

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
CONSUMERS POWER COMPANY)	Docket Nos. 50-329
(Midland Plant, Units 1 and 2))	50-330

BRIEF OF THE NUCLEAR
REGULATORY COMMISSION STAFF

I. INTRODUCTION

The background and procedural posture of this proceeding were described in the "Nuclear Regulatory Commission Staff's Proposed Findings of Fact and Conclusions of Law" filed contemporaneously with this brief. That material will not be repeated here. This brief of the Nuclear Regulatory Commission Staff responds to the Board's request at Tr. 6162 that the parties brief the legal issue before the Board in this suspension proceeding.

II. STATEMENT OF THE ISSUE

The issue before this Board is whether to continue, modify, or suspend the construction permits for the Midland Plant pending a full hearing on the issues remanded to the Nuclear Regulatory Commission by the Aeschliman decision.

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III. ARGUMENT

A. Consumers Has the Burden of Proof

With regard to the issues before this Board and the legal standards against which those issues are to be judged, it is Consumers who bears the burden of proving that the present construction permits should not be suspended or modified.^{1/}

B. The Board Has the Jurisdiction to Permit Full Inquiry

Beyond a consideration of issues relevant to a determination on the suspension question, this Board's jurisdiction is limited. The Commission has reconvened this Board with explicit instructions to deal only with the Aeschliman decision. To the extent substantive safety and/or environmental questions outside the remand are brought to the attention of this Board, it is not empowered to deal with them. The jurisdiction of this Board then must be distinguished from the broad and plenary jurisdiction of Atomic Safety and Licensing Boards convened for the purpose of determining whether or not construction permits and operating licenses should issue. For issues beyond the scope of the Aeschliman decision, the proper course for a party wishing to raise

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Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-349, NRCI-76/9, 235, 246-247; Union Electric Company (Callaway Plant, Units 1 and 2), ALAB-346, NRCI-76/9, 214, 215 (1976); Toledo Edison Company (Davis-Besse Nuclear Power Station), Commission Memorandum and Order, 4 AEC 801, 802 (1972).

such an issue is a petition under 10 C.F.R. §2.206 to institute a proceeding under 10 C.F.R. §2.202 to modify, suspend, or revoke a license or for such other action as may be proper.

However, the Board's jurisdiction to inquire fully into the issues remanded by Aeschliman is clear, and is broader than suggested by Consumers in its brief.^{2/} In examining the suspension question, the Board's jurisdiction includes "equitable factors" and related issues. Financial qualifications, schedules and costs associated with the Midland Plant, and costs of alternative sources of generation are all issues related to the remand and associated suspension question, though not specifically remanded by Aeschliman.^{3/}

C. Recalculation of Costs and Benefits Not Required for the Suspension Proceeding

The remand issues are to be addressed in the context of the cost-benefit analysis required by the National Environmental Policy Act (NEPA). The instructions to the Commission in Aeschliman make this clear.

^{2/} "Brief of Consumers Power Company" dated June 13, 1977 (Consumers' Brief), p. 6.

^{3/} Consumers evidently accepts this proposition. See Licensee's "Proposed Findings of Fact and Conclusions of Law" filed June 13, 1977 (Consumers' Findings), pp. 48-49 (Financial Qualifications); p. 47 (Midland Plant Costs and Schedules); pp. 58-72 (Cost of Alternatives).

As this matter requires remand and reopening of the issues of energy conservation alternatives as well as recalculation of costs and benefits, we assume that the Commission will take into account the changed circumstances regarding Dow's need for process steam, and the intended continued operation of Dow's fossil-fuel generating facilities. [Emphasis supplied, Aeschliman, supra, p. 632]

The purpose of the suspension hearing is to determine whether or not Midland Plant construction should go forward in the interim. The suspension hearing predates the determination on remand as to whether the project continues to be cost-benefit justified. Thus the issue at the suspension proceeding is not the recalculation of costs and benefits but the determination of whether it is likely that the ultimate cost-benefit analysis would favor continuation of the project. If the object of the suspension proceeding were to re-examine and revalidate the original cost-benefit analysis performed for the Midland Plant, the suspension proceeding would, in effect, become the remand hearing. This is clearly not the case nor the contemplation. Thus, the revised cost-benefit analysis is not an issue presently before the Board.

