

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) )

DOCKETED  
'83 DEC 16 A9:57  
OFFICE OF  
DOCKETING & SERVICE  
BRANCH  
Docket No. 50-460 CPA

INTERVENOR'S ANSWER TO NRC STAFF & APPLICANT'S  
MOTIONS FOR SUMMARY DISPOSITION.

I. INTRODUCTION

The Coalition For Safe Power, hereafter "Coalition", pursuant to 10 CFR 2.749 and in accordance with the July 11, 1983 Order of the Licensing Board in the above captioned proceeding, hereby submits its response in opposition to "Licensee's Motion For Summary Disposition" dated November 14, 1983 and "NRC Staff Motion for Summary Disposition of CFSP Amended Contention 2" dated November 14, 1983. For reasons set forth below, the Coalition asserts that there are genuine issues of material fact to be heard and the Licensing Board should convene an evidentiary hearing on January 10, 1984 as scheduled in its July 11, 1983 order.

II. LEGAL STANDARDS

The Commission's Rules of Practice provide that any response to summary disposition, with or without affidavits, be served twenty days after the service of the motion. 10 CFR 2.749(a). In this proceeding, the Licensing Board, pursuant to its authority under 10 CFR 2.718, set December 12, 1983 as the deadline for filing of such responses. 10 CFR 2.749(a) also states that "there shall

be annexed to any answer opposing the motion separate, short and concise statement of material facts as to which it is contended that there exists a genuine issue to be heard." The Coalition has attached such a statement hereto.

The Applicant argues in its motion for summary disposition that:

\* \* \* fundamental precepts of the administrative process mandate that at this stage of litigation the intervenor be required to respond to this motion by presenting material and disputed facts in affidavit form that support its position.

Motion at 7. (emphasis added) There is no legal precedent for this assertion and 10 CFR 2.749 makes no such requirement:

When a motion for summary disposition is made and supported as provided in this section, a party opposing the motion may not rest upon the mere allegations or denials of his answer; his answer by affidavit or as otherwise provided in this section must set forth specific facts \* \* \*

The Appeals Board recognized this stating:

Although Decade replied to the Licensee's motion on October 24, 1981 asserting that the motion should be denied, it did not file any affidavit setting forth "specific facts showing that there is a genuine issue of material fact," or a "short and concise statement of the material facts as to which it is contended that there exists a genuine issue to be heard.

Wisconsin Electric Power Company (Point Beach Nuclear Plant Unit 1) ALAB-696, 16 NRC 1245, 1259 (1982). It should be noted that the NRC Staff makes no such assertion.

Summary disposition is only authorized where the party is entitled to judgment as a matter of law, where it is quite clear what the facts are, and where no genuine issue remains for trial.

The Appeal's Board has stated:

\* \* \* summary disposition is a harsh remedy. It deprives the opposing letigant of the right to cross-examination witnesses, which is perhaps at the very essence of an adjudicatory hearing.

Cleveland Electric Illuminating Company et. al. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 755 (1977).

Due to this "harsh remedy" the burden of proof is upon the movant, in this case the Applicant and NRC Staff, to establish the absence of a genuine issue of material fact even if the party opposing the motion fails to submit controverting evidence. Id. at 753-54. The opposing party need not show that he/she will prevail on the issues but that there are genuine issues to be tried. See American Manufacturers Mut. Ins. Co. v. American Broadcasting Paramount Theaters, Inc., 388 F. 2d 272, 280 (2d. Cir. 1976); Pacific Gas & Electric Company (Stanislaus Nuclear Project, Unit No. 1) LBP-77-45, 6 NRC 159, 163 (1977). The record must be viewed in the light most favorable to the party opposing the motion. See Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-74-36, 7 AEC 877 (1974). The Appeals Board recognized this concept:

[T]he Commission's summary disposition rule, like Rule 56 of the Federal Rules of Civil Procedure after which it is modelled, does not require a party opposing a motion for summary disposition to prove its case before trial.

Point Beach, supra, at 1258; Perry, supra, at 753, 754 and cases cited therein.

### III. SCOPE OF ISSUES

The discussion of the facts in dispute set out below addresses them in the context of certain legal precedents. While summary disposition is intended to dispose of issues which are factual, not legal, in nature, the scope of the instant proceeding is determined by these cases. Washington Public Power Supply System (WPPSS Nuclear Projects No. 1 and 2), CLI-82-29, 16 NRC 1221 (1982) is the first of these, a Commission decision on the original petitions prior to the submission of contentions. The Commission reiterated the findings of an Appeal Board in an earlier decision (Indiana & Michigan Electric Company (D.C. Cook, Units 1 and 2), ALAB-129, 6 AEC 414 (1973)) that the legislative history behind 10 CFR 50.55(b) was "inconclusive in ascertaining any intent about the scope of an extension proceeding." The Commission went on to say, quoting from D.C. Cook:

\* \* \*a determination should be based on "common sense" and the "totality of the circumstances" so as to ascertain "whether the present consideration of any such issue or issues is necessary in order to protect the interest of intervenors of the public interest."

6 AEC at 420.

The Commission also stated several other positions:

- 1) a contention cannot be litigated in a Construction Permit Amendment proceeding when an operating license proceeding is pending wherein the issue may be raised;
- 2) a contention having nothing whatsoever to do with the causes of delay or the proposed justifications cannot be litigated;



- 3) the inquiry of a CPA should be into the reasons which have contributed to the delay in construction; and
- 4) that, despite the fact that a holder of a construction permit must establish reasons "founded in fact" explaining the delay, that it  
\* \* \* cannot misrepresent those reasons and because it might, "[a] intervenor is thus always free to challenge a request for a permit extension by seeking to prove that, on balance, delay was caused by circumstances that do not constitute "good cause."

WNP-1 & 2, supra, slip op. at 14.

Upon dismissal by this Licensing Board of the petitioner (for lack of a litigable contention) in the aforementioned request for hearing for WNP-2, the Appeals Board further clarified the scope of the issues involved in a request for a construction permit extension. In affirming the Licensing Board's denial, the Appeals Board established that the word "dilatory" meant "intentional delay of construction without a valid purpose." Washington Public Power Supply System (WPPSS Nuclear Project No. 2), ALAB-722, 17 NRC \_\_\_\_\_ (slip opinion at 9). In a footnote, the Appeals Board went on to say:

Thus, for example, an intentional slowing of construction because of a temporary lack of financial resources or a slower growth rate of electric power than had been originally projected would constitute delay for a valid business purpose.

WNP-2, supra, slip op. at 9, footnote 6. (Intervenor would note here that the issues raised in Contention No. 2 and subsequent submittals establish the issues to be a permanent lack of financing and lack of need and thus are not bases for a "good cause" determination.) The Appeals Board also established that:

\* \* \* the ultimate "good cause" determination called for by Section 185 of the Atomic Energy Act is whether good cause exists to extend the construction completion date. The statutory focus is not so much (or at least, not exclusively) on an applicant's past conduct, but rather on the future. Plainly then, that ultimate "good cause" determination is expected to encompass a judgment about why the plant should be completed and is not to rest solely upon a judgment as to the applicant's fault for delay. (emphasis in original)

Id. at 13.

Lastly, the factula issues in dispute are defined by the contention admitted into litigation and the subsequent responses to interrogatories filed by all parties. The motions for summary disposition of the contention do not address the facts presented therein, which are discussed in more detail below.

#### IV. GOOD CAUSE

Both the Applicant and NRC Staff state in their respective motions that the facts on the record show the existance of "good cause" as required by 10 CFR 50.55(b), although each fails to recognize that "good cause" not only applies to the reason for the delay but also to the reason for the extension.

Regarding the "good cause" determination for the past, WNP-2 suggests a two-prong test. First, the construction delay(s) at issue must be traceable to the applicant and second, the delay(s) must be "dilatory". Id. at 7. The decision to defer construction of WNP-1 is traceable to the Applicant and was dilatory.

The WPPSS Executive Finance Committee investigated options for financing its projects, including plant deferral, prior to the Bonneville Power Administration (BPA) recommendation. WPPSS Executive Board Minutes, April 5, 1982, at 5. The Finance Committee then requested a recommendation from BPA on April 6, 1982. WPPSS Executive Board Minutes, April 19, 1982, at 5 and Licensee's Motion for Summary Disposition at 17. Thereupon the BPA Administrator made his recommendation, in doing so stating that a reason for the recommendation was escalating rates caused substantially by WPPSS' construction program. Finally on April 29, 1982, the WPPSS Executive Board and Board of Directors voted to adopt resolutions 71 and 1221, respectively, deferring construction of WNP-1.

The second test, to determine if the action of the Applicant were dilatory is defined to mean "intentional and without a valid purpose." WNP-2, Supra, at 13. Again there is clearly a genuine issue yet to be heard. Neither movant claims the actions were not intentional. Both contend no genuine issue exists in the determination of a "valid purpose" for the delay. The Applicant contends that the "valid purpose" test has been met because the BPA made a recommendation and thus deferral of construction was inevitable. Applicant's Motion at 23. The Applicant also claims once BPA made its recommendation it had no real choice but to seek the instant construction permit extension. Id. at 29. It further asserts that the "Licensee based its decision to defer WNP-1 and its showing of good cause on the BPA recommendation. Neither was premised on the underlying basis of the recommendations concerning WNP-1 developed by BPA..." Id.

