

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of)
CONSUMERS POWER COMPANY)
(Big Rock Point Nuclear Plant))

Docket Number 50-155
(Spent Fuel Pool Modification)

INTERVENOR JOHN O'NEILL II'S
BRIEF IN SUPPORT OF
MEMORANDUM AND ORDER ON NEPA REVIEW

JOHN O'NEILL II
INTERVENOR
REPRESENTING HIMSELF

DECEMBER 4, 1980 A.D.

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I. INTRODUCTION

"NEPA reviews should be governed by a rule of reason."
Staff brief, p.22

In this brief I shall show compelling reasons to uphold the Atomic Safety and Licensing Board's "Memorandum and Order on NEPA Review", reasons based both upon law and upon logic.

Consumers Power and NRC Staff would sweep under the rug the stubborn problems of NEPA issues, and employ curious, convoluted reasoning to exempt Big Rock from an Environmental Impact Statement. But I will show that the fuel pool expansion is intrinsically bound to continued plant operation and serves no other purpose than to extend the plant's life. The issue of continued plant operation will be shown to have first been introduced into this proceeding by the licensee. For several important reasons this proposal is indeed a major federal action.

I will further demonstrate that the scope of this proceeding compel a NEPA review, both in light of the Prairie Island finding and as a statutory requirement of NEPA. I will also show that this is

the only proceeding in which this necessary issue can be raised.

I will further prove that the NEPA review is not retroactive because of the peculiarities of this case, the mandate of the NEPA law, and because of the limits placed upon the ordered Environmental Impact Statement.

Finally, I will show that there is a strong factual basis for an Environmental Review because this small "grandfathered" plant is not needed, is unsafe, and that an Environmental Impact Statement would show the benefits of denying Big Rock a license amendment far outweigh the benefits and attendant risks of continued plant operation. These issues of fact are strong arguments in favor of an Environmental Impact Statement that have never been disputed.

The weight of law and precedent and the compelling force of common sense are squarely behind our call and the Board's call for an Environmental Impact Statement.

The Appeal Board is charged with reviewing the September 12, 1980 ruling of this Atomic Safety and Licensing Board:

"It is ordered that the staff prepare an Environmental Impact Statement pursuant to section 102(2)(C) of NEPA, covering the environmental impacts of an expanded spent fuel pool and the additional term of operation of the facility that such expansion would permit."

Memorandum and Order on NEPA Review,
p. 18-19, Sept. 12, 1980. (Hereafter
Board Order)

This decision was reached by the Board after all the parties, including John Leithauer, briefed this question posed by the Board in response to John O'Neill's Contention VIII:

Where the facility has never been subjected to National Environmental Policy Act of 1969 (NEPA) review because it was licensed before NEPA, does a license amendment which would permit the continued operation of the facility either require or permit considering a cost-benefit

analysis or the need for power in the license amendment proceeding, notwithstanding that the staff may issue a negative declaration? Order Following Special Pre-Hearing Conference, pp. 33,34.

This is the main problem facing the Appeal Board.

Further background of this case is well known and adequately briefed by other parties and will be dispensed with here.

II. QUESTIONS BEFORE THE APPEAL BOARD

1. Is the spent fuel expansion related to continued plant operation?
2. Is there a major federal action being considered here? Is such an action one that:
 - a. concerns the spent fuel proposal alone;
 - b. changes the nature of the pool;
 - c. is part of a major federal policy on spent fuel recycling;
 - d. or does the spent fuel pool expansion necessarily result in continued plant operation as part of the action considered?
3. What is the proper scope of the hearing?
 - a. Does the notice in the Federal Register of July 23, 1979 (44 Fed. Reg. 43126) define the scope?
 - b. Does Licencee's Amendment Application define scope?
 - c. How do the NRC regulations affect the scope of this proceeding?
 - d. How does the NEPA statute itself affect the scope here?
4. Does NEPA here require an Environmental Impact Statement as a matter of law?
5. Does the Licensing Board have the authority to here require an Environmental Impact Statement before a review has been presented or tested in an evidentiary hearing?
6. Is NEPA here applied retroactively?
7. What are the issues of fact concerning need for power, plant safety, the environmental consequences of Big Rock's operation, and alternatives, including that of doing nothing?

8. Should the Appeal Board find 102(2)(C) was erroneously applied, need it remand the issue of the applicability of 102(2)(E) of NEPA to the Licensing Board, or decide the issue itself, and, if so, how should it decide the issue?

III. ARGUMENT

I. The spent fuel pool expansion has been proposed for the sole purpose of extending the period of power generation at Big Rock.

This is a simple fact. There is no other purpose to the proposed amendment than to extend the plant's life. The power company has stated this fact unequivocally in Spent Fuel Rack Addition Description and Safety Analysis, April, 1979 (hereafter CPCo

SFR Safety) a document central to this license amendment proceeding.

From the introduction, p. 1-1:

Because of uncertainties in government policy on fuel reprocessing and in the availability of government storage facilities, Consumers Power Company (CPCo) plans to increase the storage capacity of the spent fuel pool at the Big Rock Point Plant to allow continued plant operation. The proposed method of accomplishing this increase is to add three high density spent fuel storage racks to those already existing in the spent fuel pool.