D. Issues for Consideration at the Suspension Hearing

The Court of Appeals in Aeschliman has identified the issues before this Board. These issues are four in number:

1. Energy conservation as a partial or complete alternative to plant construction.
2. Clarification of a report by the Advisory Committee on Reactor Safeguards (ACRS),
3. Environmental costs associated with waste disposal and reprocessing in the fuel cycle, and
4. Changed circumstances with regard to Dow's need for process steam.

The Commission identified the legal standards to be applied to these issues in the suspension proceeding in its General Statement of Policy on Environmental Effects of the Uranium Fuel Cycle (41 Fed. Reg. 34707, August 16, 1976) (General Statement of Policy). The Commission discussed the question of suspension in light of the inadequate examination of the fuel cycle issue, and noted that "resolution of this question turns on equitable factors well established in prior practice and case law."^{4/} Such factors included: 1) the significance of any adverse environmental impact in the interim, 2) the need for the project, 3) the foreclosure of reasonable alternatives by interim construction, 4) the effects of delay, 5) the possibility that the cost-benefit balance would be tilted through increased investment in the interim, 6) general public policy concerns, 7) the extent of the NEPA violation and 8) the timeliness of the objections.

While the Commission's General Statement of Policy identified these equitable factors as bearing specifically on the question of whether a

^{4/} General Statement of Policy, p. 9.

suspension or modification of a construction permit was in order on fuel cycle grounds, the same factors are applicable to the question of suspension or modification of the construction permits on the other issues, namely, energy conservation, the ACRS letter and changed circumstances with regard to Dow's need for steam. The recent Commission decision in Seabrook^{5/} confirms this position. The suspension question presented in Seabrook was broader than the question of suspension on fuel cycle grounds alone. In that context, the Commission expressed the following view:

...the question of suspension of the permits herein must at the least be decided on the basis of (1) traditional balancing of the equities and (2) consideration of any likely prejudice to further decisions called for by the remand. Slip opinion, p. 29

The Commission expressed a particular concern over the possibility that the cost-benefit balance would be tilted through increased investment prior to a decision on the remand, while confirming that the equitable factors identified in the General Policy Statement were to be applied generally to suspension questions.^{6/}

^{5/} See Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-77-8, 5 NRC ____ (March 31, 1977).

^{6/} Id.

Weighing the equitable factors requires consideration of the issues remanded by Aeschliman by examining the equitable factors identified in the General Statement of Policy.

1. Significant Adverse Impacts

This Board must determine the significance of any adverse impacts associated with continuation of the project in an interim period until the remanded issues are finally decided. Central to this determination by the Board is the duration of the interim period. The original testimony filed in this proceeding in November of 1976 presumed that the remand question would be decided by September of 1977. Due to the length of the suspension proceeding, this is no longer realistic. A more realistic projection would call for a determination on the remanded issues by the end of 1977. While the direct testimony filed in this proceeding examined environmental impacts through September, 1977, the record supports the finding that the environmental impacts associated with continuation of the project through 1977 are minimal. Indeed, even if construction were to extend beyond 1977, due to the fact that the bulk of the environmental impacts associated with construction has already taken place, this Board's finding of no significant adverse environmental impact would likely remain unchanged.^{7/}

^{7/} See "Nuclear Regulatory Commission Staff's Proposed Findings of Fact and Conclusions of Law" filed on July 1, 1977 (Staff Findings), paras. 13 to 20.

2. Need for the Project

It is under this equitable factor that two of the Aeschliman issues are to be considered. The question before the Board is whether a need for the project has been established. This involves a determination by the Board not only as to a need for the electricity to be generated by the Midland Plant but also as to the need for the steam to be generated by the plant and supplied to Dow. The applicable issues remanded by Aeschliman and to be considered under this factor are: (1) whether or not energy conservation may obviate all or a part of the need for the electrical generation of the Midland Plant and therefore form a partial or complete alternative to continued plant construction and, (2) whether or not changed circumstances with regard to Dow's need for process steam may obviate the need for the portion of the Midland Plant designed to generate such process steam.

