partial Initial Decision. The Board finds that the review conducted by the Staff has been adequate and that the action called for under NEPA and 10 CFR Part 51 is the issuance of a construction permit for WNP-1 subject to the limitations for the protection of the environment listed in Paragraph 7 of the Summary and Conclusions on page ii of the FES. (Norris, Tr. following p. 732; Sharma and Connor, Tr. following p. 734.)

IV. SUPPORTING OPINION

A. Appendix I Considerations

At the evidentiary hearing held on May 13-15, 1975, the Board received into evidence as Applicant's Exhibit 12 certain information by which the Applicant sought to demonstrate that the numerical guides of Appendix I of 10 CFR Part 50 are met by WNP-1 and WNP-4. The information was submitted by the Applicant in anticipation of the effective date (June 4, 1975) of Appendix I.[26/] The Applicant also presented in Applicant's Exhibit 12 a preliminary cost-benefit analysis, required at that time by Paragraph II.D of Appendix I, which was intended to show that there are no items of reasonably demonstrated technology which should be added to the radwaste systems sequentially and in order of diminishing cost-benefit return, and to show that further cost-effective reductions in population doses cannot be accomplished.

On July 29, 1975, the Board received into evidence the interim Appendix I calculations of the Staff which result

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26/ The Commission issued its decision regarding Appendix I on April 30, 1975, and the decision was announced in the Federal Register on May 5, 1975 (40 Fed. Reg. 19439), and new Appendix I became effective on June 4, 1975.

in "upper-bound" estimates of doses to the general public. The Board also received the Staff's revised NEPA evaluation and cost-benefit analysis of radiological impacts from normal operation of WNP-1 and WNP-4. (Staff Exhibits 5, 6, and 7.) In its Partial Initial Decision the Board noted that the question of compliance with Appendix I would be addressed at the radiological health and safety phase of the proceeding. (NRCI-75/7 at p. 154)

On September 2, 1975, the Commission issued an amendment to Appendix I which became effective on September 4, 1975. The amendment provided the Applicant with the option of dispensing with the cost-benefit analysis required by Paragraph II.D of Appendix I if the proposed radwaste systems for WNP-1 and WNP-4 satisfy the Design Objectives for Light-Water-Cooled Nuclear Power Reactors contained in the Concluding Statement of Position of the Regulatory Staff (dated February 20, 1974) in the Appendix I rulemaking proceeding (NRC Docket RM-50-2). These design objectives are set forth in the Annex to the September 4, 1975 Amendment. (See Fed. Reg. 40818

On September 2, 1975, the Staff requested that the Applicant inform the Staff as to whether the Applicant would comply with

Paragraph II.D of Appendix I or whether the Applicant would elect to dispense with the cost-benefit analysis required by Paragraph II.D and demonstrate compliance with the Annex to the September 4, 1975 amendment (Staff Exhibit 10). By letter dated September 19, 1975, the Applicant replied that it would exercise the option of demonstrating compliance with the Annex. Attached to the letter was certain information requested by the Staff relating to compliance with the Annex. (Applicant's Exhibit 22).

The Staff evaluated the radwaste systems proposed for WNP-1 and WNP-4 for the reduction of radioactive materials released to the environment in liquid and gaseous effluents. Based upon the information provided in Applicant's letter dated September 19, 1975, and based upon more recent operating data applicable to WNP-1 and WNP-4 and upon changes in the Staff's calculational model, the Staff generated new liquid and gaseous source terms in order to calculate releases from the site by WNP-1, WNP-4, and WNP-2 (Stoddart, Attachments 1-4, Tr. Following p. 724). The source terms for WNP-2 (a BWR) were calculated using the Staff's current models and methodology to assure consistency in the Staff's determinations

of the new source terms for site-related criteria. These source terms were utilized by the Staff to calculate the individual doses presented in its testimony. (Stoddart, Tr. following p. 724.)

Included in the Staff's assessment are dose calculations of pathways associated with liquid effluents released to the Columbia River with noble gases released to the atmosphere, and with radioiodines and other radionuclides released to the atmosphere. Based upon meteorological data collected at the site and upon atmospheric transport and dispersion models, the Staff calculated relative atmospheric dispersion values (X/Q) for noble gases and X/Q and deposition values (D/Q) for radioiodines and radionuclides for locations where dose calculations were required. (Kornasiewicz, Tr. following p. 720)

Answers to Board questions concerning the nature of the underlying assumptions, on which the Staff's calculations were based, indicate that by and large the dose estimates are reasonably realistic. The Staff witnesses explained the concept of "maximum exposed individual" as one who, by virtue of his living and dietary habits, exceeds what might be called

the average individual in a given population. It would then appear unlikely that the dose received by the individual would be exceeded by any individual; indeed, it seems likely that the average individual would receive a rather smaller dose.

The Staff witnesses agreed that there is some conservatism in assumptions relative to source terms in that they are more likely to be in error on the conservative side. Such assumptions though appear to be based on actual experience in operating reactors insofar as is practicable. (Tr. 959-70.)

Recognizing that data concerning radioactive effluents is being collected continuously at operating plants, and that environmental monitoring programs are being implemented, this Board would urge maximum use of this information to gain even better knowledge and perspective with respect to the impact of radioactive effluents on the populations in the vicinity of nuclear power plants.

B. Organization and Management

In the interest of obtaining some understanding of the WPPSS organization and of administrative systems, both existing and planned, the Board questioned members of WPPSS

management to determine the views and plans of top management relative to the design, construction, and operation of a complex nuclear facility. It appears that WPPSS management is committed to the further development and maintenance of a strong, affirmative program to assure responsible design and construction and safety of operation, and is committed to considered and appropriate allocation of authority and responsibility. It further appears that WPPSS management is conscious of necessary interactions among organizational units, involving established checks and balances, in both headquarters and plant organizations. WPPSS management has adopted the concept of "management by assurance" which calls for full understanding of administrative systems required and full administrative attention to the functioning of those systems with regard to design, construction, and operation of WNP-1 and WNP-4. (Tr 854-83, 901-14, 918)

It appears to this Board that WPPSS management reasonably comprehends the organizational and managerial necessities regarding the design, construction, and operation of a nuclear power plant. It can only urge the continuing and unrelenting attention by management to these vitally important matters throughout the life of the facility.

The Board notes that Chapter 13.0 of the SER contains a description and evaluation of the proposed plant operating organization, and briefly mentions plans for technical support. There is, however, no explicit mention of evaluation by the Staff of management's understanding of and role in the design, construction, and operation of the plant. That role is to organize, to allocate authority and responsibility, to develop administrative systems and procedures, including appropriate checks and balances, and to devote continual attention to making the total system work.

The Staff appears to place substantial reliance on the formulation and existence of a Quality Assurance program and organization. There is little doubt that a well organized and executed quality assurance program, such as is envisioned by Appendix B to 10 CFR 50, can help greatly to produce a high quality facility. But the success of any system depends on the ability of management to develop, and propagate, a responsible attitude toward safety, whether the subject involved is design, construction, or operation. The safety of operation of a plant depends, vitally, not only on the technical and operational groups at the plant, but also on the continual

attention by management and headquarters technical and operational groups, all involving appropriate checks and balances.

Therefore, this Board would urge the Staff to review and evaluate the management and organization of each Applicant explicitly at the construction permit stage with the objective of determining, among other things, whether management is planning soundly and is properly preparing for the assumption of responsibility for safety of operation of its facility.[27/]

27/ See discussion of organization and management in Mississippi Power & Light Company and Middle South Energy, Inc. (Grand Gulf Nuclear Station Units 1 and 2) LBP-74-64, RAI-74-8, p. 348 (August 30, 1974), and Niagara Mohawk Power Corporation (Nine Mile Point, Unit 2), LBP-74-43, RAI-74-6, p. 1046 (June 14, 1973).

V. CONCLUSIONS OF LAW

1. The Board has reviewed the entire record of this proceeding, including the proposed findings of fact and conclusions of law submitted by the parties. All of the proposed findings and conclusions submitted which are not incorporated directly or inferentially in this Initial Decision are herewith rejected as being unnecessary to the rendering of this Initial Decision.

2. In the Partial Initial Decision issued on July 30, 1975, the Board made findings of fact and determinations and reached conclusions of law, regarding environmental and site suitability matters, and on certain safety issues. Thereafter in its Memorandum and Order issued on September 30, 1975, the Board made additional determinations regarding certain additional safety issues. The Board has considered these earlier findings, determinations, and conclusions, as well as all of the documentary and oral evidence of record in this proceeding. This consideration and a review of the entire record, including that portion of the record created since the issuance of the Partial Initial Decision, have led the Board to the foregoing discussion and findings of fact, and to the conclusions of law stated hereinafter.