The facts speak to the contrary: Resolution 71, passed by the WPPSS Executive Board, was drafted to provide an expression of concurrence by the Executive Board with the BPA recommendation and to provide the full Board the opportunity to concur in the decision. WPPSS Executive Board Minutes, April 23, 1982, at 30. As stated earlier, the BPA recommendation was made at the request of the WPPSS Executive Board Finance Committee. The Finance Committee had looked into plant deferral prior to the BPA recommendation.

While the Applicant asserts that the reasons underlying the BPA recommendation are not at issue in this proceeding, the NRC Staff takes a different view and one with which intervenor agrees. See NRC Staff's "Statement of Material Facts As To Which There Is No Genuine Issue To Be Heard," at 3. The NRC Staff states on page 5 of its Motion:

One reason cited by BPA...is a slower growth rate of electrical power demand...Each of these reasons constitutes a valid purpose \* \* \*

Although the Coalition does not agree with the NRC Staff's conclusions, it does concur that the reasons behind the BPA recommendation are facts that must be examined in determining "valid purpose." While the NRC Staff states that:

BPA's financial stake in, and financial responsibility for, WNP-1 is so high as to effectively give BPA control over the planned completion date for WNP-1.

(Id. at 3), the Applicant would have the Licensing Board allow it to hide behind the actions of the BPA avoiding all scrutiny, by stating that BPA is entirely responsible but arguing against any

investigation into BPA's actions.

One overriding reason for BPA's recommendation was that the private utilities, owners of 30% of WNP-3, would not agree to deferral of the WNP-3 project. See Letter from Peter Johnson, BPA Administrator, to John J. Welch, Chairman, Finance Committee, WPPSS, dated April 23, 1982. However, the private utilities were more than willing to negotiate with the Applicant and BPA. See Letter from W.J. Satre, President, Washington Water Power; Robert H. Shott, Chairman of the Board, Portland General Electric; Don C. Frisbee, Chairman of the Board, Pacific Power & Light; and John W. Ellis, President, Puget Sound Power & Light, to John Welch, Chairman, Finance Committee, WPPSS, dated April 22, 1982 and provided herein as Attachment A. The record to date lacks any evidence to show that this avenue was pursued seriously. The Applicant claims it had no other option, but in fact there were several: it could have placed the project in indefinite mothball as it did with projects WNP-4 and 5; terminated the project; or entered into negotiations with the private utilities, owners of 30% of WNP-3, as mentioned previously. The NRC Staff's claim that a "slower growth rate of electrical demand" was the basis for BPA's recommendation is also misleading. BPA Administrator, Peter Johnson, stated it was escalating rates caused by the WPPSS construction program which was the significant factor. Additionally, the private utilities would not agree to deferral of WNP-3 in lieu of WNP-1, although WNP-1 was more complete. This was not a decision based solely on prudence. The movants have made no attempt to address these issues.



The Applicant and NRC Staff cite Georgia Power Co. (Alvin W. Vogtle Nuclear Power Units 1 and 2) LBP-77-2, 5 NRC 261 (1977) as an example for "temporary lack of financial resources" constituting good cause. Both fail to mention that the applicant in that case showed that future financing was available. Vogtle, supra, at 300. While neither the NRC Staff nor Applicant have addressed the issue of whether there will ever be a need or financing ability for WNP-1, the NRC Staff addresses the "temporary" lack of need in its motion for summary disposition. The NRC Staff asserts no factual basis for its position except the BPA's report, "Analysis of Resource Alternatives" dated April 19, 1982 (hereinafter "WNP-1 Decision Document"). This document is not in and of itself a reliable forecast, its over a year old, and is now superceded by more recent analyses by the same agency (BPA) showing electrical growth to be even less than projected in 1982. See Attachment B. Moreover the NRC Staff stated in response to the Coalition's First Set of Interrogatories, dated June 30, 1983 that it relied for its determination on the need for WNP-1 on NUREG-75/012, the FES for WNP-1 dated March, 1975, now nearly 9 years old.

Additionally, the NRC Staff and Applicant's Motions for Summary Disposition ignore the issue of whether good cause exists to extend the construction completion date. This issue the Appeals Board ruled in ALAB-722 is the "ultimate 'good cause' determination called for by Section 185 of the Atomic Energy Act." WNP-2, supra, at 13. Paramount in the determination of "good cause"

to extend the construction completion date is a showing that the benefits continue to outweigh the costs -- particularly that power from the plant will be needed upon completion and can be produced at reasonable cost.

Need for power and lack of financing are two components of the BPA recommendation upon which the NRC Staff and Applicant rely to show good cause exists for the delay in completion. The Intervenor raised these as issues in its contention and throughout its responses to interrogatories from the NRC Staff and Applicant. The Intervenor posited the lack of need for power from WNP-1 as a basis on which to not extend the construction permit completion dates, citing among others, the Northwest Conservation Act Coalition Model Plan. The Intervenor intends to call Jim Lazar, a co-author of the Plan, as a witness and will, if required, submit the appropriate affidavit in support of this answer (pursuant to 10 CFR 2.749(c)). Neither the NRC Staff nor Applicant have responded to this previously identified genuine issue of fact in their respective motions for summary disposition.

In sum, the movants have not fulfilled the requirements set out in ALAB-722 to show that good cause exists to extend the construction completion date for WNP-1 and thus have failed to meet the burden of proof necessary under 10 CFR 2.749.

#### V. REASONABLE PERIOD OF TIME

The second provision of 10 CFR 50.55(b) is that the Commission will, upon good cause shown, extend the completion date "for a reasonable period of time." As stated in ALAB-722, the original

intent of the provision it effects (namely 10 CFR 50.55(a) which mandates earliest and latest dates for completion) was for the Atomic Energy Commission (AEC) to plan for nuclear fuel. However, the current nonexistence of this federal role has not negated the need to "[assure] that construction is diligently pursued" and that "completion dates [can be predicted] accurately." WNP-2, supra, footnote 9 at 12, 13. These two goals continue to be of importance according to Letters to the Honorable Thomas P. O'Neill, Jr. and the Honorable George H. Bush from Chairman Nunzio J. Palladino, dated February 21, 1983, which sought to eliminate the requirement for completion dates. The analysis quoted by the Appeals Board in WNP-2 simply states that, in the Commission's point of view, the requirement was not having the intended effect. The NRC still stands behind the proposition that predicted plant completion dates are important and that construction should be diligently pursued. (Congress, in addition, has declined to remove the 50.55(a) requirement.)

This approach is consistent both with NRC's mandate to protect the public health and safety as well as its duty pursuant to the National Environmental Policy Act of 1969 (83 Stat. 852) implemented by Executive Order 11514 and the Council on Environmental Quality's Guidelines of August 1, 1973 (38 FR 20550). The finding required of the Commission under NEPA prior to issuance of a construction permit (See e.g. 10 CFR Part 2 Appendix A, VI (c)(1)(v); (c)(2)(ii), (c)(3)(i)(iii) and 10 CFR 51.20(b)) that the benefits outweigh the costs are in large part predicated on the need for the facility in question. Need for power dictates when a plant should go on line and thus when construction should commence and be complete.

Thus the Appeals Board citation of the Letters, supra, recognizes the agency's responsibility to ensure that a plant is both completed when needed as well as needed when completed.

The fact that the initial cost-benefit analysis done by the NRC was far off the mark is irrelevant to this proceeding except that without it (and since it is wrong by at least one decade it is useless) there is nothing on the record to support a determination by this Licensing Board as to when the plant should be completed, if ever. The Applicant, notwithstanding its assertion on page 35 of the Motion that the request for an extension is for 2-5 years, is in fact requesting a delay of 9 1/2 years. In truth, there is nothing on or off the record upon which any party -- or the Licensing Board -- can rely which states when the plant will be completed.

The WPPSS Board does not even intend to make a decision on the construction delay until October 1984. See Management Plan for Extended Construction Delay of WNP-1, dated June 29, 1982 at 1 and Comparison of Present WNP-1 Delay Plan with Alternatives, presented to Participants Review Board, on October 8, 1982 at 2 (Attachments C and D respectively). The Applicant has proposed that the NRC Staff consider June 1, 1988 as an earliest fuel load date (Letter from G.D. Bouchev, Manager, Nuclear Safety & Regulation, WPPSS, to Elinor G. Adensam, Chief, NRR, NRC, April 15, 1983) and yet informed the Licensing Board that under a proposed plan, completion would occur in "approximately 1991." See Letter from N.S. Reynolds to ASLB, March 7, 1983. (It should be noted that this

letter states that Counsel for the Applicant will advise the Board of any subsequent decisions -- decisions apparently made on April 27, 1983 (See Presentation to Executive Board Construction Committee by R.A. DeLorenzo, Program Director, FY 1984 Financial Plan, May 25, 1983, Attachment E.) -- which have not been the subject of any advisory letters received by the Intervenor.) The Northwest Power Planning Council, on the other hand, has stated that the plant will not be needed earlier than 1996. See Rosolie Affidavit.