On both the need for electricity and the need for steam, the record supports an affirmative Board finding. On the issue of need for electricity, the record evidence is substantial. Extensive analysis by both Consumers and the Staff indicates a genuine need by Consumers for the Midland electrical capacity at the presently scheduled commercial operating dates of the units. In the case of the analysis of both Consumers and the Staff, energy conservation was explicitly identified

and considered and its effect on projected need for electricity was analyzed.^{8/}

On the issue of need for steam, it is well established in the record, that Dow needs a new steam source beginning in 1980 and no later than 1984 in quantities which justify the steam generating portion of the Midland Plant.^{9/} However, Dow has the capability of supplying its own steam and has traditionally provided its own steam. The crucial issue is whether Dow will purchase the steam from the Midland Plant. The testimony before the Board by two high Dow officials establishes Dow's intent to purchase steam from the Midland Plant.^{10/} Dow's corporate position is that it will take its process steam from the Midland Plant if presently projected costs and schedules are maintained. The issues of costs and schedules were fully explored at the hearing and the record evidence demonstrates that present costs and schedules for the Midland Plant are reasonable.^{11/} Based on Dow's commitment to take process steam from the Midland Plant if projected costs and schedules are maintained and since the projected costs and schedules for Midland have been established as

^{8/} See Staff Findings, paras. 21 to 47.

^{9/} See Staff Findings, paras. 48 to 79.

^{10/} Id.

^{11/} Id.

reasonable, it is apparent that Dow will purchase process steam from Consumers.

3. Foreclosure of Reasonable Alternatives by Continued Construction

The Board must determine whether construction in the interim will foreclose any alternatives associated with the Aeschliman issues before the Board. This factor has received some interpretation in an appeal board decision concerning Seabrook.^{12/} There the appeal board interpreted foreclosure of an alternative as meaning that an alternative would be made more difficult by continued plant construction rather than be absolutely precluded by it.^{13/} The question then before the Board is, with regard to each of the four issues remanded by Aeschliman, whether continued construction in the interim until a decision on the remand would make reasonable alternatives associated with those issues more difficult to implement. In the Staff's view the answer is clearly no.

With regard to conservation, the alternatives which would be foreclosed by continued construction would be either a smaller facility or complete elimination of the facility due to the effects of conservation. The record evidence, however, indicates that conservation would have neither effect. Rather, the record evidence indicates

^{12/} Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2) ALAB-349, NRCI-76/9 235, 258-59 (1976).

^{13/} Ibid., at fn. 49.

a need for the full electrical output of the Midland Plant and so the alternative of conservation cannot be judged reasonable and hence cannot be judged foreclosed by continued construction.^{14/} Even if the full output of the facility were not required, the prudent course would be continued construction of the Midland Plant as designed.^{15/}

With regard to the clarified ACRS letter, eleven items have been identified by the ACRS and each of these eleven items has been the subject of Staff testimony before this Board. With regard to these eleven items, it has been established that the items are either resolved for the Midland Plant, or, in those instances where resolution is pending, the item can reasonably be left for later consideration at the operating license stage. See 10 CFR §50.35(a). Alternative resolutions will not be foreclosed by continued construction.^{16/}

With regard to the fuel cycle issue, reasonable alternatives are not identifiable and so the question of their foreclosure by continued construction does not arise. The Commission expressed this view in its General Statement of Policy:

Since existing concepts for reprocessing and waste technology do not vary significantly with the design of nuclear power generating facilities, it is extremely unlikely that the revised environmental survey will result in any modification of these facilities. Only the possibility of discontinuing their construction or use is likely to be at issue.^{17/}

^{14/} See Staff Findings, paras. 21 to 47.

^{15/} Id.

^{16/} See Staff Findings, paras. 146 to 160.

^{17/} General Statement of Policy p. 5.

This view was born out on March 14, 1977 when the Commission issued an interim Rule containing values for the environmental impacts associated with the areas of waste disposal and reprocessing.^{18/} No plant design modifications were associated with the issuance of the interim rule. The question then associated with the Aeschliman fuel cycle issue is not foreclosure of alternatives, but tilting the cost-benefit balance.

Likewise, on the Aeschliman issue of changed circumstances with regard to Dow's need for process steam, no reasonable alternatives will be foreclosed by continued construction in view of Dow's commitment to take process steam from the Midland Plant. On the contrary, due to Dow's interest in availability of the Midland Plant on its currently projected schedule and at currently projected cost, a suspension with attendant cost increases and schedule delays could lead Dow to withdraw from the project to seek a more timely and economic steam source. So in this instance, a suspension of construction could in essence foreclose an alternative.

^{18/} See 42 Fed. Reg. 13803 (interim rule).