3. The Board concludes that the review of the application by the Staff has been adequate, and that the application and the record of the proceeding contain sufficient information to support findings by the duly authorized official of the Regulatory Staff (and the issuance of a construction permit based thereon for WPPSS Nuclear Project No. 1) to the same effect as the conclusions of law of the Board, as follows:[28/]

A. In accordance with 10 CFR §50.35(a):

(1) The Applicant has described the proposed design of the facilities, including but not limited to the principal architectural and engineering criteria for the design, and has identified the major features or components incorporated therein for the protection of the health and safety of the public;

28/ With the exception of Conclusion of Law C, all conclusions of law herein apply to both WNP-1 and WNP-4. The Board has deferred consideration of the financial qualifications of the Applicant to design and construct WNP-4 and therefore makes no conclusion of law with respect to the financial qualifications issue for WNP-4. Thus, the Board will not authorize the issuance of a construction permit for WNP-4 at this time. Accordingly, Conclusion of Law C applies only to WNP-1.

(2) Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the Final Safety Analysis Report;

(3) Safety features and components, if any, which require research and development have been described by the Applicant and the Applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components; and

(4) On the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facilities, and (ii) taking into consideration the site criteria contained in 10 CFR Part 100, the proposed facilities can be constructed and operated at the proposed location without undue risk to the health and safety of the public.

B. The Applicant is technically qualified to design and construct the proposed facilities.

C. The Applicant is financially qualified to design and construct the proposed WNP-1 facility.

D. The issuance of permits for construction of the facilities will not be inimical to the common defense and security or to the health and safety of the public.

4. As we concluded in our Partial Initial Decision dated July 30, 1975, in accordance with 10 CFR Part 51 of the Commission's Regulations, the Board concludes:

a. The environmental review conducted by the Staff pursuant to the National Environmental Policy Act of 1969 ("NEPA") as further augmented and modified herein is adequate.

b. The requirements of Sections 102(2)(C) and (D) of NEPA and 10 CFR Part 51 of the Commission's Regulations have been complied with in this proceeding.

c. The Board has independently considered the final balance among conflicting factors contained in the record of the proceeding, and has determined that appropriate action to be taken is issuance of construction permits for WNP-1 and WNP-4,[29/]

29/ See n. 28, at p. 50

subject to the conditions for the protection of the environment recommended by the Staff (FES, p. ii), and set forth in the Partial Initial Decision.

VI. ORDER

Based upon the Board's findings and conclusions, and pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's Regulations, IT IS ORDERED that the Director of the Division of Reactor Licensing, Office of Nuclear Reactor Regulation, is authorized to issue to the Washington Public Power Supply System a permit to construct WPPSS Nuclear Project No. 1, consistent with the terms of this Initial Decision, substantially in the form of Attachment A hereto.

IT IS FURTHER ORDERED, in accordance with 10 CFR §2.760, §2.762, §2.764, §2.785 and §2.786 that this Initial Decision shall become effective immediately and shall constitute with respect to the matters covered therein the final action of the Commission forty-five (45) days after the date of issuance hereof, subject to any review pursuant to the Commission's Rules of Practice. Exceptions to this Initial Decision may be filed by any party within seven (7) days after service of this Initial Decision. Within fifteen (15) days thereafter [twenty (20) days in the case of the Staff] any party filing such exceptions shall file a brief in support thereof. Within

fifteen (15) days of the filing of the brief of the appellant [twenty (20) days in the case of the Staff], any other party may file a brief in support of, or in opposition to, the exceptions.

THE ATOMIC SAFETY AND
LICENSING BOARD

Marvin M. Mann, Member

Donald P. deSylva, Member

Robert M. Lazo, Chairman

Issued at Bethesda, Maryland
this 22nd day of December, 1975.

Appendix: Appendix A

Attachment: Attachment A

DECISIONAL RECORD

The decisional record in this proceeding (~~Washington Public Power Supply System, Nuclear Projects No. 1 and No. 4~~ St. Lucie Nuclear Power Plant, Unit No. 2, Docket Nos. ~~50-460, 50-513~~ 50-389) consists of the following:

1. The material pleadings filed herein, including the Commission notices, the petitions and other pleadings filed by the parties and the orders issued by the Board during the course of this proceeding.
2. The transcript in this proceeding.~~1~~
3. The exhibits received into evidence at the evidentiary hearing. These exhibits are identified as follows:

Applicant's Ex. 1	Applicant's License Application, with its three amendments
Applicant's Ex. 2	Applicant's Preliminary Safety Analysis Report (PSAR), with its seventeen amendments
Applicant's Ex. 3	Applicant's Environmental Report (ER), with its three amendments

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1/ The transcript of testimony at the evidentiary hearings is in ~~seven~~ volumes with pagination from 72 to 1019.

Applicant's Ex. 4	Pacific Northwest Utilities Conference Committee, West Group Forecast of Power loads and Resources, July, 1975 to June 1986 (February 1, 1975)
Applicant's Ex. 5	Regional Evaluation of the Geothermal Potential in Central Washington State (January 1975)
Applicant's Ex. 5a	A revised bibliography for the Woodward-Gizinski Report
Applicant's Ex. 6	Letter from the United States Department of Agriculture, Forest Service, regarding preparations of environmental impact statements for geothermal leasing (September 9, 1974)
Applicant's Ex. 7	Section 401 certification from Washington Thermal Power Plant Site Evaluation Council
Applicant's Ex. 8	Applicant's letter responding to comments on the Draft Environmental Statement (May 5, 1975)
Applicant's Ex. 9	Missing page from the Applicant's comments on Draft Environmental Statement (to be inserted in FES between pp. A-8 and A-9)
Applicant's Ex. 10	Applicant's request for a Limited Work Authorization (January 31, 1975)
Applicant's Ex. 11	United States Energy Research and Development Administration letter to Applicant granting permission to conduct limited work activities pending execution of lease for site (May 14, 1975)

Applicant's Ex. 11a	Corrected copy of Applicant's Exhibit 11 - ERDA letter granting permission to conduct limited work activities pending execution of lease for site (May 14, 1975)
Applicant's Ex. 11b	Permit dated March 26, 1971 between the United States and the Applicant regarding site investigations
Applicant's Ex. 12	Guides on Design Objectives for Light-Water-Cooled Nuclear Power Reactors Licensed Under 10 CFR Part 50, WNP-1 and 4 Per Unit Dose Estimates
Applicant's Revised Ex. 12	Guides on Design Objectives for Light-Water-Cooled Nuclear Power Reactors Licensed Under 10 CFR Part 50, WNP-1 and 4 Per Unit Dose Estimates (Revised)
Applicant's Ex. 13	Table setting forth number of fish collected by various sampling techniques (5 pages)
Applicant's Ex. 14	Supplemental testimony of J. F. Hanlon
Applicant's Ex. 15	The lease between ERDA and the Applicant
Applicant's Ex. 16	The proposed NPDES Waste Discharge Permit for the facility
Applicant's Ex. 17	Letter from Applicant to Staff regarding Financial Qualifications for WNP-4

Applicant's Ex. 18	5 Annual Reports of certain private utility companies
Applicant's Ex. 19	1974 Updated Financial and Operating Summaries of the 104 Consumer-owned Participants
Applicant's Ex. 20	Audited Balance Sheets and other Financial Information, Washington Public Power Supply System, Nuclear Project No. 1, Richland, Washington, June 30, 1975 and 1974
Applicant's Ex. 21	Applicant's Interim 1974 Report
Applicant's Ex. 22	Letter from Applicant to Staff regarding Appendix I (September 19, 1975)
Applicant's Ex. 23	Letter from Applicant to Staff regarding Appendix I (October 14, 1975)
Applicant's Ex. 24	Applicant's Summary Regarding 10 CFR 50, Appendix I
Applicant's Ex. 25	Letter from Applicant to Staff regarding Reactor Vessel Supports (September 3, 1975)
Applicant's Ex. 26	Letter from Applicant to Staff regarding additional information on Reactor Vessel Supports (November 7, 1975)
Applicant's Ex. 27	Letter from Applicant to Staff regarding submittal of information demonstrating compliance with ECCS final acceptance criteria (June 6, 1975)

