June 30, 1983

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of WASHINGTON PUBLIC POWER SUPPLY SYSTEM (WPPSS Nuclear Project No. 1)

Docket No. 50-460 CPA

NRC STAFF RESPONSE TO COALITION FOR SAFE POWER FIRST SET OF INTERROGATORIES TO NRC STAFF

I. INTRODUCTION

The NRC Staff hereby responds to Intervenor Coalition for Safe Power's (CFSP) interrogatories to the NRC Staff dated June 9, 1983. The Staff notes that it is under no obligation to respond since CFSP has not complied with 10 CFR § 2.720(h)(2)(ii). That section of the regulations requires that interrogatories to the Staff be filed with the presiding officer, who may require answers from the Staff after finding that answers are necessary to a proper decision in the proceeding and that answers are not obtainable from any other source. In the interest of expediting this proceeding, however, the Staff voluntarily provides this response. The Staff reserves its right to require that future discovery requests to it be submitted in compliance with 10 CFR § 2.720(h)(2)(ii).

The Staff's answers and objections to CFSP's interrogatories follow. Professional qualifications and affidavits of the Staff personnel responsible for the answers given are attached.

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11. OBJECTIONS TO INTERROGATORIES

The Staff objects to the following interrogatories:

INTERROGATORY 24:

What do you believe would be a (maximum) reasonable period of time for extension of the construction completion date for WNP-1?

RESPONSE:

The Staff objects to Interrogatory 24 as it calls for speculation and is not relevant to the contention in this proceeding that the "request for extension of completion date to 1931 does not constitute a 'reasonable period of time' provided for in 10 CFR 50.55(b)." Staff has already stated that the requested amendment to the construction completion date is reasonable; to speculate as to how much time beyond the requested date would also be reasonable is not relevant to the proceeding.

INTERROGATORY 37:

What constitutes "good business sense" in decisions on nuclear plant deferal (sic)?

RESPONSE:

The Staff objects to Interrogatory 37 on grounds of relevance since the quoted language is not part of 10 CFR § 50.55 and therefore not the standard upon which the Staff's determination of good cause was based. In addition, the Staff does not understand from where the quoted words "good business sense" are taken and accordingly does not know in what context the words are being used.

INTERROGATORY 44:

Was the construction of WNP-3 (Satsop) halted because of no need for its power?

(a) If so, how does this affect the five-year deferral of WNP-1?(b) If not, what were the reasons and how will they affect the deferral of WNP-1?

RESPONSE:

The Staff objects to Interrogatory 44 as irrelevant to any issue in this proceeding since it inquires into a matter involving a plant not the subject of this proceeding.

INTERROGATORY 46:

What is the Staff's position on the relationship between time and the deterioration of partially constructed facilities and equipment? Provide the basis for this position.

RESPONSE:

The Staff objects to Interrogatory 46 as irrelevant to any issue in this proceeding. This interrogatory raises a safety issue and is thus beyond the scope of this construction permit extension proceeding.

INTERROGATORY 48:

What level of staffing is necessary at WNP-1 to maintain the construction site and equipment without deterioration?

RESPONSE:

The Staff objects to Interrogatory 48 as irrelevant to any issue in this proceeding. This interrogatory raises a safety issue and is thus beyond the scope of this construction permit extension proceeding.

III. RESPONSES TO INTERROGATORIES TO WHICH THE STAFF HAS NO OBJECTION

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 answers to this interrogatory are set forth in the Professional Qualifications and Affirmations of Preparation attached to this pleading.

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:

At present, Staff contemplates calling as witnesses Messrs. Mohan Thadani, Erastace Fields, and Jim Petersen. The Professional Qualifications for these individuals are attached to this pleading. At present, it is contemplated that the witnesses will testify in substance about the subject matters to which they responded in this pleading.

INTERROGATORY 3:

What is the complete basis for your position that Licensee's decision in April, 1982 to 'defer' construction for two to five years, and subsequent cessation of construction at WNP-1 was not "dilatory."