Within the context of 10 CFR 50.55(b), reasonableness of the time period requested must be viewed two ways, the first being a matter of sufficiency and the second, does it comport with the intent of the Congress and the Atomic Energy Act. The Applicant has requested a 9 1/2 year delay in completion, 4 1/2 years for delays already incurred and now necessary for completion and 5 for deferral. On May 26, 1983, however the BPA issued "Analysis of Alternatives Related to WNP-3", in which it proposed various alternatives related to the completion of WNP-3 which have a corresponding impact of deferral on WNP-1 of 2 to 7 years. The document discussed a 5 to 12 year deferral of WNP-1, not a 2-5 year deferral as previously discussed by BPA and as represented by the Applicant to the NRC. While the "Analysis of Alternatives Related to WNP-3" (hereinafter the "WNP-3 Decision Document") states that it does not constitute a change in course for the WNP-1 project "it was assumed that WNP-1 would be brought on line 3 1/2 years after WNP-3" if WNP-3 were delayed 3 or more years. WNP-3 Decision Document, at 23 (Attachment F). Contingency 2a (a 3 year delay in WNP-3) which has been chosen by BPA/WPPSS (See e.g. letter from



D.E. Dobson, Acting Program Director, WNP-3 and 5, WPPSS, to D.M. Sternberg, Reactor Projects Branch No.1, NRC, dated July 13, 1983 and Analysis of Resource Alternatives: Summary & Conclusions, BPA ~ May 26, 1983 at 7 (Attachments G and H respectively.) includes the deferred "arrival of No. 1 to June, 1993." WNP-3 Decision Document at 24, Table III.C.1. To Intervenor's knowledge the NRC Staff is unaware of the impact of WNP-3 on WNP-1. See Response to FOIA Request 83-515, submitted by Nina Bell, August 26, 1983, dated September 20, 1983 (Attachment I). In fact, the NRC Staff SER was published subsequent to issuance of the WNP-3 Decision Document so the NRC Staff is apparently content to ignore statements by BPA related to construction schedules for WPPSS projects. In sum, the construction permit amendment to extend the completion date of WNP-1 to 1991 requests a period of time which is not reasonable by dint of being insufficient.

There are further indications regarding the insufficiency of the time period requested in the extension. The first of these is an additional downward trend in forecasting done by the BPA. See Attachment B. This alteration caused the agency to lower its base case forecast for 1980-2000 from 1.6 percent to 1.4 percent. This further decrease in need for power comes after analyses which indicated the lack of need for WNP-1 and caused its deferral for 2-5 years, as put forth by NRC Staff and Applicant.

Additionally there are issues related to the long-term financing of WNP-1. Intervenor has alleged that financing will not become available within the time period requested. See Intervenor's 2nd Updated Responses to Applicant's First Set of Interrogatories, July 13, 1983, at 1. Intervenor will present

Jim Lazar as a witness to testify on this lack of financing; neither the NRC Staff nor Applicant have met their burden of proof by showing that financing will exist for WNP-1 within 2 to 5 years since "mothballing". Currently, in part due to the default on bond obligations for WNP- 4 and 5 there is no ability to finance WNP-1. Rosolie Affidavit at 3. None of the bailout plans presented to Congress have attempted to raise funds for completion of WNP-1.

BPA has shown there is no ability to finance WNP-1 by recommending the halt of construction on WNP-3 which has a corresponding impact on restart of construction of WNP-1. WNP-3 Decision Document at 23. The WNP-3 decision was based on new need for power and new financing projections made subsequent to the decision to defer construction of WNP-1 for 2 to 5 years. Thus, there is even less likelihood financing will exist prior to 1985, by BPA analyses, then when construction ceased. (1985 is the date when construction would have to begin for plant completion by 1991.)

The second test of reasonableness is whether the time requested fulfills the intent of Congress upon passage of the Atomic Energy Act and NEPA. While the Commission noted in WNP-1 and 2, supra, that "the purpose of a construction permit extension proceeding is not to engage in an unbridled inquiry into the safety and environmental aspects of reactor construction and operation" a subsequent Appeals Board ruling determined that "[a] judgment must still be made as to whether continued construction should nonetheless be allowed." WNP-2, supra. In this case the requested

extension is for 9 1/2 years. In determining if this is reasonable the Licensing Board must determine if there is a safety and/or environmental significance to the delay. The WNP-3 Decision Document states: "The NRC Staff has expressed a concern for equipment deterioration during delays which exceed 5 to 10 years. Equipment necessary to safe operation cannot function if degraded. This is a narrow and "bridled" inquiry into the safety significance of construction deferral.

There is also an environmental impact which must be weighed in determining if 9 1/2 years is a reasonable period of time. The NRC Staff Safety Evaluation Report (SER) dated June 16, 1983 (submitted as Attachment 3 to the Motion for Summary Disposition) states:

The Staff has also considered the environmental impacts of the extension of construction permit, and has determined that the proposed action does not entail any significantly different construction activities from those which were considered in the Final Environmental Statement for WNP-1 and 4 (NUREG-75/012), dated March 1975. The staff, therefore, concludes that the proposed action will not alter the conclusions reached in NUREG-75/012 regarding the environmental impacts and cost/benefit balances of construction of WNP-1.

SER at 3. The NRC Staff has offered no basis upon which to conclude that the passing of a decade will not alter the impact of construction activities. More importantly the determinations of cost/benefit which includes the cost of power, the alternatives to the project and the need for power are significantly and rapidly changing. The SER offers no basis for the conclusion that the

primary benefit of WNP-1 -- electricity -- will, in fact, be needed. Additionally, the SER mentions, in an unrelated section, that the NWPPC issued a draft report entitled "Regional Conservation and Electric Power Plan 1983" which states "that its task force of nuclear experts has concluded that it would be difficult to mothball a nuclear plant for more than five years." SER at 3. The SER concludes that this finding addresses economic and commercial considerations (not public health and safety) however it does not address this as a possible socio-economic impact under the cost/benefit analysis required. In fact, there are material issues which remain in dispute despite the issuance of the SER. Such issues have not been controverted by the facts set forth in NRC Staff and Applicant's motions.

The Applicant's position is that the reasonableness of the time requested should depend upon the basis used to support a finding of good cause for the extension. See e.g. Licensee's Response to Coalition's 2nd Set of Interrogatories, June 28, 1983, interrogatory no. 26. The basis offered by the Applicant and accepted by the NRC Staff are the five offered in support of the original application for extension and the BPA recommendation which encompasses two major factors: lack of financing and lack of need for power from the project. The BPA recommendation must be viewed in the context of more recent BPA analyses including the decision to mothball WNP-3 which BPA says will impact WNP-1. Thus, all parties agree on at least these two criteria with which to judge

reasonableness. The Coalition has stated clearly in its contention and in responses to interrogatories that there is no need for power and no financing ability. Neither the NRC Staff or the Applicant have attempted to address these genuine issues of fact at issue in this case in their respective motions for summary disposition. Moreover, Coalition intends to sponsor a witness (Mr. Lazar) at the evidentiary hearing to testify on need for WNP-1. See Bell Affidavit.

#### VI. CONCLUSION

As stated above, neither the NRC Staff or Applicant have met their burden of proof, controverted all the facts on the record and shown that all genuine issues of material fact need no further hearing. Therefore, the Licensing Board should deny their motions for summary disposition and convene the evidentiary hearing scheduled for January 10, 1983.

Respectfully submitted



Nina Bell, Intervenor  
Coalition For Safe Power

Dated, this 13th day of  
December, 1983.



April 22, 1982

Mr. John Welch  
Chairman, Finance Committee  
Executive Board  
Washington Public Power Supply System  
P.O. Box 968  
3000 George Washington Way  
Richland, Washington 99352

Re: Your Letter Dated April 22, 1982

Dear Mr. Welch:

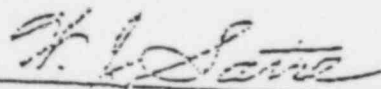
You asked whether, as owners of WNP No. 3, we would resist a proposal to defer continued construction on that project. The answer is yes. We will vigorously resist any such efforts.

It continues to be our firm belief that it is in the best interests of the region and its electric utility customers that WNP Nos. 1, 2, and 3 all be completed as expeditiously as possible and that construction on none of those projects be deferred. The general economy of the region, its employment picture, and the long-term interests of its electric utility customers are all served by expeditious completion of the three projects.

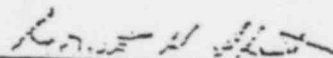
Answering the two specific questions posed in your letter, our responses are as follows:

1. Deferral of construction of WNP No. 3 would be very detrimental to our customers and we would exercise our contractual and legal remedies to prevent such deferral, and
2. We continue to be, as we always have been, interested in pursuing any arrangement which is in the interest of the Region and our customers and would, of course, be willing to work with the Supply System, BPA and others to determine alternative solutions.

Sincerely,



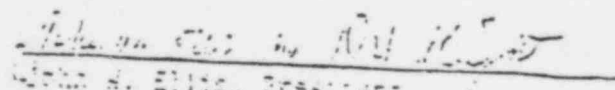
W.J. Syre, President & Chairman of  
the Board



Robert H. Short, Chairman of the Board



Eldon Brennan, President



John H. Ellis, President



## Bonneville Power Administration

FOR IMMEDIATE RELEASE  
Wednesday, August 17, 1983

PORTLAND, Ore. -- The Bonneville Power Administration's long-term forecast for the use of electricity in the Pacific Northwest is down slightly, the agency said today.