Applicant's Ex. 28	Letter from Applicant to Staff regarding submittal of additional ECCS information (July 17, 1975)
Applicant's Ex. 29	Letter from Applicant to Staff regarding submittal of additional ECCS information (July 25, 1975)
Applicant's Ex. 30	Letter from Applicant to Staff regarding submittal of additional ECCS information (September 26, 1975)
Applicant's Ex. 31	Letter from Applicant to Staff regarding technical specification changes for locked-open or closed valves (October 10, 1975)
Applicant's Ex. 32	Supplemental Agreement between Applicant and ERDA regarding lease between these parties (October 16, 1975)
Applicant's Ex. 33	Memorandum of Understanding between Applicant and ERDA (October 16, 1975)
Applicant's Ex. 34	National Pollutant Discharge Elimination System Waste Discharge permit dated April 28, 1975, as amended July 14, 1975, issued to Applicant by Thermal Power Plant Site Evaluation Council of the State of Washington
Applicant's Ex. 35	Letter from Region X of the EPA to TPPSEC regarding review of the revised NPDES Permit (July 30, 1975)

Applicant's Ex. 36	Applicant's Critical Review and Study as requested by ASLB Relative to WNP 1 and 4 and the Columbia River
Applicant's Ex. 37	Amendment 18 to Applicant's PSAR (June, 1975)
Applicant's Ex. 38	Amendment 19 to Applicant's PSAR (July 1, 1975)
Applicant's Ex. 39	Applicant's summary of Amendment 20 to Applicant's PSAR
Applicant's Ex. 40	B&W NPGD Quality Assurance Program for Nuclear Equipment, Revision 1 (March, 1975)
Applicant's Ex. 41	Amendment 20 to Applicant's PSAR (November, 1975)

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Staff's Ex. 1	Staff's Final Environmental Statement (March, 1975)
Staff's Ex. 2	Staff's report on site suitability
Staff's Ex. 3	Updated Figure 6.1 of the Final Environmental Statement
Staff's Ex. 4	Affidavit of Jan A. Norris, with its attachments, dated June 20, 1975
Staff's Ex. 5	Affidavit of Jan A. Norris, with its attachments, dated July 18, 1975
Staff's Ex. 6	Affidavit of Jacob Kastner, with its attachments, dated July 1, 1975

Staff's Ex. 7	Affidavit of Phillip G. Stoddart, with its attachments, dated July 18, 1975
Staff's Ex. 8a	Safety Evaluation Report (May, 1975)
Staff's Ex. 8b	Supplement No. 1 to Safety Evaluation Report (June 2, 1975)
Staff's Ex. 8c	Supplement No. 2 to Safety Evaluation Report including 2 sets of errata (August, 1975)
Staff's Ex. 9	Letter from Staff to Applicant regarding the Staff's position on ECCS (September 19, 1975)
Staff's Ex. 10	Letter from Staff to Applicant regarding Appendix I (September 12, 1975)

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

DOCKET NO. 50-460

WASHINGTON PUBLIC POWER SUPPLY SYSTEM NUCLEAR PROJECT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-134

1. The Nuclear Regulatory Commission (the Commission) having found that:

A. The application for construction permit complies with the requirements of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission, there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission, and all required notifications to other agencies or bodies have been duly made;

B. The Washington Public Power Supply System (the Applicant) has described the proposed design of the Washington Public Power Supply System Nuclear Project No. 1 (the facility), including; but not limited to, the principal architectural and engineering criteria for the design and has identified the major features or components incorporated therein for the protection of the health and safety of the public;

C. Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the final safety analysis report;

D. Safety features or components, if any, which require research and development have been described by the applicant and the applicant has identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;

E. On the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facility and (ii) taking into consideration the site criteria contained in 10 CFR Part 100, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public;

F. The applicant is technically qualified to design and construct the proposed facility;

G. The applicant is financially qualified to design and construct the proposed facility;

H. The issuance of a permit for the construction of the facility will not be inimical to the common defense and security or to the health and safety of the public; and

I. After weighing the environmental, economic, technical and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of a construction permit subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended (the Act), and Title 10, Chapter 1, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," and pursuant to the Initial Decision of the Atomic Safety and Licensing Board, dated December 22, 1975, the Nuclear Regulatory Commission (the Commission) hereby issues a construction

permit to the Applicant for a utilization facility designed to operate at 3600 megawatts thermal as described in the application and amendments thereto (the application) filed in this matter by the Applicant and as more fully described in the evidence received at the public hearing upon that application. The facility, known as the Washington Public Power Supply System Nuclear Project No. 1 will be located on the Applicant's site in Benton County, Washington.

3. This permit shall be deemed to contain and be subject to the conditions specified in Sections 50.54 and 50.55, of said regulations: is subject to all applicable provisions of the Act, and rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the conditions specified or incorporated below:

A. The earliest date for the completion of the facility is January 1, 1980, and the latest date for completion is January 1, 1982.

B. The facility shall be constructed and located at the site as described in the application, in Benton County, Washington.

C. This construction permit authorizes the applicant to construct the facility described in the application and the hearing record, in accordance with the principal architectural and engineering criteria and environmental protection commitments set forth therein.

D. In view of the fact that the Attorney General has not recommended an antitrust hearing in this matter, that no antitrust issues have been raised by another in a manner according with the Commission's Rules of Practice, and that no finding has been made that an antitrust hearing is otherwise required (10 CFR Part 2, Section 2.104(d)), antitrust review of the application for this construction permit under Section 105c of the Atomic Energy Act of 1954, as amended, has been completed and a hearing thereon determined to be unnecessary.

E. This facility is subject to the following conditions for the protection of the environment:

1. The Applicant shall assure that an archeologist, acceptable to the State of Washington Historic Preservation Officer, is present during the initial stages of all excavation work in the vicinity of the river.

2. The Applicant shall take the necessary mitigating actions, including those summarized in Section 4.7 of the FES, during construction of the station and associated transmission lines, to avoid unnecessary adverse environmental impacts from construction activities.

3. Before engaging in a construction activity not evaluated by the Commission, the Applicant will prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated, or that is significantly greater than that evaluated in the FES, the Applicant shall provide a written evaluation of such activity and obtain prior approval thereto from the Director of Nuclear Reactor Regulation.

4. The Applicant shall establish a control program which shall record written procedures and instructions to control all construction activities and shall provide for periodic management audit to determine the adequacy of implementation of environmental conditions. The Applicant shall maintain sufficient records to furnish evidence of compliance of all the environmental conditions herein.

4. This permit is subject to the limitation that a license authorizing operation of the facility will not be issued by the Commission unless (a) the Applicant submits to the Commission the complete Final Safety Analysis Report, portions of which may be submitted and evaluated from time to time; (b) the Commission finds that the final design provides reasonable assurance that the health and safety of the public will not be endangered by the operation of the facility in accordance with procedures approved by it in connection with the issuance of said license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements were satisfied; and (d) the Applicant submits proof of financial protection and executes an indemnity agreement as required by Section 170 of the Act.

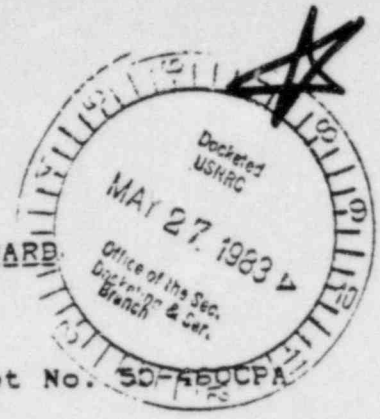
5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE NUCLEAR REGULATORY COMMISSION

Roger S. Boyd, Acting Director
Division of Reactor Licensing
Office of Nuclear Regulation

Date of Issuance:

RELATED CORRESPONDENCE



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
WASHINGTON PUBLIC POWER SUPPLY SYSTEM et. al.	)	Docket No. 50-460CPA
	)	
	)	
(WPPSS Nuclear Project No. 1)	)	

COALITION FOR SAFE POWER RESPONSES TO APPLICANT'S FIRST SET OF INTERROGATORIES

On May 3, 1983, the Washington Public Power Supply System (WPPSS) served the Coalition for Safe Power its first set of interrogatories. Pursuant to Sections 2.740(b) and 2.741(d) of the NRC Rules of Practice, CFSP sets forth below its response to each interrogatory.

INTERROGATORY 1: State the full name, address, occupation and employer of each person answering the interrogatories and designate the interrogatory or the part thereof he or she answered.

RESPONSE: Eugene Rosolie, Suite 410 408 SW 2nd, Portland, Or. is responsible for answers to all interrogatories.

INTERROGATORY 2: Identify each and every person you are considering calling as a witness in the event a hearing is held in this proceeding and with respect to each of these witnesses:

a. State the substance of the facts and opinions to which the witness is expected to testify;

b. Give a summary of the grounds for each opinion; and

c. Describe the witnesses' educational and professional background.