As stated in the Staff's safety evaluation accompanying the order extending the permit completion date, the requested extension is for "good cause" shown and for a "reasonable period of time."

INTERROGATORY 4:

Please explain fully what you mean by the word "defer." RESPONSE:

By "defer", in the sense used in this proceeding, the Staff means postpone. See Webster's Dictionary.

INTERROGATORY 5:

Please explain fully what you mean by the word "dilatory." RESPONSE:

By "dilatory", in the sense used in this proceeding, the Staff means the "intentional delay of construction without a valid purpose." <u>Washington Public Power Supply System</u> (WPPSS Nuclear Project No. 2), ALAB-722, slip op. at 9 (April 11, 1983).

INTERROGATORY 6:

What is the basis for your response to interrogatories 4 and 5? RESPONSE:

The basis is set forth in Staff's responses to Interrogatories No. 4 and 5.

INTERROGATORY 7:

Why do you contend that Licensee has established good cause for an extension of the WNP-1 construction permit? Explain your answer fully. RESPONSE:

The Staff's safety evaluation supporting the extension of the latest construction completion date, issued June 16, 1983, explains the basis for the Staff's conclusion that the reasons provided by Permittee constituted "good cause" for the extension of the construction permit to June 1991.

INTERROGATORY 8:

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

RESPONSE:

The six reasons offered by the Permittee are listed in the June 16, 1983, safety evaluation supporting the order extending the construction permit.

INTERROGATORY 9:

Is it your position that the reasons offered by Licensee to support a showing of good cause are in fact the only reasons why Licensee had requested an extension of its construction permit?

RESPONSE:

The only reasons offered by the Permittee are the six listed in the Staff safety evaluation supporting the extension order. The Staff is not aware of any reasons for Licensee's request other than those six reasons.

INTERROGATORY 10:

If your response to Interrogatory 9 is no, state all other reasons.

See answer to Interrogatory No. 9.

INTERROGATORY 11:

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

Permittee's submittals dated July 21, 1981, January 11 and March 9, 1983 contained a total of six reasons offered to support a showing of good cause, and those were the reasons considered by the Staff in determining whether to extend the WNP-1 construction permit.

INTERROGATORY 12:

Please explain fully what you mean by a "reasonable period of time." RESPONSE:

A reasonable period of time is a time commensurate with the delay due to a "good cause".

INTERROGATORY 13:

What factors do you contend should be considered when determining if a requested construction permit extension is for a "reasonable period of time."

RESPONSE:

The factors that should be considered are those factors supplied by the permittee as a basis under 10 CFR § 50.55(b) for the requested extension.

INTERROGATORY 14:

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

Based on the facts presented by the Permittee, the Staff has concluded that extension of the construction completion date to June 1991 provides the Permittee a "reasonable period of time" for the completion of WNP-1.

INTERROGATORY 15:

(a) Is it your position that BPA support is necessary to the financing of WNP-1?

(b) if your answer to Interrogatory No. 15(a) is in the affirmative, identify and give full details with respect to all information upon which you base that statement.

RESPONSE:

Yes. BPA is involved contractually with WPPSS and the utilities participating in WNP-1 as a power transmitting and coordinating agent to such an extent that its support is necessary to the financing of WNP-1. BPA is an integral party to (1) the WNP-1 Net Billing Agreements with the Participants (the publicly and cooperatively owned utilities); and (2) the WNP-1 Exchange Agreements with the Companies (the investor-owned utilities). Under these contracts the utilities will assign the VNP-1 capability to BPA which in turn will transmit the power and exercise a billing function, among other things.

INTERROGATORY 16:

Is it your position that the financial support or lack of financial support by BPA for WNP-1 would have an effect on the financing costs of WNP-1?

RESPONSE:

Because of the integral nature of BPA's involvement in the WNP-1 project, noted above, BPA's support is probably essential to WPPSS's ability to obtain financing at all for WNP-1. BPA's involvement may also affect the cost of financing.