Indeed, no one has posed any other purpose for the expansion of the pool other than Ms. Moore's speculation that the pool expansion is to meet the need "to compensate for a regulatory change which suspended the possibility of the use of reprocessing as a means for spent fuel disposal", note 17, p. 16 Staff Brief, October 20, 1980. This reasoning begs the question while also ignoring the fact that the compensation sought as a result of the regulatory change would be the continued operation of Big Rock.

Unless you stand on your head or look sideways, the only purpose of the amendment proposed is to allow to continue for ten years the Big Rock Plant that would otherwise inexorably close in about 1981. This is a Fact.

Let us then forever lay to rest the fiction advanced by Consumers that the continued operation of Big Rock is unrelated to our examination of the spent fuel pool expansion requested, and Ms. Moore's assertion throughout Staff brief that the expansion "might indirectly affect the continued operation of a nuclear power plant." Staff Brief, p. 7 and Passim. Plant operation and the spent fuel pool expansion are causality linked and inseperable.

I shall return to these issues several times, as a question of law while examining the proper scope of the hearing, as a partial basis for the applicability of NEPA, and in examining the forced seperation of these twin issues which is the pivotal point of many of the arguements put forth by counsel for Consumers and the NRC Legal Staff. But the factual and causal connection must not be forgotten if law is to be founded upon reality.

II. Before the Board is a proposed Major Federal Action.

A. The proposal to expand the spent fuel pool is in itself, a request for a major federal action.

Even if for the purpose of argument, we regard the spent fuel pool expansion alone, a request for a major federal action is present. This is indicated by the magnitude of the conflict seen in this hearing, the presence of five intervenors and thier admitted contentions of substance, the presence at the Special Pre-Hearing Conference of 21

people concerned enough with the proposal to make limited appearance statements, and the fact that it has taken one and one-fourth years to only begin to grapple with the substantive issues raised here. The significant cost, estimated at over 2.5 million dollars but likely to exceed that amount, also argues that this is a major Federal Action.

A large portion of the spent fuel is now present and due layer to be stored is not standard fuel but experimental mixed oxide uranium/plutonium fuel that is being developed as a lightwater fuel as part of an anticipated breeder reactor program. This unusual fuel demands special attention: some of the fuel has lost its cladding integrity (called leakers); the uranium/plutonium mixture may be ununiform, for there are fuel rods with peculiar "hot spots"; and there is little practical experience in the extended (10-20 years here considered) compacted storage of this new and experimental fuel. A compaction of fuel in such a case unquestionably requires close attention from both the utility and the NRC and hence argues strongly that this is a major federal action.

Of course, the larger, denser pressure of high-level radioactive wastes increases the potential for accident. The pool is also located within the reactor's containment building and the pool and reactor events can compound the single danger from either failing alone.

Finally, in the words of Tamm, J, 602 F.2d at 419, "It is undisputed that questions involving storage and disposal of nuclear waste pose serious concerns for health and environment." Considered alone, then, the proposed spent fuel pool is a major federal action.

B. The proposed modification significantly alters the nature and utilization of the pool.

"The original plant design assumed a viable full reprocessing industry in the United States by the time

the plant commenced operations. Therefore, the original spent fuel pool was provided with racks to accommodate approximately 2 cores, the assumption being that the $\frac{1}{2}$ core discharged each year would be transferred to a reprocessing facility prior to the next year's refueling, and the pool would always have the capability to accept a full core offload."

CPCo's Spent Fuel Rack Addition, Description and Safety Analysis, p. 1-1. (Hereafter CPCo SFR Descript.)

The spent fuel pool, and its cooling pumps, monitors, and other attendant equipment were originally designed to hold only $\frac{1}{2}$ of the core during a brief one year cooling-off period, after which, the $\frac{1}{2}$ life decay would allow the cooler and less radioactive spent fuel to be shipped offsite. A full core could also be accepted during reactor maintenance or in the event of an emergency. The pool was ^{not} designed as nor evaluated in the original licensing review as a spent fuel storage tank as now envisioned, but rather as a cooling-off, temporary place for the one year storage of $\frac{1}{2}$ of the reactor core. This, I shall demonstrate, is a very different use and design criteria that that pressed for in the proposed license amendment.

"CPCo deems it necessary to increase the capacity of its spent fuel pool and requests the approval of the NRC to increase the capacity of its spent fuel pool (from 193 assemblies) to 441 elements. This increase allows the storage of normal spent fuel until 1990 while retaining the capability to offload a full core up to that time." Ibid.

This is to be accomplished "by installing additional racks with closer center-to-center spacing." CPCo Spent Fuel Rack Addition, Environmental Impact Evaluation, p 1-2, (Hereafter CPCo SFR EIP)

The license amendment would then allow the storage of Uranium and mixed-oxide, experimental uranium/plutonium fuel on closer spacing, for a period envisioned by the utility as 10 years, but (for the purpose of this hearing,) up to 20 years. The plant's license expires in 2000AD, and while waste storage in the pool past 2000 is a real possibility, this is being addressed in a generic rulemaking proceeding.

The amendment would increase the maximum amount of fuel that could be stored twice over the old maximum. Moreover, the original plan called for no more than 1/4 of the core, or 22 fuel assemblies would usually be stored, thus the expanded fuel pool when full would be expected to store up to 20 times that amount of fuel originally planned for, and this storage would be for at least 10 to 20 years, rather than an expected maximum of 12 months. The pool then becomes a small, high level waste dump.