RESPONSE: To date the CFSP has not identified any witness.

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INTERROGATORY 3: Is your contention based upon conversations, consultations, correspondence or any other type of communications with one or more individuals? If so,

a. Identify by name and address each of these individuals.

b. State the educational and professional background of each of these individuals, when each communication occured, and identify all other individuals involved.

c. Describe the nature of each communication with such individual, when it occured, and identify all other individuals involved.

d. Describe the information received from such individuals and explain how it provides a basis for your contention.

e. Identify each letter, memorandum, tape, note or other record related to each conversation, consultation, correspondence or other communication with such individuals.

RESPONSE: No.

INTERROGATORY 4: Please identify and provide a copy of the current charter, bylaws, articles of incorporation and/or all other organic documents pursuant to which intervenor is organized.

INTERROGATORY 5: Have the documents identified and provided in interrogatory 4 amended and/or superceded any earlier charters, bylaws, articles of incorporation and/or organic documents pursuant to which intervenor was organized? If so:

a. Identify and provide each of these amended and superceded douments (sic).

b. Explain why these documents were amended and/or superceded.

c. Identify and provide all documents in which the actions explained in interrogatory 5(b) are discussed.

INTERROGATORY 6: Explain the organizational goals of intervenor.

RESPONSE: Intervenor objects to interrogatories 4,5,and 6. The requests have no relation to the issues in this proceeding.

INTERROGATORY 7: What is the complete basis for your statement that Licensee's "decision in April ,1982 to 'defer' construction for two to five years, and subsequent cessation of construction at WNP-1 was dilatory."

RESPONSE: The complete basis for our statement is contained in our contention.

INTERROGATORY 8: Please explain fully what you mean by the word "defer" as used in your contention.

RESPONSE: "Defer", as used in the contention, means to put off; we believe, however, that it means a permanent halt to construction of the plant.

INTERROGATORY 9: Please explain fully what you mean by the word "dilatory" as used in your contention.

RESPONSE: "Dilatory", as used in the contention, means intentional and without valid purpose.

INTERROGATORY 10: What is the basis for your response to interrogatories 8 and 9?

RESPONSE: The basis for the responses to interrogatories 8 and 9 are Webster's Dictionary, Blacks Law Dictionary, Commission Decision CLI-82-29, 16NRC___(Oct.8, 1982 and ALAB-722 (April 11, 1983).

INTERROGATORY 11: Why do you contend that Licensee has failed to establish good cause for an extension of the WNP-1 construction permit?

RESPONSE: We contend that Licensee has failed to establish good cause for the reasons given as basis for our contention.

INTERROGATORY 12: What are the reasons you believe Licensee offered to NRC in support of a showing of "good cause" as required by 10 C.F.R. 50.55(b)?

RESPONSE: It is our belief that Licensee offered the NRC the reason that it was BPA that had recommended the action.

INTERROGATORY 13: What is the basis for your response to interrogatory 12?

RESPONSE: Representations made by licensee through filings with the NRC and at the prehearing conference.

INTERROGATORY 14: Do you contend that the reasons offered by Licensee to support a showing of good cause are factually incorrect?

RESPONSE: BPA did make a recommendation.

INTERROGATORY 15: What is the basis for your response to interrogatory 14?

RESPONSE: Personal knowledge of events surrounding the deferral of WNP-1 and filings by the Licensee.

INTERROGATORY 16: Do you contend that the reasons offered by Licensee to support a showing of good cause are not in fact the reasons why Licensee had requested an extension of its construction permit?

RESPONSE: Yes.

INTERROGATORY 17: If your response to interrogatory 16 is yes, why do you believe that Licensee has (a) sought an extension of its construction permit and (b) deferred construction at WNP-1?

RESPONSE: It is our belief that WNP-1 was defered to due several factors. WPPSS had a choice to either defer WNP-1 or WNP-3. Even though construction on WNP-1 was ahead of WNP-3 and the construction permit on WNP-3 does not

expire until 1986 WNP-1 was chosen because (1) private utilities were involved in WNP-3 and would not agree to deferral of that plant and (2) WNP-3 is located in Western Washington where there is strong anti-nuclear sentiment making the restart of contruction on WNP-3 more difficult. Furthermore, there is no need for the power from WNP-1 or WNP-3 now or at any time in the future nor will there ever be adequate financing for the projects.

INTERROGATORY 18 : What is the basis for your response to interrogatories 16 and 17?

RESPONSE: The basis for response to interrogatories is common knowldge in the region as to the financial situation of WPPSS, news articles, and the BPA report submitted by Licensee in this proceeding.

INTERROGATORY 19: What is the basis for your statement that the "modified request for extension of completion date to 1991 does not constitute a 'reasonable period' of time provided for in 10 CFR 50.55(b)?"

RESPONSE: The basis is contained in our contention.

INTERROGATORY 20: Please explain fully what you mean by a "reasonable period of time" as used in your contention.

RESPONSE: What we mean by "reasonable period of time" is that the extension beyond the original dates falls within a period of one to two years and that the proposed dates of completion be a good estimate of when the plant will be completed, for example not requiring further extensions in the future.

INTERROGATORY 21: What factors do you contend should be condidered when determining if a requested construction permit extension is for a "reasonable period of time"?

RESPONSE: Licensee's past performance to complete work on schedule,and if the plant is likely to be completed within the time period. The primary factors which govern a finding on the latter are financial ability, management capability and need for power.

INTERROGATORY 22: What do you contend would constitute a "reasonable period of time" in the case of WNP-1?

RESPONSE: An extension of one to two years might be appropriate. An extension should be an extension; if there have been such substantial changes in the situation such that the original application for the construction permit would have been denied, and the request is for more than a matter of months, then it is clear the construction permit requires relitigation. In this case, deferral of construction was based on no need for power and lack of financing and was due to poor management in the first place and there is no reason to believe that the deferral of construction will be for any known period of time.

Respectfully submitted,

Dated this day the 23rd of May, 1983.

Nina Bell
Coalition for Safe Power

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
WASHINGTON PUBLIC POWER SUPPLY SYSTEM et. al.	)	Docket No. 50-460 CPA
	)	
	)	
(WPPSS Nuclear Project No. 1)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "COALITION FOR SAFE POWER RESPONSES TO APPLICANT'S FIRST SET OF INTERROGATORIES" in the above-captioned proceeding have been served on the following by deposit in the U.S. Mail, first class, postage prepaid on this 23rd day of May, 1983.

Herbert Grossman, Chairman
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Glen O. Bright
Adminstrative Judge
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Mitzi Young
Counsel for NRC Staff
Office of Exec. Legal Director
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

State of Washington
Energy Facility Site Evaluation
Council Mail Stop PY-11
Olympia, WA 98504

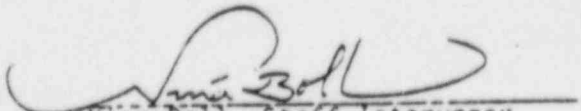
Docketing & Service
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Nicholas Reynolds
Debevoise & Lieberman
1200 17th Street, NW
Washington D.C. 20036

Dr. Jerry Harbour
Administrative Judge
Atomic Safety & Licensing Board
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

Gerald Sorenson, Manager
Licensing Program
WPPSS
300 G. Washington Way
Richland, WA 99352

Atomic Safety & Licensing
Appeal Board Panel
U.S. Nuclear Regulatory Commission
Washington D.C. 20555



Nina Bell, Staff Intervenor
Coalition for Safe Power

N.B

RELATED CORRESPONDENCE

DOCKETED

'83 MAY -4 A8:52

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY
AND LICENSING BOARD

In the Matter of	)	
	)	
WASHINGTON PUBLIC POWER SUPPLY SYSTEM	)	Docket No. 50-460-CPA
	)	
(WPPSS Nuclear Project No. 1)	)	

LICENSEE'S RESPONSE TO INTERVENOR'S
FIRST SET OF INTERROGATORIES

On April 14, 1983, the Coalition for Safe Power ("intervenor") served the Washington Public Power Supply System ("Licensee") its first set of interrogatories. Pursuant to Sections 2.740b(b) and 2.741(d) of the NRC Rules of Practice, Licensee sets forth below its response to each interrogatory or request for documents.

When documents are requested the discovery of which is not objectionable, Licensee will make such documents available to intervenor according to the following procedures:

1. Documents will be available for inspection at Licensee's offices, 3000 George Washington Way, Richland, Washington during normal business hours (7:30 a.m. to 4:00 p.m., Monday through Friday).

2. Intervenor should schedule the inspection of documents by notifying Gerald C. Sorensen at (509) 372-5238, who will arrange for the documents to be inspected.