INTERROGATORY 17:

Is it your position that the opinion of BPA as to when WNP-1 should go into commercial operation would have an effect on the financial costs of WNP-1?

RESPONSE:

Financing costs are affected by BPA's involvement including its recommendation as to when the plant should go into operation, as well as the period in which construction takes place and the duration of construction.

INTERROGATORY 18:

(a) Is it your belief that BPA has the authority to disapprove any further financing of WNP-1 construction?

(b) If your answer to Interrogatory No. 18(a) is in the affirmative, explain fully the factual basis for that statement.

RESPONSE:

Yes, indirectly. Although BPA does not to our knowledge have actual veto authority over WPPSS financing, BPA's significant role in the project gives it an advisory and concurrence function in decisions affecting the project such as financing.

INTERROGATORY 19:

Is it your position that the growth rate of electric power requirements has a business relationship as to when WNP-1 should go into commercial operation?

RESPONSE:

The Staff is unable to answer Interrogatory 19 because it does not understand what CFSP means by the term "business relationship."

INTERROGATORY 20:

(a) Is it your position that the January 11, 1983 letter to H. Denton, Director, NRR, NRC from G.D. Bouchy (sic), WPPSS, supports Permittee's assertion that a deferred need for power constitutes "good cause" for deferring construction? (b) If your answer to Interrogatory No. 20(a) is in the affirmative, set forth and explain fully the factual basis or legal authority for your position.

RESPONSE:

(a) In the case of WNP-1, the WPPSS letter dated January 11, 1983, from G. D. Bouchey to H. Denton, Director, NRR, with enclosure, supports the Permittee's claim of "good cause" for the extension based upon the BPA recommendation to defer construction.

(b) The Staff safety evaluation in support of the Order extending the construction completion dates for WNP-1 contains the basis for the Staff conclusion.

INTERROGATORY 21:

(a) Is it your position that a lack of need for power
can, as a matter of law, constitute "good cause" under 10 CFR 50.55(b)?
(b) if your answer to Interrogatory No. 21(a) is in the affirmative, set forth and explain fully the factual basis or legal authority for this position.

RESPONSE:

(a) Lack of need for power per se does not constitute "good cause" under 10 CFR § 50.55(b). Whether need for power constitutes good cause in any given permit extension request must be determined on a case-bycase basis.

INTERROGATORY 22:

(a) Does the lack of need for power in the Northwest justify deferring construction of WNP-1?

(b) Explain fully your answer to Interrogatory No. 22(a).

RESPONSE:

No. It has already been determined that the need for power from the plant exists. However, the slower current growth rate in electric power demand, which has resulted in lack of current need for the capacity from the plant, allows the Permittee a measure of flexibility in his construction schedule that would not exist if the rate of growth were greater.

INTERROGATORY 23:

Explain the factual basis and/or legal authority which supports the (sic) position that six to nine years is a 'reasonable period of time' under 10 CFR 50.55(b).

RESPONSE:

The "reasonable period of time" is not quantified under 10 CFR 50.55(b). The reasonableness of the extension of construction completion period is judged by the Staff on a case-by-case basis. In the case of WNP-1, the factual basis for the conclusion that six to nime years is a reasonable period of time is set forth in the Staff safety evaluation dated June 16, 1983.

INTERROGATORY 25:

(a) Identify any and all "requirements of any regulations" promulgated since the date of docketing of the WNP-1 operating license application from which WNP-1 would otherwise be grandfathered by virtue of its date of docketing.

(b) Explain fully how each of the requirements identified in response to Interrogatory No. 25(a) will delay completion of the plant beyond the requested completion date of 1991. Give full details as to the extend to (sic) delay attributable to each such requirement.

(a) There are no "requirements of any regulations" promulgated since the date of docketing of the WNP-1 operating license application from which WNP-1 has been grandfathered by virtue of its date of docketing. WPPSS has made a commitment to satisfy the requirements of any future regulations promulgated from the date of docketing to the resumption of construction.

(b) See answer to (a) above.

INTERROGATORY 26:

Explain the difference, if any, between deferral, mothball and preservation.