Northwest loads in the year 2000 are now expected to total 22,000 average megawatts. This is some 900 average megawatts less than was forecast a year ago. The difference is almost enough electricity to supply the present needs of a city the size of Seattle.

The downward revision in the total load was attributed to:

- Additional savings in energy due to BPA's conservation program;
- A forecast for lower industrial loads (mainly aluminum companies) which BPA serves; and
- A slower than expected rate of recovery from the current economic recession.

Many Northwest utilities and the Northwest Power Planning Council base their forecasts for electric energy consumption on the period 1980-2000. For this period, BPA in July 1982 issued a forecast for Northwest power loads showing an annual compounded growth rate of 1.6 percent.

This week, BPA lowered its base case forecast for the period 1980-2000 to 1.4 percent. One reason for the lower forecast up to the year 2000 is that Northwest electric loads declined during the 1980-1983 period due to the economic recession.

Beginning with this latest forecast, BPA will issue a new projection for 20-year energy growth extending from the year the forecast is made. BPA's forecast from this year until the year 2003 calls for a growth rate of 1.8 percent. The attached summary discusses BPA's forecast methods and its estimates for the period 1983-2003.

# # # #

WP-ALM-2281P

Background Summary  
Load Forecast

The Bonneville Power Administration's forecast for power consumption in the Pacific Northwest between now and the year 2000 is down slightly.

A year ago, BPA predicted that the region's loads at the turn of the century would total 22,900 average megawatts. The new forecast reduces that figure to about 22,000 average megawatts. The difference represents almost enough electricity to supply the current requirements of Seattle.

The downward revision in the forecast is attributed to:

- Additional projected savings in energy due to BPA's conservation program.
- A drop in the forecast for the industrial loads served by BPA (mostly aluminum plants).
- A slower than expected rate of recovery from the 1981-82 economic recession.

The Pacific Northwest is emerging from three years of little or no growth in the use of electricity. The overall load is now lower than it was when the three-year 1980-1983 period began.

BPA in July 1982 issued a forecast for Northwest power loads showing an annual compounded growth rate of 1.6 percent for the period 1980 to 2000.

This week, BPA lowered its forecast for the period 1980-2000 to 1.4 percent. One reason for the lower forecast up to the year 2000 is that Northwest electric loads declined during the 1980-1983 period due to the economic recession.

BPA this week also issued a forecast for the 20-year period from 1983 to 2003. The base case load growth forecast for 1983-2003 is 1.8 percent. The annual rate of growth is expected to fall somewhere between a low of 1.3 percent and a high of 2.6 percent. The low and high represented by this range reflect the uncertainty inherent in forecasting Northwest electrical loads.

In formulating its 1983-2003 estimate, BPA attempted to predict the growth in three major sectors of the economy: residential, commercial and industrial. The commercial sector is expected to have the greatest growth. The annual rate of growth anticipated for each sector is:

Residential -- a baseline compounded annual growth of 1.6 percent within a range of 1.3 to 2.6 percent.

Commercial -- a baseline growth of 2.1 percent within a range of 1 to 3.4 percent.

Industrial -- a baseline growth of 1.7 percent within a range of 1.4 to 2.5 percent. The following table shows the breakdown of loads for the baseline case.

BASE CASE

Pacific Northwest Regional Firm Electricity Loads  
and Annual Rates of Growth, 1983-2003  
(In Average Megawatts)

<u>SECTOR</u>	<u>1983</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2003</u>	<u>1983- 2003 AARG %</u>
Residential	5416*	5466*	6094*	6577	7091	7413	1.6
Commercial	2963*	3060*	3509*	3853	4279	4526	2.1
Industrial	3963*	4149*	4744*	5030	5386	5589	1.7
DSI (Firm)	1833	2214	2632	2657	2671	2682	1.9
Federal Agency	202	220	262	281	310	323	2.4
Irrigation	561*	657*	658*	706	728	738	1.4
Total Sales	14938	15766	17899	19104	20465	21271	1.8
Losses	1000	1039	1171	1259	1358	1417	1.8
Total Loads	15938	16805	19070	20363	21823	22688	1.8

\*Sector totals approximate.

AARG=Average Annual Rate of Growth

For the baseline case, the Northwest's population is expected to grow to a total of 10.9 million persons -- at an average annual rate of 1.5 percent as compared with an average annual rate of 0.8 percent for the nation as a whole.

Over the same period, non-agricultural employment is expected to grow by an average annual rate of 2.4 percent -- from about 3 million in 1983 to 4.8 million in 2003. Real income in the region is expected to increase at an average annual rate of 3.6 percent.

The average price of fuels competing with electricity is expected to increase as the century draws to a close. Natural gas prices are likely to grow at an

average annual rate of 2 percent. Oil prices will grow at a rate of 2.5 percent, or slightly faster than the price of natural gas.

The projections for the baseline case were produced by merging separate long-term and near-term forecasts. The long-term forecast employed a supply pricing model and a series of demand models, each of which addressed a specific sector of consumption.

The long-range approach did not include such variables as the weather or economic fluctuations. However, the short-range forecast was designed to respond to such influences, and this allowed them to become a part of the final forecast. BPA plans to update its near-term forecasts on a quarterly basis so that current economic information can be incorporated into the projections.

BPA used contract demands of the direct-service industrial customers for its 1982 forecast. The 1983 forecast assumes, however, that the Alumax plant will not be built. It also assumes greater savings from conservation than did the 1982 forecast. The savings figure is up by some 300 average megawatts by the year 2000. The methodology was also modified and improved in 1983.

Two charts are attached. The first shows the 1982 and 1983 baseline forecasts. The second shows a breakdown of consuming sectors.

August 17, 1983  
WP-ALM-2280P



COMPARISON OF PRESENT WNP-1 DELAY PLAN  
WITH ALTERNATIVES

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## SUMMARY EVALUATION

### COMPARISON OF PRESENT WNP-1 DELAY PLAN WITH ALTERNATIVES

#### ISSUE:

The Executive Board has requested an evaluation of alternatives relative to the present WNP-1 delay plan. In response to this request, the Supply System staff has defined alternatives and prepared the following information.

#### BACKGROUND:

As of April 1982, WNP-1 was approximately 62 percent complete and was seven months ahead of the official fuel load date of December 1985. The Administrator of the Bonneville Power Administration (BPA) recommended to the Executive Board on April 19, 1982, a delay of WNP-1 for up to five years. This recommendation reflected these considerations:

- The lower regional load forecasts as identified by BPA.
- The desire to maximize the region's flexibility to accommodate changing load and economic conditions.
- The need to keep short-term rate increases to a minimum.

On April 29, 1982, the Board of Directors subsequently approved a two to five year delay for WNP-1 by passing Resolution 1221 entitled, "A Resolution Directing a Financing and Construction Program for Projects 1, 2 and 3 and An Extended Construction Delay for Project 1." A decision was required on April 29, 1982, to allow financing plans to proceed for WNP-2 and WNP-3. A WNP-1 plan for the implementation of Resolution 1221 was approved by the Executive Board on May 28, 1982. This delay plan was initiated and staffing levels (which were at 6,375 on May 1, 1982) were reduced to 1,176 (Supply System and Contractor personnel); 400 below the Board approved plan.

#### THE NEED TO INVESTIGATE ALTERNATIVES:

On September 10, 1982, the Executive Board requested that alternatives to the present plan be evaluated and that one of the alternatives be a "Drop-the-Wrench" alternative. Meetings were conducted on September 27, 1982 and October 4, 1982, between the Supply System, the Construction and Operations Committee and the BPA to assess the present plan and various alternatives. The Construction and Operations Committee and BPA indicated that alternatives to the present plan should be prepared with the objectives of lower staffing levels, minimizing near-term cash flows to reduce the BPA short-term rates and focusing more on a 5-year delay due to the recent load forecasts.

A number of factors are considered important in the evaluation of alternatives. These factors include:

- The number of personnel assigned to WNP-1 and the loss of technical continuity.
- The early attrition of personnel from WNP-2 should WNP-1 manpower be reduced.

- The licensing/regulatory risks.
- The uncertainty over load requirements.
- The influence of power marketing strategies.
- The reductions in the contractors' availability.

#### POWER SALES EVALUATION:

It is recognized that there are uncertainties surrounding the Northwest Regional load forecasts and that once such a forecast is developed there will continue to be uncertainties with respect to the forecast accuracy. Therefore, the sale of power outside the region was evaluated in order to assess the conditions under which power sales and the need for power controlled the decision on project schedule.

The evaluation of power marketing strategies over the range of project delay durations has been accomplished using the same methodology used by BPA in its published short-term marketing policy for evaluating alternative resources.

Although power from WNP-1 may not appear to be required in the Pacific Northwest until sometime in the early 1990's, power is needed in the Southwest in the late 1980's to displace oil and gas capacity. The current avoided cost of energy production in California is approximately 50-60 mills/kWh based on gas-fired generation energy costs. This cost is expected to increase significantly early in 1983 under proposed gas rate increases. Over the next several years the availability of gas to displace oil may become more critical. In any event, the pressure on the avoided cost of energy is climbing. It appears there is a fundamental economic benefit available to support a sale of surplus energy from this project.