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3. Intervenor should not remove any documents from the room provided for such inspection. Intervenor should identify those documents it wishes to be copied and Licensee will make and supply copies at intervenor's expense and at a rate of 10¢ per page.

4. The documents referenced below will be available for inspection on May 19, 1983 and for a reasonable time thereafter.

INTERROGATORY 1: Supply copies of "net billing agreements" executed between WPPSS and the Bonneville Power Administration and "Participants."

RESPONSE: The Net Billing Agreements and Amendatory Agreements thereto executed between Licensee, the Bonneville Power Administration ("BPA") and each participant in WNP-1 will be made available for inspection and copying as set forth above.

INTERROGATORY 2: Supply copies of the "Exchange Agreement" executed between WPPSS, Bonneville Power Administration and the "Companies."

RESPONSE: The Exchange Agreements and Amendatory Agreements thereto executed between Licensee, BPA and each company which purchased a portion of WNP-1 project capability will be made available for inspection and copying as set forth above.

INTERROGATORY 3: Provide all documents used to support the statement made by Licensee that "the BPA recommendation concerning construction deferral at WNP-1 significantly affects the ability of the Licensee to raise capital needed for continued construction of WNP-1."

RESPONSE: The basis for Licensee's statement is the Project Agreement and Amendatory Agreement thereto executed between BPA and Licensee. Such documents will be made available for inspection and copying as set forth above.

INTERROGATORY 4: What was the date of the last issuance of bonds for WNP-1? Had WPPSS intended to issue bonds for WNP-1 prior to the BPA recommendation? If yes, supply the date and all documents which show that such bond sale would have been possible or impossible.

RESPONSE: The last sale of bonds for WNP-1 was on February 11, 1982. No formal decision was made to proceed with the issuance of additional bonds for WNP-1 prior to the BPA recommendation, although the Supply System did recognize that additional bonds will have to be sold to finance the completion of WNP-1.

INTERROGATORY 5: Provide the last date WPPSS issued any bonds for its projects and identify the project.

RESPONSE: The last date Licensee issued bonds for its projects was on May 20, 1982. The bonds were issued for WNP-2 and WNP-3.

INTERROGATORY 6: Provide all documents exchanged between WPPSS, "Participants" and "Companies" concerning the delaying of WNP-1 construction.

INTERROGATORY 7: Provide minutes of all meetings of the WPPSS Executive Board at which the delay of WNP-1 was discussed.

INTERROGATORY 8: Provide all documents generated internally by WPPSS concerning the delay of WNP-1.

INTERROGATORY 9: Provide all documents related to all options considered by WPPSS for WNP-1 between April 23 and 29, 1982.

RESPONSES: Licensee objects to interrogatories 6, 7, 8 and 9. These interrogatories request documents which are clearly beyond the scope of this proceeding and which are irrelevant and unnecessarily burdensome. In Boston Edison Company (Pilgrim Nuclear Generating Station, Unit 2), LBP 75-30, 1 NRC 579, 582 (1975), the Licensing Board stated that "as a rule of necessity, there must be limitations on the concept of relevancy so as '. . . to keep the inquiry from going to absurd and oppressive grounds' [citation omitted]." Another Licensing Board stated that "§2.740(b)(1) only permits discovery of

documents 'relevant to the subject matter involved in the proceeding,' and then further qualifies and limits the term 'subject matter' to the contentions admitted by the presiding officer in the proceeding. . . ." Allied General Nuclear Services (Barnwell Fuel Receiving and Storage Station), LBP-77-13, 5 NRC 489, 492 (1977).

Interrogatories 6, 7, 8 and 9 lack any limitations as to the scope of documents sought in connection with the delay of WNP-1. They encompass documents prepared concerning ramp-down actions proposed or in fact taken to prevent possible site or facility degradation during construction deferral. Such documents, which bear on health and safety aspects of reactor construction, simply are not relevant to the questions posed in this construction permit amendment proceeding. See Washington Public Power Supply System (WPPSS Nuclear Project Nos. 1 & 2, CLI-82-29, 16 NRC ___ (1982), October 8, 1982, slip op. at 9-10.

Interrogatories 6, 7, 8 and 9 also encompass documents addressing various changed contractual obligations of the Supply System in light of the deferral of WNP-1. Matters such as contract realignment as a result of construction deferral and employment levels at WNP-1 discussed in these documents again have no relevance to this proceeding.

In short, through these interrogatories intervenor seeks virtually every document concerning every aspect of the construction delay at WNP-1. Licensee submits that in view of the narrow issues posed in this proceeding, such a request is improper. Accordingly, Licensee objects to Interrogatories 6, 7, 8 and 9.

INTERROGATORY 10: Explain what caused the delay by WPPSS in making an amendment to its Construction Permit Extension Request to the NRC. Provide all documents generated internally by WPPSS related to this action.

RESPONSE: While Licensee does not see the relevance of this interrogatory to the admitted contention, the following information is nonetheless submitted. The Supply System does not believe that there was any inordinate delay associated with the filing of the amendment to this construction permit extension request. That request was filed following review by Supply System management and counsel. In view of the fact that a CP amendment request was already pending, and intervenor's request for hearing was already pending, the Supply System saw no urgency in filing the second amendment request. The request was filed seasonably, i.e., in ample time for the NRC Staff to act on it and for the Board and parties to address it fully.

Licensee objects to the balance of the interrogatory which requests "all documents generated internally by WPPSS related to this action." As discussed above in connection with interrogatories 6, 7, 8 and 9, this request seeks virtually every document generated internally by the Supply System regarding every aspect of the deferral of WNP-1. Such a request clearly encompasses documents not relevant to this proceeding. Therefore, Licensee submits that the request for documents is objectionable.

Respectfully submitted,

Nicholas S. Reynolds
Sanford L. Hartman
DEBEVOISE & LIBERMAN
1200 Seventeenth St., N. W.
Washington, D. C. 20036
(202) 857-9817

Counsel for Licensee

May 3, 1983

Telecopied Facsimile

STATE OF WASHINGTON)
)
COUNTY OF BENTON)

G. C. Sorensen, being duly sworn, deposes and says: That he is the Manager, Regulatory Programs, for the Washington Public Power Supply System, and that he believes the contents of the foregoing Licensee's Response to Intervenor's First Set of Interrogatories are true and correct to the best of his information, knowledge and belief.

G C Sorensen

Sworn to and subscribed before me
on this 3rd day of MAY, 1983.

S. R. Mitchell
Notary Public
255 Saint Ct.
Richland, Wa.
Dec. "85"

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
WASHINGTON PUBLIC POWER SUPPLY SYSTEM	)	Docket No. 50-460-CPA
	)	
	)	
(WPPSS Nuclear Project No. 1)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "Licensee's Response to Intervenor's First Set of Interrogatories" in the captioned matter were served upon the following persons by deposit in the United States mail, first class, postage prepaid this 3rd day of May, 1983:

Herbert Grossman, Esq.
Chairman, Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Glenn O. Bright
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Jerry Harbour
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Chairman, Atomic Safety and Licensing Appeal Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mitzi A. Young, Esq.
Office of the Executive Legal Director
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Chairman, Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Gerald C. Sorensen
Manager of Licensing
Washington Public Power
Supply System
3000 George Washington Way
Richland, Washington 99352

Mr. Scott W. Stucky
Docketing & Service Branch
U. S. Nuclear Regulatory
Commission
Washington, D. C. 99352

Nicholas D. Lewis, Chairman
Energy Facility Site
Evaluation Council
State of Washington
Mail Stop PY-11
Olympia, Washington 98504

Mr. Eugene Rosolie
Coalition for Safe Power
Suite 527
408 South West 2nd
Portland, Oregon 97204

Sanford L. Hartman

N.B. - p.3

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY
AND LICENSING BOARD

In the Matter of	)	
	)	
WASHINGTON PUBLIC POWER SUPPLY SYSTEM	)	Docket No. 50-460-CPA
	)	
(WPPSS Nuclear Project No. 1)	)	

LICENSEE'S RESPONSE TO INTERVENOR'S
THIRD SET OF INTERROGATORIES

On July 13, 1983, intervenor served the Washington Public Power Supply System ("Licensee") with its third set of interrogatories in the captioned proceeding. Pursuant to Sections 2.740b(d) and 2.741(d) of the NRC Rules of Practice, Licensee sets forth its response to each interrogatory.

INTERROGATORY 1: State the full name, address, occupation and employer of each person answering the interrogatories and designate the interrogatory or the part thereof he or she answered.