This amendment profoundly changes the nature of storage, the amount to be stored, and the time of storage from the original pool design and the review criteria in the original license hearing. The Tamm ~~quote~~ has already established that such changes raise significant questions of health and environmental safety.

Thus the expanded pool, even considered alone, for the purpose of argument, because of the proposed change in its nature, is a major federal action, fulfilling the criteria cited by utility's council on page 11 of its NEPA brief, October 20, 1980: "A major amendatory was defined as 'a significant change in the nature, magnitude or extent of the action from that which was originally evaluated and which may have a significant effect upon the quality of the human environment... Sworob v. Harris quoted at 451 F. Supp. 96 (E.D. Pa.1978) quoted in CPCo's Nepa Brief, p 11.

C. The spent fuel expansion proposal is part of a major new federal policy on spent fuel reprocessing.

It is no coincidence that spent fuel pool expansions have been proposed or approved for most U.S. reactors. This is due to the new federal policy, the Presidential Directive suspending fuel reprocessing. Coupled with the NRC policy on spent fuel pool expansion amendments, this

proposed action is part and parcel of a major Federal action, initiated by the Executive and the NRC.

D. The spent fuel pool expansion and attendant continued plant functioning constitute a major federal action.

This proposal must be considered in either one of two ways. Either the proposal contains in itself the proposal for continued operation, as suggested by Consumer's Spent Fuel Rack Addition Description and Safety Analysis, p 1-1, or the requested pool expansion naturally causes as a necessary effect the continued plant functioning, as found in the Dairyland case. LaCrosse Boiling Water Reactor, Docket Number 50-409, SFP License Amendment, Jan 10, 1960, Hereafter Dairyland. In the first case, an even more extensive federal action is here requested than discussed above in points A-C, because of the magnitude of the proposal itself.

In the second case, the proposal is also a major federal action because the significant and far reaching consequence of spent fuel pool expansion include necessarily continued plant operation. Proposed then, is a major federal action; there is no other way to consider the matter, without pretending that the nuclear generator does not exist!

III. The scope of this license amendment is necessarily broad enough to include an Environmental Impact Statement.

A. Notice in the Federal Register cannot define the scope of this proceeding.

The authority for deciding the scope of an NRC hearing flows from the facts of the case and is to be determined by the Licensing Board in the Pre-Hearing pleadings. There is no NRC regulation that so severely limits the Board by confining the scope to the Federal Register Notice. Such proscriptions on the board's power would deny due process

to participants.

Moreover, many of the contentions admitted by the Board in this proceeding exceed the narrow limits of the Federal Register Notice, including: Contention 8 of Christa-Maria et.al. and IIE-2 of O'Neill that pose a reactor accident preventing access to the spent fuel pool in containment and the pool controls; Contention 9 of Christa-Maria concerning emergency evacuation plans; IID of O'Neill concerning the possible crash of a B-52 Bomber breaching containment; the issue of bio-accumulation in Lake Michigan's food chain is admitted in O'Neill's contention IIF; and most to the point in this instant are Contention VII of O'Neill admitted, which states: "Because of the licensee's history of mismanaging the plant, especially the spent fuel pool, it has demonstrated an inability to properly manage an expanded spent fuel pool." Board Order Following Special Rre-Hearing Conference, p. 32 and Passim., and Contention VIII of O'Neill which states: "An environmental review of the proposed spent fuel pool expansion is necessary under Section 102 (2) (C) of NEPA and would indicate that the environmental costs of this expansion exceed the benefits." Board's Memorandum and Order on NEPA Review, p. 19. These contentions have not been appealed following their admittance by the Board. Clearly none of these contentions would have been admitted if the Federal Register Notice really did define the scope of the proceeding.

Scope is a matter of the facts at hand, and the Board's legitimate right is to examine these in light of NRC regulations and Federal statutes and to define the proceedings' scope on the merits of issues at hand.

B. The License Amendment Application does not define proper scope.

That the License Amendment Application does not define scope is fitting, for the Licensee is just one party pleading before the Licensing

Board, this fitting. Clearly, no adjudicative role has been delegated to it. Nonetheless, the utility in its initial set of documents raised the fact of continued plant operation as the purpose of the proposed expansion in the introduction to both the "Description and Safety Analysis", p. 1-1, and that of the "Environmental Impact Evaluation" p. 1-1, and it further first raised the issue of assessing the cost and benefits of continued plant operation resulting from the hoped-for expansion, and those of plant shutdown necessitated by a denial of the amendment.

C. The scope is properly mandated by pertinent statutes, examined by the Board in compliance with NRC regulations and policies.

Clearly, the NRC must in all its actions fully comply with the provisions of the federal NEPA law. The NRC regulations of necessity provide that an Environmental Impact Statement must be prepared for any "action which the Commission determines is a major Commission action significantly affecting the quality of the human environment". 10C.F.R. § 51.55(a)(10) The Board acted within its delegated authority from the Commission. It was further authorized by 10C.F.R. § 2.718(e) to take "any other action" consistent with the Atomic Energy Act and the NRC regulations. See 10C.F.R. § 2.721(d).