For example, if the project was completed by 1988 under the present 2-year delay plan and all output until July 1, 1991 was sold as surplus power at a then current cost of 47.0 mills/kWh or a 1982 cost of 26.5 mills/kWh, the levelized present value of the project over the short-term would break even with the delay to 1991. Any sales above the break-even point, up to the avoided cost of gas, would produce an additional significant benefit to the region. The net benefit to the ratepayers of a 2-year delay will keep rates lower in the intermediate and long-term. As indicated in the BPA study, the long-term economic benefits of any of the alternatives without the sale of surplus power shows there is little to choose between the various alternatives on a present worth - levelized annual basis. However, the early completion of the project and the sale of any surplus power at an economically attractive price would produce substantial long-term benefits to the region.

A 2-year delay coupled with sales of power to other entities through 1991 will result in a present value cost savings of \$300 million to \$500 million.

#### PRESENT WNP-1 DELAY PLAN:

The present delay plan is structured to provide a 5-year delay with a 2-year completion delay option. A minimum staffing level of 960 will be reached in January of 1983. A ramp-up will begin in the first quarter of 1983 and continue to an October 1, 1984 staffing level of 3,400. A decision is to be made by October 1984 regarding the duration of the delay -- two to five years. A 2-year delay will result in peak staffing of 6,200 by February 1985 and a 5-year delay will result in peak staffing of 3,900 by February 1985.

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10 PAGES

MANAGEMENT PLAN  
FOR  
EXTENDED CONSTRUCTION DELAY OF WHP-1

JUNE 29, 1982



JUNE 29, 1992

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JUNE 28, 1982

## MANAGEMENT PLAN FOR EXTENDED CONSTRUCTION DELAY OF WWP-1

### 1.0 OVERVIEW

#### 1.1 INTRODUCTION

This Management Plan is a description of the general policy and guidelines to be followed in bringing the WWP-1 Project to an extended construction delay status. The Supply System will use this plan as the basis for all management direction with respect to efforts on Project 1. The extended construction delay plan is to be executed within limited funding constraints while preserving the assets of the Project of a period of up to 5 years.

#### 1.2 BOARD ACTIONS DIRECTING THE DELAY

Because of the problems in financing the construction of Units 1, 2 and 3; BPA load forecasts; and BPA projected rate increases, the Supply System Board of Directors accepted the BPA recommendation to delay construction of WWP-1 for a period of up to 5 years. The recommended action, on April 19, 1982, was to place WWP-1 in a minimum cost status while preserving the assets and maintaining licensability for a period of up to 5 years beginning May 1, 1982. The Supply System Board of Directors mandated implementation of those recommendations on April 29, 1982, in Resolution No. 1221 (see Appendix A).

Subsequently the Board requested the Supply System staff to analyze alternative delay concepts and provide appropriate recommendations. On May 28, 1982, the Staff recommended, and the Board approved, a concept wherein a gradual restart program would be authorized beginning in January, 1983. The concept also provided for alternative ramp-up options to be reviewed in October, 1984, and a decision made at that time relative to the magnitude of the overall construction delay, i.e. two years, or five years, or some intermediate delay period.

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# WASHINGTON PUBLIC POWER SUPPLY SYSTEM

WNP-1

FY 1984 FINANCIAL PLAN

MAY 25, 1983

**PRESENTATION TO:** Executive Board Construction Committee

**PRESENTED BY:** R. A. Do Lorenzo, Program Director

m

## WNP-1 FY 1984 FINANCIAL PLAN

### INTRODUCTION

#### BACKGROUND

- APRIL 29, 1982: THE SUPPLY SYSTEM'S BOARD OF DIRECTORS AUTHORIZED AN EXTENDED CONSTRUCTION DELAY OF PROJECT NO. 1.
  - BASED ON THE RECOMMENDATION OF THE BONNEVILLE POWER ADMINISTRATION
  - UP TO A FIVE YEAR DELAY
- MAY 28, 1982: EXECUTIVE BOARD DIRECTED IMPLEMENTATION OF CONSTRUCTION DELAY PLAN
  - GRADUAL RESTART TO BEGIN IN JANUARY 1983
  - OCTOBER 1984 DECISION POINT FOR A TWO OR FIVE YEAR DELAY
  - STAFF LEVEL WOULD DROP TO 960 BY JANUARY 1983.
- OCTOBER 15, 1982: EXECUTIVE BOARD DIRECTED MODIFICATION TO MAY 28, 1982 PLAN
  - STAFF LEVEL WOULD DROP TO 500 BY JULY 1, 1983
  - NO SPECIFIC CONSTRUCTION RESTART ACTIVITY PLANNED
  - BASIS FOR APPROVED FY 83 BUDGET (REVISED OCTOBER 22, 1982)
- APRIL 27, 1983: EXECUTIVE BOARD'S CONSTRUCTION COMMITTEE RECOMMENDED THAT THE WNP-1 FY 84 BUDGET BE PREPARED USING THE CRITERIA AS JOINTLY DETERMINED BY SUPPLY SYSTEM AND BONNEVILLE POWER ADMINISTRATION
  - MAINTAIN ASSETS AND PLANT LICENSABILITY
  - MINIMIZE RESTART AND COMPLETION COSTS TO THE LARGEST PRACTICAL EXTENT
  - STAFF LEVEL WOULD DROP TO 300 - 350 LEVEL BY MARCH 1984

WNP-1 FY 1984 FINANCIAL PLAN

CRITERIA FOR EXTENDED CONSTRUCTION DELAY PROGRAM  
(JOINTLY AGREED AMONG THE SUPPLY SYSTEM,  
BONNEVILLE POWER ADMINISTRATION AND PARTICIPANTS REVIEW BOARD)

BASES

- ADDITIONAL FUNDING FOR THE PROJECT WILL NOT BE REQUIRED UNTIL AT LEAST JULY 1985.
- CONSTRAINS CASH FLOW AND STAFFING LEVEL
- THE PROJECT IS NOT REQUIRED TO BE ON LINE UNTIL APPROXIMATELY 1991
- ESTABLISHES PROJECT RESTART/RAMPUP DATE

OBJECTIVES

- PRESERVATION OF LICENSABILITY AND ASSETS
  - PROVIDES BASIS FOR MINIMUM STEADY-STATE STAFFING REQUIREMENTS
- IDENTIFICATION AND IMPLEMENTATION OF EFFICIENCY IMPROVEMENTS TO MINIMIZE RESTART AND COMPLETION COSTS TO THE LARGEST PRACTICAL EXTENT
  - PROVIDES BASIS FOR OPTIMIZING STEADY-STATE STAFFING LEVEL

ANALYSIS OF ALTERNATIVES RELATED TO WNP-3  
MAY 26, 1983

Bonneville Power Administration



## B. ALTERNATIVE CONSTRUCTION SCHEDULES

The options which will be analyzed in this paper consist of variations in the level of construction activities and, therefore, various commercial operation dates. Alternative 1 (Contingencies 1a and 1b) is based on the current schedule of a December 1986 commercial operation date. Alternative 2 (Contingencies 2a -2g) assumes a reduction in construction to a minimum preservation state with varying periods of delay or termination. Alternative 3 (Contingencies 3a -3c) assumes that construction is reduced to an intermediate level with varying delays or termination.

Construction on WNP-1 has been reduced to a minimum site preservation state, with an expected on line date of 1991. There is no need to change the construction status of WNP-1 at this time, nor is any new course set for WNP-1 in this document. However, in evaluating alternatives which involve a delay of WNP-3, it is necessary to make some assumptions about the schedule of WNP-1.

\*For the purposes of this document, it was assumed that WNP-3 would be completed before WNP-1, barring involuntary termination of WNP-3. If WNP-3 were delayed 3 years or more, it was assumed that WNP-1 would be brought on line 3-1/2 years after WNP-3. It would take approximately 3-1/2 years for load growth to absorb the output of WNP-3, assuming load/resource balance at the time WNP-1 comes on line. This is the assumed timing for regional resource-economic analysis. However, it is likely that construction management and other considerations will dictate a different optimal on-line date for WNP-1.

An alternative assumption will have been that sufficient surplus firm power sales contracts could be executed to justify an earlier completion of WNP-1. This latter assumption was not adopted for purposes of conservatism and because surplus sales are addressed elsewhere in this document.

Some analysis was also done of a 3-year delay of WNP-3 with no further delay of WNP-1. These assumptions about the schedule of WNP-1 were made only for evaluative purposes, and do not imply any intention to change the status of that project.

For purposes of this analysis, "intermediate level" is defined as the level of staffing required to maintain the project in a standby (optimum restart capability) mode. The total manning level is estimated at approximately 1,100 personnel comprised almost entirely of nonmanual forces. There are no physical construction activities occurring. The cash requirement necessary to sustain this intermediate level is approximately \$10 million per month (70 percent share).

## C. SPECIFICATION OF ALTERNATIVES AND CONTINGENCIES CONSIDERED

The alternatives and contingencies considered in the analysis are described in Table III.C.1.

# Table III.C.1--SPECIFICATION OF ALTERNATIVES AND CONTINGENCIES

NOTES: Unless otherwise stated, assumptions in table refer to WNP-3.  
 All alternatives other than Alternative 1a assume financing WNP-2 with BPA revenues.  
 All alternatives assume that WNP-2 arrives on schedule in February 1984.