Response: The individual responsible for answering these interrogatories is Mr. Alan G. Hosler Project Licensing Manager, WNP-1, Washington Public Power Supply System. His business address is 3000 George Washington Way, Richland, Washington, 99352.

INTERROGATORY 2: Provide a list of and make available all documents received by the Applicant from the Bonneville Power Administration ("BPA") from January 1, 1981 to the present regarding the anticipated cessation and actual cessation of construction activity at WNP-1, including the placing of the project in a mothballed, deferred or preserved state.

Response: The information requested in this interrogatory will be made available on August 17, 1983. Procedures to be followed in examining these documents are set forth in Licensee's responses to intervenor's first and second set of interrogatories.

INTERROGATORY 3: Provide a list of and make available for inspection and copying all documents provided by Applicant to the BPA from January 1, 1981 to the present regarding the anticipated cessation and actual cessation of construction activity at WNP-1, including the placing of the project in a mothballed, deferred or preserved state.

Response: The information requested in this interrogatory will be made available on August 17, 1983. Procedures to be followed in examining these documents are set forth in Licensee's responses to intervenor's first and second set of interrogatories.

INTERROGATORY 4: What are the "current conditions" referred to by Licensee in its response to Intervenor's Second Set of Interrogatories, Nos. 14 and 24, which affect the determination that an extension to 1991 is for a "reasonable period of time"? Provide this information in a list format with the greatest specificity possible and refer to all the documents which are relied upon as a basis for each condition.

Response: The "current conditions" referred to in Licensee's response to interrogatories 14 and 24 of intervenor's second set of interrogatories are (1) the recommendation by BPA regarding WNP-1 and (2) the difficulties in obtaining financing for the project in light of this recommendation. The documents which are relied upon as a basis for each condition are set forth below:

Recommendation of BPA

Licensee's April 30, 1982 letter to Mr. Harold R. Denton, Director, Office of Nuclear Reactor Regulation, U. S. Nuclear Regulatory Commission, as noted by the Staff upon its issuance of the June 16, 1983 Order Extending Construction Completion Date;

Licensee's January 11, 1983 letter to Mr. Harold R. Denton, Director, Office of Nuclear Reactor Regulation, U. S. Nuclear Regulatory Commission, as noted by the Staff upon its issuance of the June 16, 1983 Order Extending Construction Completion Date;

The net billing agreements signed by each of the project participants, the Licensee and BPA.

The Project Agreement executed between BPA and the Licensee.

Financing Difficulties

Each of the documents listed above in connection with the recommendation of BPA are also relied upon as a basis for this condition.

INTERROGATORY 5: Provide all materials and documents used by the BPA to prepare the "Analysis of Alternatives Related to WNP-3, May 26, 1983' by the BPA (hereinafter refered [sic] to as the WNP-3 Decision Document) which bear in any way upon the deferral of construction on WNP-1.

Response: Licensee objects to interrogatory 5 on the ground that it seeks materials and documents not in the Licensee's possession, custody or control. Section 2.741(a) permits any party to serve on any other party a request to produce and permits the requesting party to

inspect and copy documents which are within the scope of Section 2.740 "and which are in the possession, custody, or control of the party upon whom the request is served . . . ." Interrogatory 5 clearly seeks documents within the possession, custody or control of BPA and not the Licensee. Moreover, it impermissibly requires the Licensee to divine the materials and documents BPA used in preparing the materials and documents sought here.

Section 2.741(b) is based for the most part on Rule 34 of the Federal Rules of Civil Procedure and, as such, judicial interpretations of the analogous federal rule can served as useful guidance. See, e.g., Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), LBP-78-37, 8 NRC 575, 581 (1978). Those interpretations make it abundantly clear that a party may not be compelled to produce materials and documents which are not in its possession, custody or control. 4A Moore's Federal Practice ¶ 34-17.

In addition, interrogatory 5 seeks materials and documents which in fact address the future construction schedule of WNP-3, not WNP-1. Thus, interrogatory 5 seeks information outside the scope of this proceeding and which is not reasonably likely to lead to the discovery of

admissible evidence. 10 C.F.R. Section 2.740(b). Accordingly, for the two reasons set forth above, interrogatory 5 is objectionable.

INTERROGATORY 6: Provide all materials and documents used by the BPA to prepare the "Analysis of Resource Alternatives" dated April 19, 1982 by the BPA (hereinafter refered [sic] to as the WNP-1 Decision Document).

Response: Licensee objects to interrogatory 6 because it requests documents not in Licensee's possession custody or control. The legal basis for this objection is set forth in Licensee's response to interrogatory 5.

INTERROGATORY 7: Explain why the Applicant believes need for power and financing are not issues to be considered in this proceeding taking into account item 6 on page 2 of Applicant's letter dated January 11, 1983 requesting an extension for the completion date for WNP-1 (and used subsequently as the basis for the NRC Staff SER and Order, dated June 16, 1983) which states: "recommendations of the BPA to WPPSS that the construction on WNP-1 be delayed for an additional period of two to five years (beyond June 1, 1986) due to load/response balance changes and economic factors identified in the BPA's report "Analysis of Resource Alternatives, dated April 19, 1982." (emphasis added).

Response: With respect to need for power, intervenor stated in response to interrogatory 7 of the NRC Staff's First Set of Interrogatories that need for power is not an issue in this proceeding. It reaffirmed that position in response to Staff interrogatories 8, 13 and 14. Based on these responses, Licensee concluded that intervenor did not intend to put this issue in controversy. See, e.g., Licensee's Response to Intervenor's Second Set of Interrogatories at Interrogatory 19. Intervenor then abruptly changed its mind, retracted its position that need for power is not an issue in this proceeding, and is now apparently attempting to raise such issue. See Intervenor's Updated Responses to NRC Staff's First Set of Interrogatories, July 13, 1983 at Interrogatory 7. Accordingly, because the issues in this proceeding are raised by intervenor and because intervenor is apparently now endeavoring to litigate an issue involving need for power, that issue will have to be considered in some form by the Board.

With respect to financing, Licensee has never stated that such issue is not to be considered in this proceeding.

INTERROGATORY 8: Identify what obstacles exist to financing for WNP-1 including any or all elements of the BPA recommendation, how such obstacles prevent financing,

the anticipated time for each obstacle to be overcome, and what must occur for each obstacle to be overcome. Explain how all obstacles will be overcome in a "two to five year" period following the date of cessation of construction.

Response: There are two obstacles beyond the control of Licensee which currently prevent financing of WNP-1 through the sale of bonds by making those bonds unmarketable. The first is the possibility that the assets of WNP-1 might become subject to the actions of a bankruptcy court were Licensee to file voluntarily a petition for bankruptcy. (As a matter of law, Licensee cannot be forced into involuntary bankruptcy. See 11 U.S.C. Chapter 9.) The second is the pending litigation in the U. S. Court of Appeals for the Ninth Circuit concerning the validity of the Net Billing Agreements. Both obstacles could be overcome through the enactment of state and federal legislation and/or a favorable decision in the Court of Appeals affirming the District Court, which had upheld the Net Billing Agreements. At the current time, it is reasonable to assume that these obstacles can be overcome in "two to five years."

INTERROGATORY 9: Which of the scenarios presented in Table III-C.1 of the WNP-3 Decision Document was chosen in July 8, 1983 by the WPPSS Executive Board/Participants Committee/WPPSS Board of Directors?

Response: Licensee objects to interrogatory 9. As noted in response to interrogatory 5, the BPA document referenced in interrogatory 9 does not address the future alternatives concerning WNP-1. Rather, it address the future construction of WNP-3. Accordingly this interrogatory is objectionable because it seeks information concerning WNP-3 which is not within the scope of discovery allowed by Section 2.740 of the NRC Rules of Practice.

INTERROGATORY 10: Does the Applicant believe that the restart of construction of WNP-1 is tied in any way to the use of BPA revenues for any of the net-billed projects? Does BPA belive [sic] that the restart of construction of WNP-1 is tied in any way to the use of BPA revenues for any of the net-billed projects? If so, provide the legal basis for use of such funds.

Response: Applicant does not understand what intervenor means by the word "tied." Upon clarification of this aspect of the interrogatory, Licensee will respond. The balance of this interrogatory seeks from the Licensee information as to the opinion of BPA on certain matters and the legal basis for that opinion. These aspects of interrogatory 10 are objectionable.

Whether BPA believes that the restart of construction of WNP-1 is tied in any way to the use of BPA revenues from any of the net-billed project is a question best directed to BPA. The Licensee is not authorized to speak for BPA, which interrogatory 10 assumes. Moreover, this aspect of interrogatory 10 constitutes discovery against a person not a party to this proceeding. Sections 2.740b and 2.741, pursuant to which this discovery request is made, are expressly limited to discovery among the parties to this proceeding.