4. Effects of Delay

Under this factor, the Board must determine what the impacts would be of a decision to suspend construction of the Midland Plant. A sound record has been established on this factor to aid the Board in its determination. A need for the electrical and steam portions of the facility has been established. Suspension of the facility would imperil the supply of reliable electrical energy to Consumers' service area. In addition, substantial costs for replacement power have been proven.^{19/} Finally, a suspension of construction may induce Dow to seek other ways of securing process steam, thereby rejecting the Midland Plant.

5. Tilting the Cost-Benefit Balance Through Increased Investment

The issue before the Board with regard to this factor is the determination of whether continued construction of the Midland Plant during the interim prior to a decision on the remand would likely tilt the cost-benefit balance away from a preferred alternative.

Here the record is substantial that continued construction of the Midland Plant would not tilt the cost-benefit balance. Extensive analyses have been performed by both Consumers and the Staff to identify alternatives to the Midland Plant and to examine those alternatives to see what the effects of continued construction would be on the cost-benefit balance. These analyses conclude that the Midland Plant is favored economically.^{20/}

^{19/} See Staff Findings, paras. 134 to 145.

^{20/} See Staff Findings, paras. 87 to 133.

This is so even in the absence of the consideration of sunk costs. As the Commission has recently made clear, however, sunk costs where a need for power is demonstrated are appropriately considered in an examination of alternatives.^{21/}

In this case, the factors of which we are aware argue for the realistic approach, that comparison of alternatives on remand should consider the actual forward costs of completion of applicant's facility at the proposed sites and of the alternatives at the time of the comparison. (Slip op., p. 51).

Even the analyses performed by Intervenors demonstrates that, if sunk costs are considered, the cost-benefit balance will not be tilted in the interim.^{22/}

The only remaining question with regard to the cost-benefit balance is consideration of the Aeschliman fuel cycle issue. This issue was not explicitly considered by the Board at the suspension proceedings. On March 14, 1977, the Commission promulgated its interim rule containing values for environmental impacts in the areas of waste management and reprocessing. The Appeal Board has instructed this Board^{23/} to examine

^{21/} Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-77-8, 5 NRC ____ (March 31, 1977)(Slip. Op. at 47-53).

^{22/} See Staff Findings, paras. 124 to 131.

^{23/} Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-396, 5 NRC ____ (May 4, 1977).

the issue on remand when re-striking the cost-benefit balance in the context of the interim rule.^{24/}

The issuance of the interim rule should not affect this Board's determination. The Midland Plant retains a tremendous economic advantage in the cost-benefit balance even without consideration of sunk costs. It is doubtful whether the fuel cycle impacts could tilt such a skewed balance.

Nor is consideration of such impacts necessary for a determination on the suspension question. The Commission specifically withdrew the fuel cycle issue from this Board's jurisdiction in its Memorandum and Order of November 5, 1976.^{25/} Had the record in this proceeding closed prior to the issuance of the interim rule, a determination on the suspension question absent a consideration of the fuel cycle issue could have been made. And a determination permitting continued construction would have been possible given the advanced state of construction and economic advantage associated with the Midland Plant. The issuance of the interim rule does not affect this determination.

^{24/} It should be noted that while the Aeschliman fuel cycle issue embraces only those portions of Table S-3 which relate to the environmental costs of waste disposal and reprocessing, Table S-3 was not considered at all in the initial cost-benefit analysis performed for the Midland Plant. See "Final Environmental Statement related to Construction of Midland Plant Units 1 and 2." NUREG-0149 (Originally issued March 1972).

^{25/} Consumers Power Company (Midland Plant, Units 1 and 2), CLI-76-11, NRCI-76/11 474,475 (November 5, 1976).

It should be further noted that the Staff has made a full consideration of the impacts of the interim rule on the cost-benefit balance for the Midland facility and has found that impact to be minimal.^{26/}

In view of the minimal effect of the fuel cycle issue on the cost-benefit balance, and in view of the tremendous economic advantage even without consideration of sunk costs exhibited by the Midland Plant, this factor clearly does not weigh against continued construction.

6. General Public Policy Concerns

Under this factor, the Board must consider factors which could affect the public at large and the general welfare and for which record evidence exists which indicates that either suspension or continuation of the project would be preferred.^{27/} The record supports an affirmative finding on this factor. Impacts on ratepayers and shareholders of Consumers, the construction workforce, state and local governments and stated national energy policy have been proven.^{28/} This factor weighs in favor of continued construction.