## Alternative 1: "Maintain WNP-3 on current Schedule."

<u>Identification</u>	<u>Schedule Assumptions</u>	<u>Financing Assumptions</u>
Contingency 1a (conventional financing)	Maintain current schedule for Nos. 1, 2, 3 (e.g., No. 2 in February 1984, No. 3 in December 1986, and No. 1 in June 1991)	Finance through issuance of Supply System bonds
Contingency 1b (financing with BPA revenues)	Maintain current schedule for Nos. 1, 2, 3	Finance with BPA revenues after exhaustion of any remaining bond-financed construction funds

## Alternative 2: "Reduce WNP-3 to preservation state as soon as possible."

<u>Identification</u>	<u>Schedule Assumptions</u>	<u>Financing Assumptions</u>
Contingency 2a (3-year delay)	Reduce activity on No. 3 to preservation state as soon as possible; defer arrival of No. 3 for 3 years to December 1989; defer arrival of No. 1 to June 1993.	Finance No. 3 with BPA revenues until construction resumes in July 1985 and with Supply System bonds thereafter. Finance No. 1 with bonds.
Contingency 2b (5-year delay)	Reduce activity on No. 3 to preservation state as soon as possible; defer arrival of No. 3 for 5 years to December 1991; defer arrival of No. 1 to June 1995.	Finance No. 3 with BPA revenues until construction resumes in July 1987 and with Supply System bonds thereafter. Finance No. 1 with bonds.
Contingency 2c (7-year delay)	Reduce activity on No. 3 to preservation state as soon as possible; defer arrival of No. 3 for 7 years to December 1993; defer arrival of No. 1 to June 1997.	Finance No. 3 with BPA revenues until construction resumes in July 1989 and with Supply System bonds thereafter. Finance No. 1 with bonds.

Table III.C.1--SPECIFICATION OF ALTERNATIVES AND CONTINGENCIES (cont.)

<u>Identification</u>	<u>Schedule Assumptions</u>	<u>Financing Assumptions</u>
Contingency 2d (8-year delay)	Reduce activity on No. 3 to preservation state as soon as possible; defer arrival of No. 3 for 8 years to December 1994; defer arrival of No. 1 to June 1998.	Finance No. 3 with BPA revenues until construction resumes in July 1990 and with Supply System bonds thereafter. Finance No. 1 with bonds.
Contingency 2e (involuntary termination of No. 3 but not No. 1)	Reduce activity on No. 3 to preservation state as soon as possible. Terminate No. 3 involuntarily on June 1, 1988 due to events revealed at that time. Maintain current schedule for No. 1	Finance No. 3 with BPA revenues until terminated.
Contingency 2f (involuntary termination of both No. 3 and No. 1)	Reduce activity on No. 3 to preservation state as soon as possible. Terminate both No. 3 and No. 1 involuntarily on June 1, 1988 due to events revealed at that time.	Finance No. 3 with BPA revenues until determination is made to terminate.
Contingency 2g (commitment of BPA revenues for funding at reduced level of construction)	Reduce activity on No. 3 to preservation state as soon as possible. Resume construction on No. 3 in July 1985 after No. 2 is completed. This results in arrival of No. 3 in June 1990.	Finance No. 3 with BPA revenues at reduced level of construction (BPA share = \$15 million per month) through June 1988 and with conventional Supply System bond financing thereafter to completion.

Alternative 3: "Immediately reduce level of construction of WNP-3 to intermediate level."

<u>Identification</u>	<u>Schedule Assumptions</u>	<u>Financing Assumptions</u>
Contingency 3a	Reduce activity on No. 3 to intermediate level. In November 1983 determine that full-scale construction can be resumed based on events revealed at that time. No. 3 arrives in August 1987. No. 1 arrives on current schedule (June 1991).	Finance No. 3 with BPA revenues until determination is made to resume construction. Subsequent financing is with Supply System bonds

Identification

Schedule Assumptions

Financing Assumptions

Contingency 3b

Reduce activity on No. 3 to intermediate level. On June 1, 1988 determine that full-scale construction cannot be resumed, based on events revealed at that time, at which point No. 3 is terminated.

Finance No. 3 with BPA revenues through termination.

Contingency 3c

Reduce activity on No. 3 to intermediate level. In March 1984 resume construction at reduced level.

Finance No. 3 with BPA revenues at reduced level of construction (BPA share = \$15 million per month) through September 1987 and with conventional Supply System bond financing thereafter to completion.



C. LICENSING AND OPERATING IMPACTS

1. Licensing Impacts

a. Status of Licenses

NRC Construction Permits. The Supply System currently holds NRC Construction Permits for WNP-1, -2, and -3. NRC regulations do not require any phase of the construction of a plant to be completed on a specific schedule. The only requirement related to schedule is that construction be completed by the latest completion date specified in the Construction Permit.

The latest completion dates specified in the Construction Permits for WNP-1, -2, and -3 are:

WNP-1	January 1, 1982
WNP-2	February 1, 1984
WNP-3	January 1, 1985.

The latest completion dates may be extended by the NRC for "good cause" (42USC2235; 10CFR50.55). In order to demonstrate "good cause," a licensee must show that factors beyond his control (labor difficulties, changing regulatory requirements or financing difficulties) were the cause of the delays in construction necessitating a Construction Permit extension.

The Supply System has pending a request for an extension of the WNP-1 latest completion date to June 1991. A petition for a public hearing on this extension of the WNP-1 Construction Permit has been granted by the NRC and a hearing is currently underway before an NRC Atomic Safety and Licensing Board. Under NRC regulations, the Construction Permit will remain in effect pending NRC action on the requested extension.

No extension of the WNP-2 Construction Permit will be required, provided an Operating License is received prior to February 1, 1984.

A request for extension of the WNP-3 Construction Permit will be necessary prior to January 1, 1985. The length of the extension requested will be dictated by the project schedule at that time. The important consideration in this area is to request only one amendment to the WNP-3 Construction Permit, since each amendment request carries with it the potential for a public hearing.

NRC Operating Licenses. NRC must grant an Operating License for each plant prior to fuel loading and initial operation. Usually an Operating License application supported by a Final Safety Analysis Report and a Final Environmental Report is submitted 3 to 4 years prior to plant completion. The Operating License application is subject to an intensive NRC review during the ensuing period prior to issuance of an Operating License.

For WNP-1, the license application has been accepted by the NRC and licensing activities (except for public hearings) are not currently proceeding. A request for a hearing on the WNP-1 Operating License proceeding



is currently under consideration by an NRC Atomic Safety and Licensing Board. No decision has been made as to whether the request for a hearing should be granted.

The licensing reviews for WNP-2 are virtually complete with only a relatively small number of well-defined open issues remaining to be resolved. The major activity is the completion of a large number of items committed to during the licensing review process. A public hearing on the WNP-2 Operating License is not expected.

The WNP-3 Operating License review is in progress. NRC is scheduled to issue the Safety Evaluation Report documenting its review and any open items resulting from its review in December 1983. The Supply System is scheduled to submit all technical information necessary to support the NRC milestone by July 1983. A petition for a public hearing on the WNP-3 Operating License is currently under consideration by the Atomic Safety and Licensing Board. A pre-hearing conference has been scheduled by the Licensing Board on August 3-4, 1983, after which a decision will be made as to whether the hearing request should be granted.

Washington State Licenses. The Supply System currently holds State Site Certification Agreements for WNP-1, -2, and -3. The State of Washington Site Certification Agreements (RCW 80.50) do not specify dates for completion of construction. However, notification of the Washington Energy Facility Site Evaluation Council (EFSEC) of significant project changes is required. No additional operating license or authorization is required from the State.

#### b. Impacts of Deferral Alternatives

The impact of an additional 2- to 7-year deferral, beyond 1991, of the licensing of WNP-1, cannot be defined with any certainty. The principal risk is the potential for changes in NRC regulations which are tied to the FSAR Docketing or Operating License dates, and these could be imposed on WNP-1. It is not possible to accurately quantify this impact; however, if the highly unstable regulatory environment of the past 10 years continues, the magnitude may be greater. The impact of changing requirements increases for the longer deferral periods (greater than 5 years).

WNP-3 will also be exposed to changing requirements if construction is deferred. However, the deferral period under consideration (3 to 8 years for WNP-3 versus 5 to 12 years for WNP-1) suggests that such deferral will have a somewhat smaller impact on WNP-3. The NRC staff has expressed a concern for equipment deterioration during delays which exceed 5 to 10 years. While this concern would need to be addressed, deterioration of equipment while under construction or during long idle periods after operation, are normal design and maintenance considerations. Proper support of an equipment maintenance program with reasonable allowance for replacement can minimize the risk in this area.

The potential for intervention in the hearing process is increased as a result of the deferral of WNP-3. As indicated previously, a petition for a hearing on the WNP-3 Operating License is under consideration by the NRC.

This petition was filed 4 months late and NRC regulations establish a relatively high threshold for the late petitions. An announcement of a delay of WNP-3 could impact the Licensing Board decision on this petition.