The last question of interrogatory 10 calls for a legal conclusion on the part of the Licensee, BPA or both as to whether the restart of construction of WNP-1 may be tied in any way to the use of BPA revenues for any of the net billed projects. It is well settled that interrogatories calling for legal conclusions are objectionable. See, e.g., Murquiz v. City of San Antonio, 520 F.2d 993, 1002 n. 8 (5th Cir.); aff'd en banc, 528 F.2d 499 (1975); vacated on on other grounds, 438 U. S. 901 (1978).

This aspect of interrogatory 10 is also objectionable because it is impermissibly vague. It does not specify whether the legal basis it seeks is to be provided by the Licensee, BPA or both organizations.

INTERROGATORY 11: If the answer to Interrogatory 10 above is yes and the answer to Interogatory [sic] 9 above is scenario 2a, 2e or 2f, what impact would Applicant anticipate on the restart of construction of WNP-1 from a ruling that use of BPA revenues for construction or rampdown was illegal, including the effects on the rampdown or construction on WNP-3?

Response: No response is required to interrogatory 11.

INTERROGATORY 12: BPA states in the WNP-3 Decision Document that the restart of construction of WNP-1 is tied to the restart of construction of WNP-3. Does Applicant agree or disagree with this position? Explain fully and provide the basis for the response.

Response: Licensee has reviewed the BPA document referenced in this interrogatory and has found no statement indicating that the restart of construction of WNP-1 is "tied" to the restart of construction of WNP-3. Consequently, Licensee is unsure of which portions of the WNP-3 Decision Document intervenor is referencing. Licensee will respond following clarification of this aspect of interrogatory 12.

INTERROGATORY 13: What effect would there be on the restart of construction of WNP-1 if it were determined that there had been a misallocation of funds on the WNP-1/4 projects such that such funds would have to be repaid to the WNP-4/5 Participants by WPPSS?

Response: The effect of such a determination would depend on a number of factors, including the extent of any such misallocation, when the determination was made, and the arrangements implemented to correct the misallocation.

INTERROGATORY 14· Taking into consideration the statements in the WNP-3 Decision Document that deferral of construction of WNP-3 for a minimum of three years will lead invariably to an additional deferral of WNP-1 for 2 to 7 years (for a total of 5 to 12 years) and the fact that WPPSS deferred construction of WNP-3 for "three years" on July 8, 1983 what is the basis for Applicant's statements to the NRC that the deferral of WNP-1 is for 2 to 5 years. What is Applicant's basis for claiming that 2 to 5 years is a "reasonable period of time"? Does Applicant contemplate an amendment to their current application for a construction permit extension? If not, why not? Provide all documents related to the responses in this interrogatory including internal memoranda, notes, minutes etc.

Response. Interrogatory 14 rests on the erroneous factual premise that the Licensee deferred construction of WNP-3 for three years. In fact, WNP-3 has been deferred until a source of funding for its completion is assured. In addition, key class 1 contractors have been and will be retained for the next three to nine months to preserve the capability for a reasonably efficient restart. The basis for this response is the July 8, 1983 resolution of the Licensee's Executive Board. This document will be available to intervenor for inspection and copying on August 17, 1983.

INTERROGATORY 15: Does the Applicant disagree with the results of "WNP-1 vs. WNP-3 Restart Sensitivity Analysis" presented in Table IV.K.1 of the WNP-3 Decision Document which concludes that a restart of WNP-3 is preferred to WNP-1? If so, what specific considerations does Applicant consider are wrong, and in what way?

Response: Licensee has not independently evaluated "WNP-1 v. WNP-3 Restart Sensitivity Analysis." Consequently, it need not respond to the balance of this interrogatory. See Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2); Order (Concerning Motion to Compel Answers to Interrogatories); Docket Nos.

50-352 and 50-353; August 24, 1982 slip op. at 1-2. To the extent that interrogatory 15 would require the preparation of such analysis Licensee objects to it.

INTERROGATORY 16: Upon what factors does the restart of construction of WNP-3 rely? What obstacles exist? When and how are these obstacles expected to be overcome?

Response: Interrogatory 16 seeks information related only to the status of WNP-3. Such information is not relevant to this proceeding nor is it likely to lead to the discovery of admissible evidence. Accordingly, Licensee objects to it on the grounds that it is outside the scope of permissible discovery. 10 C.F.R. Section 2.740(b).

INTERROGATORY 17: Provide the minutes of all meetings of the WPPSS Board of Directors at which the delay of WNP-1 was discussed.

Response: This material will be made available on August 17, 1983.

INTERROGATORY 18: Provide the minutes of all meetings of the WNP-3 Participants Committee at which the delay of WNP-1 as discussed.

Response: License is not aware of the existence of a "Participants Committee" for WNP-3. However, if this interrogatory seeks the minutes of the WNP-3 Participants Review Board, such documents are not within the Licensee's

possession, custody or control. As such, the interrogatory is objectionable. The legal basis for this objection is set forth in response to interrogatory 5.

INTERROGATORY 19: Does the Applicant agree or disagree with the statement by the NRC Staff in its response to Intervenor's First Set of Interrogtatories [sic], No. 41, that: "Need for power has some significance in this proceeding only because it has been raised as among the reasons for the BPA recommendation to defer construction. The Permittee offers the BPA recommendation as one of the factors constituting "good cause" to extend the plant completion date."? Explain fully your response.

Response: Licensee agrees with the statement of the NRC Staff in response to interrogatory 41 of the Intervenor's First Set of Interrogatories cited above. The Licensee also agrees with the Staff's statement in that response that the issue is whether BPA's recommendation that WNP-1 be deferred for two to five years is an act which is beyond the control of the Licensee and constitutes good cause for the extension. Accordingly, a central issue in this proceeding is not whether power generated from WNP-1 will be needed during the length of the construction permit extension. Rather, it is whether

the BPA recommendation constitutes good cause for that extension. Need for power is relevant in this proceeding only because it was a factor upon which BPA based its recommendation.

Respectfully submitted,

Nicholas S. Reynolds
Sanford L. Hartman
DEBEVOISE & LIBERMAN
1200 Seventeenth St., N. W.
Washington D. C. 20036
(202) 857-9817

Counsel for Licensee

August 1, 1983

STATE OF WASHINGTON)
)
COUNTY OF BENTON)

Telecopied Facsimile

A. G. Mosler, being duly sworn, deposes and says:

That he is Project Licensing Manager, WNP-1, for the Washington Public Power Supply System, and knows the contents of the foregoing Licensee's Response to Intervenor's Third Set of Interogatories; that the same is true of his own knowledge except as to matters therein stated on information and belief, and as to that, he believes them to be true.

Alan G. Mosler

Sworn to and subscribed before me
on this 29th day of July, 1983.

J. R. Martin
Richland, WA
12/26

LS

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
WASHINGTON PUBLIC POWER SUPPLY SYSTEM	)	Docket Nos. 50-460-CPA
	)	
	)	
(WPPSS Nuclear Project No. 1)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "Licensee's Response to Intervenor's Third Set of Interrogatories" in the captioned matter were served upon the following persons by deposit in the United States mail, first class, postage prepaid, this 1st day of August, 1983:

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Chairman, Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

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Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
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Dr. Jerry Harbour
Atomic Safety and Licensing Board
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Chairman, Atomic Safety and Licensing Appeal Board
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Sanford L. Hartman

WPPSS
WNP 1&4

RELATED CORRESPONDENCE

Jim
Paper Clip

QUALIFICATIONS

John J. Happell
Licensing Engineer
BABCOCK & WILCOX COMPANY

My name is John J. Happell. My business address is P.O. Box 1260, Lynchburg, Virginia 24503. I am employed by the Babcock & Wilcox Company in the Nuclear Power Generation Division as a Licensing Engineer in the Licensing Section.

I received a Bachelor of Science Degree in Mechanical Engineering from Newark College of Engineering in 1950, a Master of Mechanical Engineering Degree from the University of Delaware in 1955, and attended the Oak Ridge School of Reactor Technology during 1954-1955 (ORSORT).

I have been employed by the Babcock & Wilcox Company since 1950.

Between 1950 and 1953, I was a Staff Engineer in the Boiler Division and performed field testing of steam generator units and the attendant evaluation of data from improved designs.

In 1953 I joined the Atomic Energy Division of the Babcock & Wilcox Company as a Heat Transfer Design Engineer. I participated in the design and transient operation studies of steam generators for the nuclear powered submarine "Seawolf". During this activity I participated in developing a steam separator design used in subsequent B&W U-bend steam generator designs.