Moreover, none of the many NRC regulations cited by Consumers and staff deprive the Licensing Board of its authority to require NEPA compliance. Staff's Brief, p.11 states "The Commission's present regulations do not specifically mention a license amendment which would increase the spent fuel storage capacity at a facility", nor could these be expected to treat all the possible instances in which an

Environmental Impact Statement would be appropriate. The commission's regulations recognize that an Environmental Impact Statement is required whenever the statute's requirements are present, §51.5(a)(10) and that "many licensing and regulatory actions of the Commission other than those listed in paragraph (a) may or may not require preparation of an Environmental Impact Statement, depending upon the circumstances." §51.5(b). These regulations are in full force now. The federal regulations at 13751-52 even note that if the NEPA criteria is not met the Commission may require one by exercising its discretion.

NEPA of course is the governing force here; the Commission's rules only determine how the NRC will execute its mandatory compliance to NEPA. The NEPA act forbids the NRC from preventing the issuance of any Environmental Impact Statement in individual spent fuel expansion cases, except to the extent that these issues are treated in a generic proceeding. Minnesota v. Nuclear Regulatory Commission, 602F.2d412 (D.C. Cir. 1979).

The fact is that when NEPA applies, the NRC must comply and this responsibility has been delegated to the Licensing Board in this case. Assuming for the moment that NEPA does apply (which shall be proven momentarily) if this Board does not have the power to order an Environmental Impact Statement to be drawn up, then the Commission must in some other timely way comply with the act. The fact is, neither the Staff nor Counsel for Consumers has suggested that such another proceeding exists; indeed, they cannot so assert for there is no other appropriate proceeding, nor is there any proceeding at this threshold that would be able to examine the NEPA issue. Furthermore, the limited resources of myself and the huge legal debt of the other major intervenors, Christa Maria et. al., preclude our participating in yet

another NRC proceeding. Since as recognized intervenors raising issues of substance and specificity (and one of these issues is the present NEPA question), we are charged with responsibility in developing a full and complete record and can realistically and effectively participate in only this proceeding. This proceeding is the only appropriate setting for the NEPA and Environmental Impact Statement issue.

IV Where no Environmental Impact Statement has ever been prepared for the plant, a license amendment which is necessary to extend the operating term of that plant is required to be reviewed by an Environmental Impact Statement under the provisions of the National Environmental Protection Act of 1970.

A. Review is required by NEPA.

It has been conclusively demonstrated that the license amendment is a major Federal action. I have also proven that the purpose of the amendment is to continue plant operation. This, of course, has been stated by the power company, CPCo SFR Safety, p.1-1, and CPCo SFR EIP, p. 1-1. "We cannot overlook the sole purpose for and the practical effect of the Federal approval sought; expansion of the spent fuel pool to enable Licensee to operate beyond the year 1981, when it otherwise would have to cease operation unless it could find another means of storing spent fuel, to the year 1990." Board Order, p.8.

And yet, the major contentions of Staff and Consumers Power pivot on denying that such a causal relationship exists between the expanded spent fuel pool and continued operation. Their approach is simply not factual.

But Consumers Power and Staff assert that continued plant life is excluded because this was mentioned in neither the Federal Register Notice nor the Utility's Application. This has been adequately answered

earlier in this brief. More importantly, Consumers Power Attorneys insist on misreading the clear decision in Prairie Island and the similar decision in Trojan.

"Because the practical effect of not now increasing the capacity of the Prairie Island spent fuel pool would be that that facility would have to cease operation, the MPCA (intervenor) appears to believe that what is being licensed is in reality plant operation. Therefore, according to MPCA, the license amendment could not issue without a prior exploration of the environmental impact of continued operation and the consideration of the alternatives to that operation (e.g., energy conservation). We do not agree. The issuance of operating licenses for the two Prairie Island units was preceded by a full environmental review, including the consideration of alternatives. See LBP-74-17, 7 AEC 487 (1974), affirmed on all environmental questions, ALAB-244, 8 AEC 857 (1974). Nothing in NEPA or in those judicial decisions to which our attention has been directed dictates that the same ground be wholly replewed in connection with a proposed amendment to those 40-year operating licenses. Rather, it seems manifest to us that all that need be undertaken is a consideration of whether the amendment itself would bring about significant environmental consequences beyond those previously assessed and, if so, whether those consequences (to the extent unavoidable) would be sufficient on balance to require a denial of the amendment application. This is true irrespective of whether, by happenstance, the particular amendment is necessary in order to enable continued reactor operation. (although such a factor might be considered in balancing the environmental impact flowing from the amendment against the benefits to be derived from it.).

Northern State Power Company (Prairie Island Nuclear Generating Plant, Units 1 and 2) ALAB-455, 7 NRC 41.46 n.4 (1978), Hereafter Prairie Island.

Why does the Prairie Island board disagree with the assertion that the license amendment could not be issued without a prior environmental review of plant operation and alternatives? Because the original license was preceded by just such a full environmental review, including the consideration of alternatives! As was the case in Dairyland, the Big Rock case differs here in that there has never been such an environmental review or consideration of alternatives. "The Prairie Island holding is founded wholly upon the lack of any requirement in NEPA to re-examine matters which had been thoroughly considered in an earlier proceeding." Dairyland Board, p. 47.