While none of the alternatives under consideration addresses a change in the WNP-2 schedule, the deferral of WNP-3 with its resulting adverse effect on the Supply System organization will undoubtedly impact WNP-2 licensing activities. Voluntary resignations during the past several months have reached an annual rate of 25 percent on a company-wide basis, with the primary cause given as the uncertain financial future of the company. While the attrition in the Generation and WNP-2 organizations has been significantly less (15 percent), a shutdown of WNP-3 would, nonetheless, have an impact on them. Recent experience suggests a 15 to 20 percent loss in the WNP-2, Generation and technical organizations supporting WNP-2. A loss of key personnel in the licensing activity and the technical organizations supporting the completion of a large number of licensing commitment items will be very difficult to accommodate at this point in the WNP-2 program without a schedule impact.

Much of the WNP-3 licensing review effort (approximately 1 year duration) may be lost if ramp down is too rapid, and there is a failure to complete and document the NRC staff Safety Evaluation Report.

A key factor in the final judgment of readiness for operation is adequacy of management systems and stability, quality, and competence of the staff. The WNP-3 rampdown introduces a number of factors with the potential for putting additional strain on management which could affect performance. It is essential that steps be taken to assure continuing management commitment and attention to assuring safety and conducting cost-effective operations.

## 2. Operating Impacts

a. WNP-1. There are no impacts other than the stated dates of deferral in the various alternatives under consideration.

b. WNP-2. A deferral of WNP-3 and the associated disruption in the Supply System organization will impact the Project, Generation and technical organizations required to support WNP-2 operation in the same manner as discussed under licensing impacts. In most cases, the same individuals are involved in completing construction, startup, or licensing commitments prior to fuel load and supporting operations after fuel load. While it is clear in the long term that there are sufficient personnel resources within the Supply System and its contractors to meet the needs of WNP-2, the short time to fuel load makes it very unlikely that a 15 to 20 percent loss in WNP-2 personnel can be compensated for without impacting the schedule. A loss of control room personnel at this time will cause schedule slippage due to the inability to support the test program and could lead to a problem in meeting our FSAR commitment to five operating shifts. Five operating shifts is not an NRC requirement per se. However, it is very difficult to meet the NRC requirements for any significant time period with much less than five shifts. While the impact on WNP-2 is highly uncertain, a schedule slippage on the order of a few months should be anticipated as a result of a WNP-3 deferral.

c. WNP-3. Staffing profiles for the various alternatives under consideration were developed. The primary impacts beyond those implicit in the deferral dates are associated with the loss and reacquisition of personnel in all of the organizations required for operation. The resulting loss of continuity leads to additional effort required to retrain and reestablish momentum during the build up period. The impact on the operation staff under alternative 2a can be substantially reduced by assigning operations the equipment maintenance function during the shutdown. Under all other alternatives, most of the Operations staff is lost. However, assignment of the maintenance function to the Operation staff will minimize the cash flow requirements in this area under all alternatives based on WNP-1 experience.

#### D. Engineering and Technical Concerns

##### 1. Geology

Of the known factors which generally affect schedule and completion, none are specifically unique to the project except the geology, as related to the magnitude of the Design Basis Earthquake (DBE). Partly as a result of the 1980 eruption of Mount St. Helens, there is current scientific interest in the potential for an earthquake or volcanic activity in Western Washington related to subduction of the Juan de Fuca plate. The potential development and acceptance of this theory at a later time will have a certain impact on the present design. However, it is not certain such risk is singularly understood.

##### 2. Engineering Design

Changes in engineering design occur at any time and may be either favorable or unfavorable related to completing the project. Changes may also involve refined analytical methods. When such methods are introduced, significant design changes may be necessary. While it is practically certain that engineering design practice will change in some way during a potential delay of the project, it is not certain the effect will be unfavorable or any significant threat to completion.

##### 3. Equipment Obsolescence

Equipment obsolescence occurs as equipment once in use is no longer manufactured. As this occurs the equipment may become difficult to operate, test or maintain. At the worst, a major item may be replaced. In a protracted delay, physical deterioration may also be of concern for some components. However, the equipment problems are not unique to delay and is a routine concern in stored and operating conditions; it is not considered a significant risk to completion of a delayed plant.

#### E. SYSTEM ECONOMICS

##### 1. Overview

Decisions on the construction schedule and funding of WNP-3 will have long-lasting and potentially large effects on the system costs of meeting the need for power. A change in construction schedule and/or funding arrangements can increase system costs by subjecting construction costs to real escalation, by the possibility of increasing interest rates on borrowed funds, by adding



**Washington Public Power Supply System**


Box 1223 Elma, Washington 98541 (206) 482-4428

July 13, 1983  
G03-83-546U. S. Nuclear Regulatory Commission, Region V  
Office of Inspection and Enforcement  
1450 Maria Lane, Suite 260  
Walnut Creek, California 94596-5368Attention: Mr. D. M. Sternberg, Chief  
Reactor Projects Branch No. 1Subject: NUCLEAR PROJECT NOS. 3 AND 5  
WNP-3 EXTENDED CONSTRUCTION DELAY

On July 8, 1983 the Supply System Executive Board voted to implement an immediate extended construction delay of Project 3. Their decision was reached after it appeared no prudent financing could be arranged to continue plant construction. This action will result in a reduction in force at the site from 1,750 employees to approximately 350 by July, 1984. Our initial planning is based on a three year construction delay, however, we have been directed to not take actions which would preclude a project restart within the next three to nine months.

Detailed planning is underway to cover the project turndown, delay and restart, with primary focus on preservation of assets and control of quality records. To assure extended construction delay activities are accomplished in accordance with NRC requirements and Licensee commitments, the Supply System is developing an implementation plan. The plan will provide for a review of pertinent quality-related work and inspection records to determine if the associated quality records are in conformance with established procedures and reflect work accomplishment. This plan will be finalized for Supply System approval about August 1, 1983.

We will keep you informed as our planning progresses and would be pleased to review the plan with you in Walnut Creek. Should you have any questions or desire further information, please contact me directly.

  
D. E. Dobson (760)  
Acting Program Director, WNP-3/5

OET:DRC:nj

cc: J. Adams - NESCO  
D. Smithpeter - BPA  
Ebasco - New York  
WNP-3 Files - Richland  
R. D. Hill - Puget Sound Power & Light Company  
P. Inman - Washington Water Power Company  
B. D. Withers - Portland General Electric Company  
L. D. Weislogel - Pacific Power & Light Company

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# Analysis of Resource Alternatives: Summary and Conclusions

Bonneville Power Administration  
U.S. Department of Energy



BPA

May 26, 1983



## INTRODUCTION

On May 10, 1983, the Bonneville Power Administration (BPA) asked the Washington Public Power Supply System (Supply System) to assist BPA in evaluating a number of issues associated with continued financing of Supply System Projects WNP-2 and WNP-3 on current construction schedules. The evaluation has taken the form of a series of analyses contained in the document entitled "Analysis of Resource Alternatives," dated May 26, 1983.

Our letter to the Supply System focused on four broad areas of inquiry: (1) an evaluation of the prospects of overcoming existing impediments to conventional municipal bond financing of the projects; (2) the effect of the Supply System's inability to meet its WNP-4 and -5 obligations on continued construction of the net-billed projects; (3) an analysis of the resource economics associated with alternative courses of action relative to WNP-3; and (4) an evaluation of alternative actions related to WNP-3 and their effect on the Supply System and the region's economy and its institutions.

The Analysis of Resource Alternatives document provides a detailed review of the various issues structured within these four broad categories. This paper summarizes these analyses and contains BPA's conclusions.

Of the five nuclear power projects under construction by the Supply System, WNP-1, -2, and 70 percent of -3 are backed by BPA under long-term contracts called "net-billing agreements" signed a decade ago. The other nuclear projects, WNP-4 and -5, were not backed by BPA. The latter projects are terminated, and the Supply System faces a number of serious legal challenges arising out of this circumstance. These legal challenges now also pose serious problems for ongoing conventional financing of the three remaining projects backed by BPA. WNP-1, near Richland, Washington, is 60 percent complete. It was placed in a preservation state last year by the Supply System for fiscal and other reasons. WNP-2, also near Richland, is 98 percent complete and is scheduled to begin producing power for the Northwest early next year. WNP-3, the central focus of the analysis, was 74 percent complete on April 30, 1983.

The Supply System's ability to ensure continued conventional financing of the remaining three projects faces serious impediments resulting from the legal controversies surrounding terminated projects 4 and 5. The analysis addresses the complex difficulties and their cumulative effect on continuation of the net-billed projects.

As a result of its analysis, BPA is advising the Supply System that financing for completion of construction of WNP-3 at this time is neither available nor prudent through conventional means, from outside sources, or through BPA rates. The analysis further shows that the utilities within the region have access to an adequate power supply so that a 3-year delay in construction of WNP-3 will not seriously jeopardize the availability of an adequate economical power supply for the benefit of the region's ratepayers.

Funds on hand, together with resources from BPA and others, are currently adequate to cover those costs associated with an orderly transition of WNP-3 to a preservation state. For these reasons, BPA believes that the prudent course of action by the Supply System is to delay ongoing construction of WNP-3 and to effect transition of that project to a preservation state as soon as possible.