7. Extent of the NEPA Violation

Under this factor, the Board must consider the magnitude of the NEPA violation. This factor has been examined in the context related to

^{26/} "Final Supplement to the Final Environmental Statement Related to Construction of Midland Plant Units 1 and 2" (June, 1977) NUREG-0275, pp. 3-1 to 3-4.

^{27/} Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-349, NRCI-76/9 235, 269 (1976).

^{28/} See Staff Findings, paras. 80 to 86.

only the fuel cycle issue of Aeschliman.^{29/} There, it was determined that the NEPA violation was "of some magnitude". In the case before this Board, in addition to the fuel cycle issue, we have the additional Aeschliman issues of energy conservation and changed circumstances with regard to Dow which add marginally to the extent of the NEPA violation. In summary, a NEPA violation of some magnitude is present and this factor weighs somewhat against continued construction of the Midland Plant.

8. Timeliness of the Objections

Under this factor, the Board must determine whether the NEPA objections were timely raised. If they were not, the Board could take this into consideration in reaching its determination as to whether or not construction should be suspended. In the present instance, however, these objections were timely raised at the construction permit stage and this factor must weigh against continued construction of the Midland Facility.

E. The ACRS Issue

Before arguing the factors discussed above, further consideration is required of the ACRS issue. This is due to the fact that the ACRS issue is not primarily a NEPA-related issue. Rather, the question which arises under this issue relates primarily to safety. If the clarified

^{29/} Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-349, NRCI-76/9, 235, 265 (1976).

ACRS letter of November 18, 1976 identified a substantive safety issue, this Board would be required to act regardless of the economic consequences and so the tests applied in the NEPA context would be inappropriate. See, Southern California Edison Company (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-212, 7 AEC 986, 997 (1974). The record on the eleven identified ACRS items is clear. There are no safety concerns. With regard to these eleven items, the items are either currently resolved, or resolution of the item can adequately be left for later determination.^{30/}

Beyond these safety concerns, however, the ACRS issue does impact upon the NEPA considerations before this Board on the remainder of the Aeschliman issues. This impact is two-fold. The first concerns the foreclosure of alternatives. This impact has already been discussed above. It was there seen that alternatives related to the ACRS items will not be foreclosed by continued construction.^{31/} The other impact is the impact on plant cost and schedule associated with these ACRS items. Cost and schedule have their greatest impact on the issue of Dow's need for steam. Cost escalation and schedule extension could affect Dow's commitment to the nuclear plant.^{32/} Record evidence was developed as to the impact on these ACRS items and other potential regulatory requirements on cost and schedule which demonstrated that present cost and schedule projections are reasonable.^{33/}

^{30/} See Staff Findings, paras. 146 to 160.

^{31/} See page 11 of the Staff's Brief.

^{32/} See Staff Findings, para. 61.


^{33/} See Staff Findings, paras. 63 to 79.

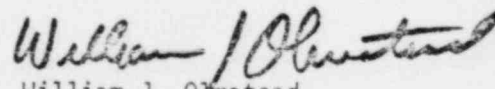
IV. CONCLUSION

Of the equitable factors identified by the Commission, two factors weigh against continued construction of the facility.^{34/} These are the extent of the NEPA violation and the timeliness of the objections. The remaining factors weigh for continued construction of the Midland Plant. In the balancing of these factors, the Staff feels that the equities clearly weigh in favor of continued construction.^{35/}

The construction permits for the Midland Plant should be left in effect pending a decision on the merits at the remand hearing.

Respectfully submitted,


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Dated at Bethesda, Maryland
this 1st day of July, 1977.

^{34/} The Statement in Consumer's Brief at p. 38 that all equitable factors weigh in favor of continued plant construction is patently wrong.

^{35/} Consumers argues at length in its brief that the concept of probability of success on the merits should be a controlling factor in the Board's decision. See Consumers' Brief, pp. 31-38. The Staff does not share that view. Indeed, the Commission stated that Virginia Petroleum Jobbers Association v. FPC, 259 F.2d 921, 925 (D.C. Cir., 1958), which contains the element of probability of success on the merits, does not apply on remand. See, Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), CLI-77-8, 5 NRC ____ (March 31, 1977) (Slip. op. ____, p. 29). The Staff does not argue that the Board must give due consideration to the weight of the evidence as it relates to the equitable factors before it for a decision. To the extent that the weight of the evidence on any one factor must lend support to a decision to either continue or suspend construction, it is clear that the concept of probability of success on the merits will be impliedly before the Board in its decision making process.