Moreover, in this Big Rock case, as in Dairyland, important proceeding occurred before NEPA existed; in our case the review and issuance of a full operating license occurred. "That being so, the conditions required by Prairie Island for obviating the NEPA review of benefits or alternatives in a spent fuel pool expansion proceeding are not present in this case, and Prairie Island (or its progeny) do not deprive us (or this Licensing Board) of authority to consider need for power in this proceeding." Dairyland Board, p. 49.

In fact, in the Dairyland case, the applicant went to great lengths to show that certain contractual clauses between the Dairyland Co-operative and the Atomic Energy Commission that concerned plant quality and cost of energy served to fulfill the purpose of an Environmental Impact Statement in the case, and that these served then to obviate the NEPA review in the license amendment. Dairyland Board, pp. 47-48.

But in this case, neither Consumers nor the Staff have pointed to such a surrogate Environmental Impact Statement, claiming only that since Big Rock received a full operating license prior to NEPA, it should be treated as though it had received a NEPA OK! This is unfounded. We are asked to accept an imaginary Environmental Impact Statement, and the public's right to participate, and this Board or any regulatory body's right to review such a "statement" is completely precluded!

The determining factor in Prairie Island is that NEPA does not require a replowing of ground covered in an earlier Environmental Impact Statement. Here, there is absolutely no ground to replow:

"Rather, it seems manifest to us that all that need be undertaken is a consideration of whether the amendment itself would bring about significant environmental consequences beyond those previously assessed, and if so, whether those consequence (to the extent unavoidable) would be sufficient on balance to require a denial of the amendment application." Emphasis Added.
Prairie Island 47.

Prairie Island acknowledges that a spent fuel pool expansion brings

about significant environmental consequences, both those previously assessed and those not considered before. If this were not the case, there would be no reason for the decision to mention consequences, nor mention the fact that these effects had earlier been assessed. The Board then might merely have said "There are no previously assessed effects of significance to review."

Reasoning from Prairie Island, when an Environmental Impact Study has never been performed, a review is necessary to study the effects that Prairie Island acknowledges exist: continued reactor operation "might be considered in balancing the environmental impact flowing from the amendment against the benefits to be derived from it."
Ibid.

Contrary to Consumers assertion (p. 9), there is simply nothing in the decision which shows that a new Environmental Impact Statement was denied by the Board finding such a study outside the "proper scope of the proceeding."

An Environmental Impact Study is required here, "because no environmental review was made at the time of the granting license; there would be no duplication, and the federal action sought, for the sole purpose of permitting a fuller utilization of the license must be addressed." Board Order, p. 11.

The Environmental Impact Study is the primary tool instituted by Congress to "attain the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other undesirable and unintended consequences." 42U.S.C. §4331(b)

All federal agencies must "to the fullest extent possible" prepare an Environmental Impact Statement on all "major federal actions significantly affecting the quality of the human environment" 42U.S.C. §433

"The detailed statement required by §4332(2)(C) serves at least three purposes. First, it permits the court to ascertain whether the agency has made a good faith effort to take into account the values of NEPA seeks to safeguard. Second, it serves as an environmental full disclosure law. Finally, and perhaps most substantially, the requirement of a detailed statement helps insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug." *Silva V. Lynn*, 482 Fd. 1282, 1284-5, First Cir. 1973).

Staff and Consumers would have not only have this proceeding ignore the NEPA values, but also pretend that there is nothing here to which those values pertain. In the light of fact and law, this is untenable. They would have us stand on our heads while sweeping problems of the utmost importance under the rug - a very difficult task!

NEPA compels us to carefully assess these environmental and cost/benefit problems.

"Compliance to the 'fullest' extent possible would seem to demand that environmental issues be considered at every important stage in the decision making process concerning a particular action at every stage where an overall balancing of environmental and nonenvironmental factors is appropriate and where alterations might be made in the proposed action to minimize environmental costs. Of course, consideration which is entirely duplicative is not necessarily required."

Calvert Cliffs Coordination Committee v. U.S. Atomic Energy Commission, 449 F.2d at 1118, (D.C. Cir. 1971).

This belays the suggestion by Ms. Moore for the Staff that the three particular instances quoted are the ONLY cases in which NEPA applies to projects begun before NEPA, but are, rather, three cases that Calvert Cliffs found necessary to delineate for that particular case. Perhaps too, Calvert Cliffs did not see any opportunity for review being initiated in the case of a plant that had received full operating license before NEPA; but that opportunity is provided by this significant License amendment, and the insights of Prarie Island and Dairyland.

Nor can Big Rock be considered to have "passed muster," because, for the purpose of NEPA, there was absolutely no "muster" for the plant to have passed! This reasoning by Staff is very much like the imaginary Impact Statement posed by Consumers addressed above.

B. The Board has not raised the NEPA issue Sua Sponte.

The Licensing Board has not raised sua sponte the issues of cost/benefit analysis, the preparation of an Environmental Impact Statement, or the Applicability of NEPA. These questions were first raised by many of those residents making limited public appearances at the Special Pre-Hearing Conference, December 5, 1979. The issue was specifically raised as one of cost/benefit by Dr. Gerald Drake, M.D., who noted that Big Rock represented only 1% of the company's generating capacity, which includes a reserve margin of about 37%. Dr. Drake also quoted the relative costs of nuclear, coal and oil power generation, including in the cost of nuclear, decommissioning costs, which showed Big Rock's power is relatively expensive. I refer the Appeal Board to Dr. Drake's comments, contained in a letter submitted to the Licensing Board at the Special Pre-Hearing Conference.