## SUMMARY

### I. Prospects for Financing

In January, BPA and the Supply System were advised by their financial advisors that three circumstances barred conventional financing. Of those three, only the potential application of Initiative 394 to the net-billed projects has been put to rest. The other two--the need for legislation insuring project integrity in the event of a Supply System bankruptcy and the challenge to the validity of the net-billed contracts--remain. The underwriters, a group headed by four of the largest investment banking firms in the nation, have advised that they cannot undertake to market bonds until these two remaining bars are removed.

Bankruptcy legislation has been considered by the Washington State Legislature and has been discussed by key members of Congress. The Washington Legislature is not expected to enact such legislation in its current session. The likelihood of Federal congressional action cannot be estimated with confidence.

While a favorable opinion has been rendered by the U.S. District Court on the question of net-billed contract validity, an appeal is expected before July 15, 1983. A final resolution of this issue through judicial, legislative, or contractual means is required to issue bonds and such solution is not imminent.

Even if these impediments should be removed, recently lowered bond ratings, complex litigation, and the prospect of a default under the WNP-4 and -5 bond resolution and other considerations would make financing expensive and questionable. Should a default occur, the underwriters are unable to estimate the interest penalty that may have to be paid. This penalty would burden BPA ratepayers and could threaten project economics.

In looking to other means of acquiring construction funds for WNP-3 in particular, BPA and the Supply System have investigated financing through banks and the other project owners. Other financial institutions, to date, have been concerned with the same impediments which block conventional bond financing. The investigations with other owners have not ripened to the point where BPA or the utilities can be assured of the legality or success of such ventures. While efforts will continue along these lines, no reasonable likelihood of success is evident in the near term. Therefore, the only assured source of construction funds we can count on would be funding construction from BPA rates.

### II. BPA Rates

BPA rates have risen rapidly in recent years and substantial additional upward pressure at this time could have serious adverse consequences.

Since December 1979, BPA rates for preference customers have risen from 3.5 mills/kWh to 18.0 mills/kWh (22.8 currently proposed for the next rate period, November 1983 to July 1985). In the same period, rates for industrial customers have risen from 2.0 mills/kWh to 24.5 mills/kWh (25.7 is currently proposed for the next rate period). BPA rates are now at the point where price elasticity of demand is beginning to occur, as well as customer and consumer resistance to further increases.

It is particularly inopportune to increase upward pressure on rates at this time since such an event could undermine the beginnings of the recovery of the region's industry and commerce from a long and deep recession.

Within the context of BPA's current rate proposal, it is possible to finance WNP-2 out of revenues and have sufficient funds to maintain WNP-3 in a preservation state provided action on WNP-3 is begun by June 1, 1983. Conversely, financing any Supply System project from revenues rather than through borrowing will increase the immediate impact upon BPA's financial situation if there is any deviation in project costs because the total amounts (rather than debt service only) will impact BPA in the near term. This, combined with BPA's high ratio of fixed-to-variable costs, would result in a significant increase in BPA financial risk.

Financing full construction for both WNP-2 and -3 from revenues would result in major additional upward pressure on rates, on the order of a 20 percent additional increase in the priority firm rate, and would greatly increase BPA financial risk. The alternative is, therefore, imprudent.

### III. Evaluation of Resource Economics Including Alternatives

Resource economic analyses have been performed to examine the economic impacts of a variety of alternative actions, including extension of the construction schedule of WNP-3 and different financing arrangements. In each case, these analyses have examined not only the capital and operating costs of WNP-3 and the potential changes that might occur, but also the operation of the entire regional power system including surplus power marketing, resource displacement, the probability of curtailment in any given year, and other such operational issues. The System Analysis Model (SAM) developed and used by the Regional Council to develop its Plan was used for these analyses. SAM simulates the operation of the regional power system over a 20-year planning horizon. To provide a consistent basis for comparing alternatives, system costs were discounted back to present value. In addition, sensitivity analyses were performed on such variables as forecasted load growth and bond interest rate.

The analyses showed, on a net present value basis, that a construction extension of 3 years for WNP-3 would not significantly increase total present value of system costs. Delays beyond 5 years would increase costs. If resource economics were the only



consideration, a construction extension would not be appropriate because the present value of system costs for the current schedule, assuming prudent financing at relatively low interest rates, is approximately equivalent to system costs under a 3-year construction extension case.

The conclusions of the resource economic analysis were tested against various load growth cases utilizing a BPA high- and low-load forecast. These analyses showed that under a 3-year construction extension case, there is sufficient flexibility available to compensate for high load growth. However, lengthy delays substantially increase the potential costs that would be incurred if high load growth occurred. The flexibility to accommodate high load growth without extreme adverse consequences is provided in part by the investment now being made in developing conservation program delivery capability. The development of this capability is a premise both of BPA's conservation programs and the Regional Council's Final Plan.

The resource economic analyses have also been reviewed in light of load forecast information currently being developed at BPA but not yet finalized. BPA's most recent studies indicate some near-term changes in loads of DSI's, public agencies, Federal agencies, and system losses. Preliminary long-term load forecast revision efforts are also underway. On balance, these future forecast updates are expected to yield a forecast somewhat lower than those used in this analysis. This would reinforce the conclusion that the load/resource situation permits a construction extension of WNP-3.

The economic analysis assumed surplus marketing at prices somewhat above those attained to date but which are considered reasonable in view of current power sales negotiations. A principal impact of a 3-year delay in WNP-3 would be to reduce near-term surpluses and to move the project's availability into a time period more nearly matching regional needs. Surplus revenues would be foregone during the delay but comparable output would be available later.

For alternatives in which WNP-3 is delayed, socio-economic impacts occur in the near term. However, employment and income levels increase in later years as construction picks up.

All resource economic analyses are predicated upon completion and operation of WNP-2 on its current schedule. Maintaining WNP-2 on schedule, with timely completion and operation, is of overriding importance to BPA and the Supply System.

#### IV. BPA Financial Condition

Our mid-year review of BPA's financial circumstances has revealed a further reduction in this Agency's financial flexibility. BPA's net revenue shortfall in FY-83, which is currently estimated to preclude paying to the U.S. Treasury any of the previously planned amortization of the Federal System (\$7.5 million) and past years' deferral (\$152 million), will result in an additional deferral of interest due (\$22.4 million). Legislative directives require BPA to



set rates to recoup such deferrals along with all other BPA costs. Due to continued revenue shortfalls, BPA's accumulated net revenues have declined from \$379 million at the end of FY 1976 to a projected low of \$15 million at the end of FY 1983.

Furthermore, as a result of the increasing capital investment in the Federal System and the Supply System projects, BPA financial flexibility has become more restricted. Whereas BPA's fixed costs consumed 76 percent of revenues in FY 1981, these costs are expected to consume 87 percent of revenues in FY 1983.

Given these circumstances, BPA must husband its fiscal resources and critically review any increase in financial exposure. BPA's only choice is to reduce financial risk and not further encumber the revenue-generating capability of the Federal System in the current circumstances.

## CONCLUSIONS

These analyses lead to the finding that conventional financing cannot be achieved due to current impediments. Even if these impediments were overcome, it would be difficult to achieve prudent financing at reasonable interest rates given other current circumstances. Financing alternatives are currently either unavailable or not prudent. Therefore, BPA would approve an action by the Executive Board to effect, as soon as possible, transition of WNP-3 to a preservation state for 3 years, in order to ensure there are sufficient monies available for efficient and proper preservation.

BPA and the Supply System have an obligation to protect the region's investment in the net-billed projects which are all needed to meet expected future regional loads. The timely completion of WNP-3, its efficient and economic preservation, and its eventual restart are of overriding importance to BPA and the Supply System. EPA plans to finance WNP-2 to completion from revenues and is also financially prepared to protect the investment in WNP-3 and WNP-1 until construction can be restarted. This course should prove fiscally sound and prudent while assuring that these important resources can be constructed on a time table appropriate for anticipated future regional power needs.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

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Ms. Nina Bell  
Staff Intervenor  
COALITION FOR SAFE POWER  
410 Governor Building  
408 S.W. Second Avenue  
Portland, OR 97204

IN RESPONSE REFER  
TO FOIA-83-515

Dear Ms. Bell:

This is a partial response to your letter dated August 26, 1983 in which you requested, pursuant to the Freedom of Information Act, seven categories of documents regarding nuclear power plants on which construction has ceased but which continue to hold valid construction permits. We have interpreted Items 1, 2, and 3, as listed on your request, to mean a generic study and analysis of the issues, not plant specific.

In accordance with your telephone conversation with Mrs. Pappas, of my staff, on September 13, 1983, you agreed to an extension of time on your request.

We have identified the 31 documents listed on Appendix A, which are responsive to your request. These documents are already available for public inspection and copying at the NRC Public Document Room (PDR), 1717 H Street, NW, Washington, DC 20555. Also, the 6 documents listed on Appendix B are being placed in the PDR. You may obtain access to these records by presenting a copy of this letter to the PDR or requesting folder FOIA-83-515.

The charge for reproducing records located in the PDR is five cents (\$0.05) per page, as specified in 10 CFR 9.14(a). A copy of these documents can be purchased by writing directly to the PDR, or by calling (202) 634-3273. Upon your agreement to pay the reproduction charges, the PDR will arrange for the records to be reproduced by Literature Research Company, a private reproduction contractor servicing the PDR. You will be billed by Literature Research Company for the reproduction charges, plus tax and postage.