RESPONSE:

The term "deferral" means postponed, mothballed means protected against the elements and the environmental conditions, and preservation means protecting against any peril or alteration.

INTERROGATORY 27:

To what events is the restart of construction on WNP-1 tied. Explain fully your answer.

RESPONSE:

The events to which restart of construction of WNP-1 is tied are outside the knowledge of the NRC Staff. The decision to resume construction of WNP-1 will be made by the Permittee.

INTERROGATORY 28:

What would be the effect of default on WNP-4 and 5 on the restart and completion of WNP 1? Provide all probability analyses, scenarios and time predictions.

The effect of default on WNP-4 and 5 on the restart and completion of WNP-1 is speculative and outside the knowledge of the NRC Staff.

INTERROGATORY 29:

What is the effect of deferral of construction on WNP-3 on the restart and completion of WNP-1? Give the basis for your response.

RESPONSE:

The effect of deferral of construction of WNP-3 on the restart and completion of WNP-1 is speculative and outside the knowledge of the NRC Staff.

INTERROGATORY 30:

What is the effect of bond ratings on WPPSS ability to finance WNP-1. Explain fully and provide the basis for your response.

RESPONSE:

Bond ratings have a direct effect on the interest rates that are paid on the bonds, or the cost of financing. A high bond rating indicates a perceived sense of security and low risk generally leading to a lower interest rate than for a lower rated bond of a similar type of security'. Bond ratings and financing costs affect WPPSS' ability to finance WNP-1 to the extent that the System is able and willing to pay a given level of financing costs.

INTERROGATORY 31:

If a bond rating service refused to rate WPPSS bonds would WPPSS be able to finance the construction of WNP-1? Explain your answer.

It is unlikely that WPPSS could raise the sums needed to finance WNP-1 if the bond rating services refused to rate WPPSS bonds for an extended period. Of particular significance would be the reason for the lack of rating. In addition, a temporary rating suspension would not necessarily jeopardize the ability to finance over a long term.

INTERROGATORY 32:

Is it your position that the Atomic Safety and Licensing Board Initial Decision (LBP-75-72, 2 NRC 922) for the Construction Permit found that the Bonneville Power Administration had the power to approve or disapprove the issuance of bonds by WPPSS. If yes give the reasons in detail for approval and/or disapproval.

RESPONSE:

Yes, indirectly. As in our response to Interrogatory No. 18, above, although BPA does not to our knowledge have actual veto authority over WPPSS financing, BPA's significant role in the project gives it an advisory and concurrence function in decisions affecting the project such as financing. In its Initial Decision (LBP-75-72) the Licensing Board gave significant weight to BPA's role in financial arrangements for WNP-1. 2 NRC 922, 924-27. It stated, among other things, that "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." 2 NRC at 927.

This statement was in the context of the Licensing Board's explanation that the first level of the bond's security is eventual revenues from operation of WNP-1 and that the second level of security is the contractual obligation of the utilities to pay WNP-1 construction and operation costs.

INTERROGATORY 33:

Is it your position the ASLB Initial Decision (LBP-75-72, 2 NRC 922) found that BPA could control the construction of WNP-1? If yes, in what manner? Explain in detail the basis for your answer.

RESPONSE:

Rather than using the word "control," it is probably more accurate to state that BPA has significant "influence" over the construction of WNP-1. The basis for this is given in our response to Interrogatory No. 32, above. In addition, our responses to Interrogatory Nos. 15, 16, 17 and 18, above, discuss the nature of BPA's role.

INTERROGATORY 34:

Is it your position that the original finding by the ASLB in its Initial Decision (LBP-75-72, 2 NRC 922) on WPPSS financing ability remains valid? Explain the basis for your answer in detail.

RESPONSE:

We have not re-evaluated WPPSS' financial qualifications for this proceeding. On March 31, 1982 (47 Fed. Reg. 13750) the NRC eliminated the review and litigation of electric utilities' financial qualifications to construct or operate nuclear power plants.