Furthermore, O'Neill's Contention VIII and a contention raised by John Leithauser specifically questioned the need for power here. Contention VIII has been admitted and is quoted above.

C. The Environmental Impact Statement must be prepared to afford intervenors equal protection under the law.

All of the intervenors contend that the spent fuel pool expansion is unwarranted and that the alternative of doing nothing, which necessarily forces prompt plant shutdown, is preferable.

Certainly the Board has the power to deny the license amendment.

As a matter of due process, the consequences of the do-nothing alternative must be explored if the Board is to responsibly decide the issues before it. Specifically, so as not to prejudice the Board's deliberations against the intervenor's cases, reasonable information must be supplied about the relief sought by intervenors. This is necessary to insure equal protection under the law.

It would be difficult for the Board to rule in favor of the intervenors if the consequences of the ruling were an unknown, and an unfair bias against the intervenors case for denial of the amendment would exist.

Fortunately, there is no reason why such consequences cannot be examined, as an Environmental Impact Statement is here mandated by NEPA. An environmental Impact Statement must then be prepared to insure equal protection under the law and due process.

V The Board acted properly and was not bound to examine any Staff performance or to wait for evidentiary hearings.

Staff here tries to deny that the Board has acted primarily on principles of law, and the only issue of fact has been the simple causal relationship between the licensee's desire to continue plant operation and the tendered spent fuel pool increase amendment. The issue can readily be determined by the Board without evidentiary hearing as a matter of law by its reliance upon Trojan, Prairie Island and Dairyland. The Board was statutorily required by NEPA to make the decision that it came to; no evidentiary review was needed at that juncture.

Consider for the sake of argument the possibility of Staff review. Both Consumers and Staff have insisted that the Board should have waited to conduct an evidentiary review, but neither has ever indicated that the Staff's review would consider need-for-power or overall plant environmental impact. The fact remains that they cannot so assert because

the Staff is bound and determined to ignore these issues. The Staff has by this refusal, abrogated any responsibility to review, and the Board is not required to wait for that which is not forthcoming.

Moreover, Staff has itself violated the principle it would establish by not recommending to the Appeal Board to wait for a Staff review and evidentiary hearing before it rules on the applicability of Section 102 (2) (E), NEPA. Rather, Staff and Consumers recommend that the Appeal Board rule immediately.

Furthermore, Ms. Moore has indicated to me that the SER and EIA will again be delayed until late January of 1981, nearly one year after the documents were due to be issued. Confer Board Order Following Special Pre-Hearing Conference, p. 34. Mr. Steptoe, one of the Utility's attorneys, has informed me that the company's main objection to an Environmental Impact Statement preparation is the the year that it would delay the proceeding. Odd then, that the Power Company would find objectionable the Board's valid attempt to speed along the proceeding. The Board has no obligation to wait for so tardy a staff.

The dominant fact remains that the Environmental Impact Statement is required by NEPA as a matter of law. Dairyland dismissed an argument that the need for power issue was beyond the Board's discretion because the issue was raised very late in the proceeding. Dairyland, p 42. Here, another timing argument fails because as in Dairyland, this is a matter of law.

The question is a matter of law, there shall be no factual assessment introduced by the Staff, and the matter of timing is irrelevant in the face of a NEPA requirement. Staff and Consumers will have full opportunity to address the factual matters involved in the hearing proceedings; this is all they have a right to.

VI The Environmental Impact Statement was properly ordered and is not a retroactive application of NEPA.

A. The proposal being reviewed is Consumers Power Company's present license amendment and the environmental effects thereof.

Neither plant licensing nor the normal operation of the plant is being subjected to NEPA here. "Rather, we view the proposal that the NRC grant a license amendment to permit expansion of the spent fuel pool as requiring a new Federal action for the sole purpose of enabling Licensee to make a fuller utilization of its operating license than it could otherwise." Board Order, pp. 6-8

Only the license amendment at bar now in 1980, and the effects of continued plant operation which necessarily attend the expansion and which I have treated at length, are being scrutinized under NEPA. This is not a retroactive application of the statute.

B. The Board took pains to insure that only the continued plant operation directly caused by the expansion would be reviewed; NEPA is not retroactively applied.

The Board excluded from the ordered review environmental costs of plant construction, the operation of the plant to the extent that it could continue without the spent fuel pool modification, and the impact of maintaining the site as a waste repository after the license expiration in 2000 AD. The Board ordered review encompassed the "realistic view of the incremental effect (that) must take into account the increase in the term of operation that would be afforded by the proposed amendment." Board Order, p 17. NEPA commands no less, and therefore, no retroactive application of the law exists.

C. The existing environment at the site contains an operating nuclear power plant that must close soon with out a spent fuel pool modification.

Staff contends on p. 20 of its brief that the baseline environment

includes an operating plant, and thus this should not be reviewed. May I remind the staff that a thoughtful examination of that plant reveals that it will cease to operate about 1981 if there is no pool modification. Obviously then, following Staff's reasoning, any NEPA review must consider the proposed alteration in the environment, specifically, the environment of the soon to close plant will be altered to introduce a plant that would continue to operate in the event of a pool modification. No improper application of NEPA is then proposed here.