In 1955 I was sent to ORSORT under B&W sponsorship and after completing the course, became an Assistant Project Engineer responsivle for conceptual design of systems for the aqueous homogeneous reactor.

During 1957-1959 I was a Project Engineer on the Liquid Metal Fueled Reactor Project sponsored at B&W by the AEC. This work involved responsibility for all engineering design.

During 1959 to 1964 I was a Project Engineer at B&W responsible for preparation of PWR proposals to utilities. This included the spectral shift reactor and light water reactors using soluble poison for reactivity control.

During the period 1964 to 1966 I was a Program Manager in the Advanced Project Engineering Department of the B&W Atomic Energy Division responsible for evaluating and coordinating improvements in the B&W PWR product. During this period, I participated in establishing many of the parameters for the Oconee I (Duke Power Company) reactor and systems designs.

Qualifications - John J. Happell

In 1966 I was made Manager of the Standards, Systems and Procedures Section in the Engineering Department of the Atomic Energy Division of B&W. During this period, I assisted in establishing calculation and design standards for the Division.

During 1969-1975 my main activity was Manager of the NPGD Standards and Procedures Section, during which time I coordinated the development of administrative procedures and other standards necessary to comply with QA (10CFR50, App. B).

In 1973 I was transferred to licensing and was assigned responsibility for the WPPSS contract.

I am a member of ASME and Tau Beta Pi.

I am a registered professional engineer in the State of Virginia.

I am the named inventor on one patent (#2,877,747) and a co-inventor on another (#3,018,239).

RELATED CORRESPONDENCE

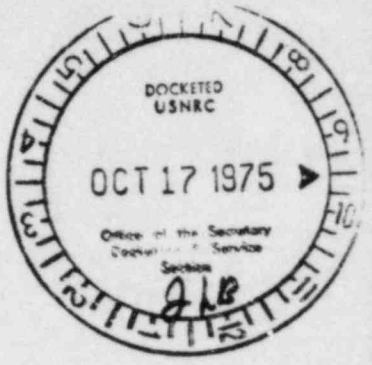
QUALIFICATIONS

Aaron Joseph Friedman
Supervising Licensing Engineer
UNITED ENGINEERS & CONSTRUCTORS, INC.

My name is Aaron Joseph Friedman. I am the Supervising Licensing Engineer with United Engineers & Constructors, Inc. of Philadelphia, Pennsylvania on WPPSS Nuclear Projects 1 and 4, and as such, I am responsible for all UE&C licensing activities performed on this project.

I graduated from The City College of New York in 1962 with a Bachelor of Chemical Engineering Degree, and obtained an MS degree in Nuclear Engineering from Columbia University in 1964. I have been employed by UE&C for seven years. Prior to my employment with UE&C, my experience included the following: From 1964 to 1965, as an analytical engineer at the Connecticut Advanced Nuclear Engineering Laboratory of Pratt & Whitney Division of United Aircraft Corp. working on nuclear reactors for space missions. From 1966 to 1967, as an engineer with the Missiles and Space Division of General Electric Company working on radioisotope thermoelectric generators, primarily SNAP-50 for the Apollo Mission. From 1967 to the present, as a Consulting Engineer in the Advanced Engineering Department of UE&C, primarily in licensing of nuclear reactors.

RELATED CORRESPONDENCE



QUALIFICATIONS

Robert E. Dellon
Manager, Quality Assurance
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

My name is Robert E. Dellon. My business address is 3000 George Washington Way, Richland, Washington. I am Manager, Quality Assurance for the Washington Public Power Supply System.

I graduated from the University of Connecticut, Storrs, Connecticut in 1969 with a Bachelor of Science Degree in Industrial Engineering and in 1973 received a Master of Business Administration Degree in Management from Fordham University.

From June 1969 through December 1970, I was employed by EBASCO Services Incorporated at the Vermont Yankee Nuclear Power Station (540 MWe), where I was an assistant field engineer engaged in monitoring construction progress.

From December 1970 through December 1972 I was employed by Burns & Roe Incorporated, Oradell, New Jersey office, where I held positions as Quality Assurance Project Manager, Quality Assurance Engineer and Quality Control Engineer. Specific areas of work included planning, preparation and implementation of Quality Assurance systems to monitor the engineering, design, fabrication, construction and installation activities associated with both nuclear and conventional electric generating facilities. During this period I was associated with the WPPSS Nuclear Project No. 2, Hanford, Washington (1100 MWe), Salem Nuclear Generating Station Units 1 & 2, Salem, N.J. (1100 MWe each), Forked River Nuclear Power Station Unit 1, Forked River, N.J. (1070 MWe), Three Mile Island Nuclear Power Station Unit 2, Dauphin County, Penn. (900 MWe), Aquirre Nuclear Power Plant Unit 1, Aquirre, Puerto Rico (600 MWe), Roseton Generating Station Units 1 & 2, oil fired, Roseton, N.Y. (600 MWe each), South Coast Electric Station Units 5 & 6, oil fired, Guayanilla Bay, Puerto Rico (430 MWe each), Gilbert Generating Station, combined cycle, Holland, N.J. (300 MWe), and the LMFBR Demonstration Plant, Oak Ridge, Tenn. (400 MWe). Thus, I have been involved in projects representing in excess of 9000 MWe of installed electric generating capacity (6810 MWe nuclear) prior to joining Washington Public Power Supply System.

From December 1972 until the present time, I have been employed by the Washington Public Power Supply System as Manager, Quality

Assurance (June 1975 to present), Manager, Quality Systems (February 1974 to June 1975), and Quality Systems Engineer (December 1972 through January 1974). I am responsible for planning, managing and coordinating the QA training, systems development, engineering and auditing activities of the Quality Assurance Department for all WPPSS Nuclear Projects.

I am a member of the American Society of Mechanical Engineers, American Nuclear Society, American Society for Quality Control (ASQC), ASQC Subcommittee on Nuclear Power and represent Washington Public Power Supply System at Edison Electric Institute Quality Assurance Task Force meetings.

QUALIFICATIONS

Duane L. Renberger
Technical Division Manager
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

My name is Duane L. Renberger. My business address is 3000 George Washington Way, Richland, Washington 99352. I am Technical Division Manager for the Washington Public Power Supply System.

I graduated from Kansas State University in 1958 with a Bachelor of Science Degree in Nuclear Engineering.

From 1958 to 1967, I was employed in various capacities for the General Electric Company at Hanford. These assignments were in the reactor engineering field, and included engineering support for reactor operations, and planning and direction of reactor tests.

From 1962 to early 1971, I was employed by Douglas United Nuclear in test engineering, safety analysis and licensing activities, and I was supervisor of the Nuclear Safety Technology and Regulatory Units.

From early 1971 to the present time, I have been employed by Washington Public Power Supply System as the Hanford No. 2 Licensing Engineer, Supervising Program Engineer, Manager of Regulatory Programs and Manager of Compliance Programs prior to my current position. As Manager of the Technical Division, I am responsible for management of WPPSS activities in Engineering, Quality Assurance, Licensing and Environmental, and Fuel and Technical Studies.

RELATED CORRESPONDENCE

QUALIFICATIONS

James D. Perko
Treasurer
WASHINGTON PUBLIC POWER SUPPLY SYSTEM

My name is James D. Perko and my business address is 3000 George Washington Way, Richland, Washington 99352. I am the Treasurer of the Washington Public Power Supply System.

I am a graduate of Gonzaga University, Spokane, Washington, holding a degree of Bachelor of Business Administration, majoring in Economics and General Business Administration.

Upon graduation in 1963, I fulfilled my military obligation with two years in the U. S. Army, receiving an honorable discharge as a First Lieutenant.

In the summer of 1965, I accepted a position as a management trainee with Seattle Trust and Savings Bank, Seattle, Washington. After completing the trainee program, I was appointed to fill a vacancy in the Investment Department. In January, 1970, I was promoted to Manager of the Investment Division. My responsibilities were to manage the bank's U. S. Government and municipal bond portfolio, manage the short-term (less than one year) investments, and supervise a six person staff.

In 1973, I accepted a position as Manager of the Bond Department at Peoples National Bank of Washington, Seattle. My duties in this new department were to develop a municipal bond department and marketing section for both U. S. Government and municipal securities. In addition, I managed the municipal bond portfolio and made recommendations to the senior management for purchases and/or sales of U. S. Government securities.

I joined Washington Public Power Supply System in 1974 as Treasurer. My duties include receiving and disbursing all Supply System funds, participating in arrangement of additional financing to meet the Supply System's requirements and managing Supply System funds so as to obtain the best possible yield from investments.