INTERROGATORY 35:

Is it your position that the original finding by the ASLB in its Initial Decision (LBP-75-72, 2 NRC 922) on the need for WNP-1 remains valid? Explain the basis for your answer in detail.

RESPONSE:

The Licensing Board found that all requirements of NEPA had been satisfied based on the Staff FES. See also Staff's answer to Interrogatory 45.

INTERROGATORY 36:

Is it your position that the only reason the ASLB found WPPSS financially qualified is because of BPA financial backing?

(a) If yes, explain the basis in detail.

(b) If no, cite all the reasons you believe the finding of financial qualification.

RESPONSE:

No. The Licensing Board relied on a number of factors to establish WPPSS financial qualifications. These were enumerated by the Board in paragraphs 1 through 9 of the Decision. 2 NRC at 924-27. BPA's participation was held to be one of a number of significant financial strengths for the project.

INTERROGATORY 38:

What constitutes "BPA support"?

RESPONSE:

The Staff in unable to answer Interrogatory 38 as it is **unsure** from where the quoted words "BPA support" are taken and accordingly does not know in what context the words are being used.

INTERROGATORY 39:

How is "BPA support" recognized in the Initial Decision (LBP-75-72, 2 NRC 922) on the Construction Permit for WNP-1?

RESPONSE:

The Staff is unable to answer Interrogatory 39 as it is unsure from where the quoted words "BPA support" are taken and accordingly does not know in what context the words are being used.

INTERROGATORY 40:

Is cost of financing an issue in this proceeding? If so, why? RESPONSE:

The cost of financing is an issue in this proceeding only to the extent that WPPSS and BPA considered the cost of financing vis-a-vis various construction schedules and financing alternatives relative to the WNP units.

INTERROGATORY 41:

Is need for power an issue in this proceeding? If so, what are the issues which should be litigated with regard to need for power? RESPONSE:

No. Need for power is not an issue for litigation in this proceeding. At issue is whether BPA's recommendation that the plant be deferred for 2 to 5 years is an act which is beyond the control of the Permittee and constitutes "good cause" for the extension. 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.

INTERROGATORY 42:

What is the legal basis for your answer to Interrogatory 41? RESPONSE:

The legal basis for the Staff's answer is set forth at 10 CFR 50.55(b).

INTERROGATORY 43:

What, besides the Applicant's representation on the need for WNP-1, does the Staff rely upon for its position on the need for the plant? RESPONSE:

Staff's methodology in determining need for WNP-1 is outlined in NUREG-75/012, Construction Permit Final Environmental Statement for WNP-1 and 4, March 1975. See also Staff response to Interrogatory 45.

INTERROGATORY 45:

Is the ultimate cost of power from WNP-1 a factor in the need for the plant? Should it be a factor in the business decisions affecting cortinued construction?

RESPONSE:

"Ultimate cost" of a project is always a factor to the extent that it can be minimized through prudent business decisions. However, the "need" for a nuclear facility is an issue which is appropriately considered prior to the grant of a construction permit. Likewise, the impacts of any variables, which may "factor in the need" for a plant, are considered during the construction permit review. Need is no longer an issue for consideration, after substantial construction has taken place.

INTERROGATORY 47:

What is the difference between BPA withholding approval for financing and BPA disapproving of financing?

RESPONSE:

Since the staff views BPA review authority over WPPSS financing as being indirect, it is difficult to differentiate between BPA "withholding approval for financing" and BPA "disapproving financing."

INTERROGATORY 49:

Is it your position that the only obstacle to financing of the NNP-1 was/is the BPA recommendation?

RESPONSE:

No. However, the BPA recommendation is a significant factor in the financing of WNP-1.

INTERROGATORY 50:

Do your agree that the passage of Washington Initiative 395 affected the ability of WPPSS to issue bonds? Explain your answer fully giving the basis and identify all documents relied upon.

RESPONSE:

The Staff does not have sufficient knowledge of the initiative to answer this interrogatory.