VIII The Environmental Impact Statement will find significant issues of fact that weigh heavily in favor of an alternative to pool expansion, including the alternative of doing nothing.

"Dewitt said that . . . the potential costs of installing all NRC-required modifications (at Big Rock) could not be justified unless the safety benefits of each of the modifications is thoroughly evaluated, "continued operation of the plant may be rendered economically unfeasible.

Charlevoix Courier, Wed., March 5, 1980, Attached to my 1st NEPA Brief, March 10, 1980.

Russel B. Dewitt is Consumers Power Company's vice president of nuclear operations.

The power company has itself recognized that issues of fact surround the continued safe operation of the plant, and not seeing fit to wait for an opportunity to for a NEPA review, has of its own initiative requested a risk/benefit analysis of the plant modifications recommended by the Systematic Evaluation Program. But the Company cannot on the hand request a cost/benefit analysis when it is to its financial advantage, and then dispute the applicability of such a cost/benefit study in these proceedings. That does not make sense.

If the need for Big Rock's power were critical, or if the cost and risks of operating Big Rock negligible, the reasons for a cost/benefit analysis as part of an Environmental Impact Statement would be

less than compelling. But the following points argue strongly that there are substantial issues of fact that weigh against continued plant operation. Many of these issues were introduced in my brief of March 10, 1980, and have not been objected to or contested by the Utility or by the Staff.

- Consumers has revealed that the power demand growth in 1979 was lower than growth projections. The Governor of Michigan, William Milliken this week announced a state wide drop in energy demand. This can be expected to continue to drop, because of rising energy prices, increased desire to conserve, and changes to alternative sources of energy such as wood heat.

-Big Rock produces only 1 to 1.6% of Consumers' total output, yet the company has approximately a 37% generating capacity above peak demand. Last year the plant was on line 40% of the time, contributing only 0.64 to 0.4% of the total power.

-The energy produced by nuclear power is deceptive since vast quantities of coal generated electricity are used to enrich uranium.

-Part of the cost of operating the plant must be considered the purchase of power for the aging, unreliable plant's frequent power outages. This purchased power is more costly than a permanent alternative.

-The price of plant management and maintenance increases disproportionately with the increased age of the plant.

-Insurance costs have likely increased since Three Mile Island.

Big Rock's insurer is known to be concerned over the plant's lack of a dome that would contain gamma radiation from an accident.

-The soon to be incurred costs of maintaining the plant in a safe condition are astounding. As a result of Systematic Evaluation, Big Rock will require many updating modifications, the most notable being the 30 million dollar dome required. Consumers Power President John Selby "Told Big Rock employees Wednesday that NRC-directive may be too expensive

to warrant the continued operation of the 18-year-old plant," Petosky News Review, Thursday, February 28, 1980.

Health costs and risks to employees and the general public must be considered. This question cannot be construed to challenge NRC permitted levels of radiation in a cost/benefit question; if radiation is present in low amounts, then it is part of the plant's environmental effect.

-Big Rock has no steam suppression pool.

-The water level in the fuel pool cannot be monitored from the control room, but must be physically inspected from within the containment, or deduced from radioactivity levels in the air above the pool. Both of these methods are impossible in the event of an accident.

-The company has requested that its response to the proposed three-foot-thick concrete silo to protect against gamma ray radiation, due December 31, 1980, be delayed until April of 1981, leaving unresolved a serious safety question.

-Dr. Richard Webb, PhD, then a Big Rock employee, testified before the NRC in 1968 that the company was dredging the bottom of Lake Michigan near the plant and dumping the sludge on the beaches adjacent to the plant. This was done, he reported, because the lake bottom was contaminated from batches of radioactive water that had been released from the plant. I believe that such direct releases continue, and their effect has never been reviewed.

These are a sample of plant problems, found in the thick "Reportable Occurance" file. These are also known as "Event Reports:"

-During an emergency, a small pipe break will cause no high pressure alarm because of containment purging. The condensate moisture monitors on the inside of containment to compensate for this problem may be inadequate. Report date, October 31, 1978.

-The control rod drive coupling integrity may not be valid. Report # 7842.

- the control rods have repeatedly stuck in the inserted position.
- In seven out of 32 tests, the control rod drive accumulator switches failed. This is significant because this was never addressed in the plant specifications or the Final Hazard Summary Review.
- During 1980 there are 13 license Event Reports on the Reactor Depressurization's 13 failures. Such failures prevent the core spray system, installed in 1977, from functioning.
- The reactor mode switch was not in the shutdown position, and an operator corrected this. November, 1978.
- Twenty five gallons of water were dumped on the containment floor before being noticed. August 21, 1978.
- The LREO9 and LSREO9 reactor level instrument system may not function due to flashing that could occur in reference line during rapid depressurization of the primary system. This is a generic shortcoming. August 22, 1979.
- The core was nearly uncovered in one instance as a result of the above fault
- Valve numbers 4097 and 4096 have failed continuously. The 24 inch containment valves continue to fail, despite their replacement every three years or so.
- On June 25, 1968, two employees were repairing the heat exchanger and while removing the reactor vessel head, received overdoses of radiation: one man received 157 milirems, the other 147 milirems.
- As a result of vibration noises, the reactor was inspected, and during a lengthy shutdown, very worn nuts and bolts were found in the control rod drive housing and in the reactor. These broken, loose fragments were removed, but we cannot be sure that all the fragments have been removed, nor was damage that they may have caused while knocking around inside the reactor assessed. April 20, 1979.

These are just sample of the alarming reports on small accidents and deficiencies at Big Rock. These offer strong, compelling reasons to review plant safety.

Alternatives to the small amount of nuclear-generated power are plentiful. These alternatives are part of my contesting the allocation of resources in this case.

-Conservation is an untried, promising method.

-Consumers' present advertising campaign emphasis the low cost of electricity, and thus can be expected to boost energy demand. The emphasis should rather encourage conservation.

-through the economic use of conventional or alternative fuels, through the purchase of power, or by converting Big Rock's boilers to the use of other fuels, the small amount of power could be replaced.

-Energy could be generated in new ways, such as through wind power at the breezy Big Rock Site.

-The utility has no policy to discourage the instillation of wasteful electrical resistance heating. Through the encouragement of heat pumps or other efficient systems, Big Rock's power could be conserved.

-There is no reason why the utility could not encourage the instillation of homes and businesses of its customers of alternative sources of energy such as solar, wind or wood heat. Nationwide, the burning of wood uses more energy than does nuclear power!

The assertion by Staff that there is no unresolved conflict of alternative uses of resources, Staff brief, p. 30, is just not true when the true scope of resources is properly considered.

The issues of fact here argue strongly not only the need for an Environmental Impact Statement, but strongly indicate

that a cost/benefit would prompt the Board to deny the license amendment, thereby choosing the attractive alternative of doing nothing. I refer the Appeal Board to the attachment to my Brief of March 10, 1980, which detailed Consumers' requested risk assessment, including their admission that the plant may have to close as a result of such a study. I cannot emphasize too strongly the paradox of the utility requesting of its own volition, without any statutory prompting, a risk/benefit analysis, and on the other hand strongly opposing a similar cost/benefit study as part of an Environmental Impact Statement that is clearly required by the NEPA law. I should think that Consumers should welcome such review, for the reasons above, and also to reassure a now doubtful public that its controversial Big Rock Plant is safe.

VIII Should the Appeal Board find §102 (3)(C) of NEPA was erroneously applied, the question of the applicability of §102 (2) (E) of NEPA should be remanded to the licensing Board for determination. Failing that, this section should be ~~found~~ to apply in this instant.

The Licensing Board clearly has the first responsibility to assess the applicability of §102(2)(E). Dairyland, Passim. Any initial determination on this should be remanded to the Licensing Board.

Also, public input may be desirable for the question, and this Board is presiding over an already-convened public series of hearings. Keeping the issues in one forum conserves our resources and easily preserves the public's ability to contribute. More importantly, the matter can quickly be disposed of by that board if public hearing are not warranted, because the question has already been thoroughly briefed before the Licensing Board. It is ready to decide the issue without further delay.

Allowing the Licensing Board to rule preserves all parties' right to appeal within the NRC. Such an appeal would delay the hearing only about two months, where a court appeal would be prolonged.

Should the Appeal Board choose to decide the issue, it should find §102 (2)(E) applicable in this instant. My arguments are the same tendered by James Olson, Esq in my original NEPA brief of March 10, 1980, and the arguments of Christa-Maria et al in their NEPA brief of the same date. The examination of alternatives in this instant clearly applies, and an examination of alternatives must be ordered. Again, as argued above, the need for equal protection under the laws also applies.

IX Conclusions

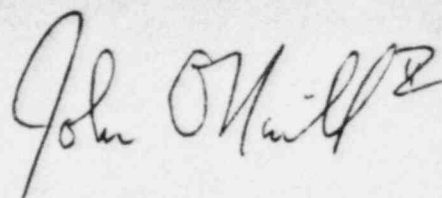
Present here is a major Federal action to amend the operating license of a nuclear plant that has never passed the "muster" of NEPA. Following the principals delineated in Calvert Cliffs, Prairie Island,

Dairyland & the Board Order of September 12, 1980, the spent fuel pool expansion and continued plant operation are absolutely linked, and thus the NEPA review, here mandated by law, must encompass the environmental impact of the entire action. There are compelling issues of fact that will cause an Environmental Impact Statement to examine issues of substance. As a matter of law, and prudence in the face of compelling facts, I move that the Appeal Board affirm the decision of the Licensing Board to order a full Environmental Impact Statment to be prepared for the Big Rock spent fuel pool expansion.

Section 102 (2)(E) should be remanded to the Licensing Board; failing that, the Appeal Board should find this section to apply and order a review of alternatives to the pool modification.

I thank the Appeal Board for its close attention to this matter I pray that they wisely and prudently rule on this issue which is of vital importance to those of us who spend our days in the shadow of Big Rock. Thank you.

Respectfully Submitted,

A handwritten signature in cursive script that reads "John O'Neill II". The signature is written in dark ink and is positioned above the typed name.

John O'Neill II
Intervenor.

December 4, 1980

Note. This brief was prepared by myself with the research assistance of Herbert Semmel, Esquire, of the Antioch School of Law, Washington, D.C., and his students Bonnie Reiss and Mimi Gerdes, and with the advice of a personal friend, James Olson, Esquire, of Traverse City, Michigan.

I hereby certify that copies of this brief were served to all parties.