Respectfully submitted,

Man G. Weener

Mary El Wagner Counsei for NBC Staff

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Mitzi A. Young Counsel for NRC Staff

Dated at Bethesda, Maryland this 30th day of June, 1983

AFFIRMATION OF PREPARATION

I, Mohan Thadani, being duly sworn, state that I was responsible for preparing the foregoing response to Interrogatories Nos. 3-14, 20, 21, 23-27, 37-39, 46 and 48. Those responses are true and correct to the best of my knowledge.

Mohan Thadami

Mohan Thadani

Subscribed and sworn to before me this 3015 day of June, 1983

Notary

My Commission expires: 7/1/86

AFFIRMATION OF PREPARATION

I, Jim C. Petersen, being duly sworn, state that I was responsible for preparing the foregoing response to Interrogatories Nos. 15-18, 28-34, 36, 40, 47, 49-50. That response is true and correct to the best of my knowledge.

Jin C. Petersen_

- Jim L. Petersei

Subscribed and sworn to before me this JUL day of June, 1983

atricia Fischitti) Notary Public

My Commission expires: 7/1/86

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AFFIRMATION OF PREPARATION

I, Erastace N. Fields, being duly sworn, state that I was responsible for preparing the foregoing response to Interrogatories Nos. 19, 22, 35, 41-45. Those responses are true and correct to the best of my knowledge.

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Subscribed and sworn to before me this day of June, 1983

My Commission expires: 7/1/86

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PROFESSIONAL QUALIFICATIONS OF MOHAN C. THADANI

I am employed as a Project Manager in the Division of Licensing, Office of Nuclear Reactor Regulation. My responsibilities include the coordination and management of reviews and analyses of designs and operations of nuclear power plant systems to determine the plant safety and the environmental impacts and compliance with the Commission's regulations.

I graduated from the University of Bombay in 1955, with a Bachelor of Science (Honors) degree in Chemistry and Physics. I received a post-graduate diploma in Chemical Engineering from the University of London. Subsequently, in 1964 I received a Master of Science degree in Chemical Engineering from the University of Tennessee. In 1957, I joined the Nuclear Power Division of Head Wrightson and Company in Stockton-On-Tees, England. I was assigned to the thermal and hydraulic design and analysis of the Bradwell Nuclear Power Station in England.

In 1959, I joined the Foster Wheeler Limited of London, England. I was assigned to the research department on the design and testing of heat exchange components of the Pressurized Water Reactors for the British submarines.

From 1964 to 1970, I worked for the aerospace companies, Northrup Space Laboratories, Gruman Aerospace Corporation, and Fairchild Industries. I performed thermodynamics and reliability analyses for the Apollo Saturn Launch Vehicles, NERVA nuclear rocket systems, Lunar Module, Earth Orbital Shuttle Systems, and several satellite systems.

In 1971, J joined NUS Corporation as a senior engineer responsible for preparation of safety and environmental evaluations for nuclear power plant systems. While at NUS, I attained progressively increasing responsibilities, being promoted to the positions of section leader, and senior staff consultant. As a project manager, I coordinated the preparation of Safety Analysis Reports and Environmental Reports for Construction Permit and Operating License Applications for Nuclear Power Plants.

In 1978, I joined Teknekron, Incorporated, as a Senior Scientist and served as a Prinicipal Investigator for analyses and evaluations to guide and support the development of Nuclear Regulatory Commission's proposed rule 10 CFR 60 concerning the safety of the geologic isolation of high level nuclear wastes.

In April 1980, I joined the Nuclear Regulatory Commission as a Nuclear Engineer in the Environmental Evaluation Branch, Division of Operating Reactors, Office of Nuclear Reactor Regulation. Following a reorganization of the Office of Nuclear Reactor Regulation, I was assigned to a position as a Nuclear Engineer in the Accident Evaluation Branch, Division of Systems Integration. In November, 1982, I was assigned to my present position as Project Manager in the Division of Licensing.

JIM C. PETERSEN

PROFESSIONAL QUALIFICATIONS

OFFICE OF STATE PROGRAMS

I am Senior Licensee Relations Analyst in the Office of State Programs, U.S. Nuclear Regulatory Commission. I am responsible for the conduct of studies and evaluations of implementation of and compliance with NRC regulations by licensees and related industries. I am also responsible for the review and evaluation of the financial qualifications of nuclear facility license applicants to pursue proposed activities under a license, primarily the construction and operation of nuclear facilities. In this regard, I have prepared financial qualifications analyses for inclusion in the Staff's Safety Evaluations and for presentation as evidence on the record of the Atomic Safety and Licensing Board's safety hearings. I have served as a Staff witness before the Atomic Safety and Licensing Board in a number of proceedings. My work also involves keeping abreast of developments in the money and capital markets and in the electric utility and nuclear industries.

I received a Bachelor of Science in Business Administration degree (awarded cum laude) with a major in Accounting from the University of Denver in 1968. I have continued my formal education through college and university courses in finance, math, economics and computer science and through several intensive short courses. I am a member of Beta Gamma Sigma, the national business administration honorary, and Beta Alpha Psi, the national accounting honorary. The latter organization presented me with its award for outstanding service.

From 1968 through 1973, I was employed in a number of assignments on the staff of the Controller of the Atomic Energy Commission. These assignments included reviewing, designing and implementing accounting systems and procedures for AEC offices and AEC contractors. I also assisted in the financial review of nuclear facility license applicants during the period when that function was performed by independent staff members of the AEC Office of the Controller. That function was subsequently transferred in its entirety to the NRC. In January of 1974, I joined the regulatory staff and assumed responsibilities in the financial qualifications review of nuclear facility license applicants. I have worked in NRC financial analysis since that time, except for a one-year assignment at the U.S. Department of Energy where I worked on the financing of emerging energy technologies.

Professional Qualifications Erastace N. Fields U.S. Nuclear Regulatory Commission

I, Erastace N. Fields, am an Electrical Engineer with the Site Analysis Branch, Division of Engineering, Office of Nuclear Reactor Regulation. Prior to joining the NRC in May 1980, I was employed as an Electrical Engineer with the U.S. Department of Energy's Economic Regulatory Commission from October 1978 through April 1980. From February 1969 through September 1978, I served with the staff of the Bureau of Power of the U.S. Federal Power Commission (currently, the Federal Energy Regulatory Commission).

My professional responsibilities have primarily involved demand and energy forecasting, analysis of the adequacy of electric utility communication facilities, production cost studies, specific and generic evaluation of electric system reliability and analysis and evaluation of power system disturbances including the preparation of reports for public dissemination.

I have provided testimony, in formal licensing hearings, on topics related to cost/benefit, alternatives analysis, and need for power. These hearing proceedings have included the Hartsville, Pilgrim and Indian Point Nuclear Stations and the Davis Pumped Storage Hydroelectric Project.

I received a BSEE degree from the Koward University's school of Engineering in 1969.

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 "NRC STAFF RESPONSE TO COALITION FOR SAFE POWER FIRST SET OF INTERROGATORIES TO NRC STAFF" in the abovecaptioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, by deposit in the Nuclear Regulatory Commission's internal mail system, this 30th day of June, 1983:-

- *Herbert Grossman, Chairman Administrative Judge Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, DC 20555
- *Mr. Glenn O. Bright Administrative Judge Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, DC 20555
- *Dr. Jerry Harbour Administrative Judge Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, DC 20555

Nicholas S. Reynolds Debevoise & Liberman 1200 Seventeenth Street, NW Washington, DC 20036

Eugene Rosolie Coalition for Safe Power Suite 527 408 South West Second Street Portland, Oregon 97204 Gerald C. Sorensen Manager, Licensing Programs Washington Public Power Supply System 3000 George Washington Way Richland, Washington 99352

- *Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, DC 20555
- *Atomic Safety and Licensing Appeal Board Panel U.S. Nuclear Regulatory Commission Washington, DC 20555
- *Docketing & Service Section U.S. Nuclear Regulatory Commission Washington, DC 20555

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

Mary Wagner Counsé for Staff

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WNP CPanestment - (Estering) 10/20/83 meeting w/ Mary ubgree-10-20-83

1. The since here is whether a not the relationhip teter BPA and WPPSS, If incifically the degree of firstlance over WPPSS is such that BPA can anted (ever them? a defecter basis) the planed completion date of WNP-J. This is all that I have to address.

Torgis the new LPM.

3. agreed to prepare draft material for sur disportion is response to item 1, above, I for Fills by 10/28.

Nov 14 Samy pip. Resp. to S.D. Rec 12 Refiled Testimony Dec. 27 Hearing Jan. 10 maybe Jon. 8 on 9

6-15-83 WPPSS Nuclear Project No. 1 Preparation for Damary Disposition and Hearing Construction Permit Externion Non Keryon Achon Theten, Rig. My., NRR Elearon adenson, Chief, hicerary Br. No. 4 Marilee Durea, hie. aut. Mary Wagner, ELD

WPPSS: alan Hosler, Licening Engineer for WNP-1 Richlard, Wash. (509) 397-2822

D Veleon - Jones Perko, WPPSS Treamer 11-7-83 1. BPA is independently financed, no federal appropriation -2. WBPSS's borks are backed up by BPA, but not by the U.S. Treasury or by the U.S. government generally. 3. all of OPA's reverses are pledged as security for the WNP-1 borde, not just revenue from the WNP-1 participate under the Net silling agreents. 4. BPA does not specifically order that center borde mill beismed. It does have specific opport over the construction budget and finish flow, however, such that I WPPSS must issue certain bople to

sitsly the play.

Sep

The pertinent issue here is whether or not the relationship between BPA and WPPSS, and specifically the degree of BPA's influence over WPPSS, is such that BPA can control the planned construction completion date of WNP-1.

-3-

Version agreed to w/ Man Wagner as of 11/8, p.m.

5. BPA's influence can be measured in at least two ways. First is the provision in the WNP-1 bond indenture which makes the BPA ultimately responsible for payment of principal and interest on the WPPSS revenue bonds issued to finance the project. Since WPPSS is a public agency its permanent financing for utility plants is all in the form of bonded indebtedness. There is no equity capital such as that contributed by the stockholders of an investor-owned utility. The first level of security for the WNP-1 revenue bonds is the revenues that will be collected from ratepayers who use electricity generated by the plant. The second level of security is evidenced by the Net Billing Agreements between WPPSS and the publicly-owned utilities and by the Exchange Agreements between WPPSS and the privately-owned utilities. These contracts, to which BPA is also a party, provide that each participating utility will pay its share of WNP-1 costs (including all debt service costs) regardless of whether or not WNP-1 is completed, operable or operating. The third level of security is provided by BPA's obligation through such contracts to make up any deficiencies in project costs (including all debt service costs) not provided by the participating utilities. / Thus, BPA's financial stake (and financial responsibility) in the successful completion and operation of of a degree. To give BPA antication and operation of WNP-1 is to give it de facto control over significant decisions on the project. It is reasonable that such control and influence should

extend, as it does, to the planned completion date of the facility, a factor that has major financial and operating significance to BPA and to

WPPSS.

A of a dogue to give BPA miguly Juny.

6. A second measure of BPA's effective control over WNP-1 decisions is its approval authority over the issuance of WPPSS bonds to finance the project. The WNP-1 Project Agreement between BPA and WPPSS provides that BPA has approval/disapproval authority over WPPSS' issuance of WNP-1 revenue bonds. WPPSS must issue WNP-1 bonds in such amounts and at such times so as to fulfill the WPPSS budget and financial plan over which BPA has approval authority.

* muthere

7. \checkmark Based on the information set forth above, I conclude that EFA's involvement in the WNP-1 project is so substantial and so integral that it effectively has control over such decisions as the planned completion date of the project.

Jim C. Petersen

SUBSCRIBED and sworn to before me this day of , 1983

Notary Public My commission expires: