



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

JUN 25 1981

MEMORANDUM FOR: Chairman Hendrie
Commissioner Gilensky
Commissioner Bradford
Commissioner Ahearne

FROM: Howard K. Shapar
Executive Legal Director

SUBJECT: SECY-81-317 - SECY-81-317B - PROPOSED RULEMAKING TO
ELIMINATE NEED FOR POWER AND ALTERNATIVE ENERGY SOURCE
ISSUES IN OPERATING LICENSE PROCEEDINGS IN THE ABSENCE
OF SPECIAL CIRCUMSTANCES

On June 15, 1981 the General Counsel proposed and distributed for comment alternative language for the preamble of the proposed rule proffered by the staff in SECY-81-317. See SECY-81-317B. The General Counsel noted that this approach had been discussed with the staff but that formal staff concurrence had not been sought. While OELD finds portions of the OGC revision legally acceptable, for the reasons set forth below, we cannot agree with all of the proposed revisions.

(As this paper was being finalized, the staff received Commissioner Ahearne's comments on SECY-81-317 and 81-317B; these comments reflect some, but not all, of the OELD concerns. The staff has also received Commissioner Bradford's comments. After a preliminary review of these comments, I offer one observation. On page 6 of Commissioner Bradford's revision, it is recommended that language stating that the rules, if adopted, "will" apply to ongoing licensing proceedings be changed to "may apply to some or all" licensing proceedings. As a legal matter, regulations duly promulgated generally apply to pending licensing proceedings, absent a grandfathering provision in the regulation or prejudice to the parties; this result would obtain whether or not the explicit language proposed by the staff is contained in the Federal Register notice. The language proposed by Commissioner Bradford seems to present an ambiguity as to the criteria which will be used to determine the applicability of the rules to pending proceedings.)

- ° The OGC revision is confusing because it seems to convey the impression that economics is the controlling factor in NRC NEPA reviews. See, generally, pages 4a and 5 of the OGC revisions. This emphasis is not correct. The Appeal Board has ruled in ALAB-458 (Midland) and other cases that under NEPA, unless the nuclear plant has environmental disadvantages in comparison to possible alternatives, differences in

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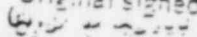
financial cost are of little concern. Although Midland was a proceeding to determine whether the construction permits of a licensee should be suspended, the NEPA principle which supports that holding of the Appeal Board is equally applicable to operating license proceedings.

- DELD disagrees with OGC's illustration on page 5 of their revision of the "special circumstances" warranting an exception to the rule pursuant to 10 CFR 2.758. On the one hand, the illustration is too narrow by limiting special circumstances to a showing of "unusually severe environmental impacts." The appropriate standard for an exception should be whether new information suggests unexpected and significant adverse environmental impacts from the operation of the nuclear plant not previously considered in the construction permit proceeding. On the other hand, the illustration is too broad. OGC states that a showing that "some other elements of the foregoing analysis are incorrect" would constitute special circumstances. The "foregoing analysis," of course, refers to the analysis in support of the proposed rule. This goes too far by apparently permitting challenges to the basis of the rule in every individual licensing proceeding, whether or not there exists new information which suggests unexpected and significant adverse environmental impacts not previously considered. The time to challenge the basis for a rule is at the time the rule is being promulgated, not in every individual case thereafter. This is implicit in § 2.758 itself. See § 2.758(a). In other words, this illustration of the application of the "special circumstances" waiver would in effect negate the objective of the proposed rule which is to eliminate unnecessary and duplicative consideration of need for power and alternative energy source issues at the operating license stage.
- The OGC revision makes no mention of the fact that Final Environmental Impact Statements issued in support of proposed licensing actions at the construction permit stage have invariably concluded that the environmental consequences of construction and operation of nuclear power plants are relatively small and that environmentally preferable alternatives are not available. Therefore, we disagree with the statements at the bottom of page 4a and the top of page 5 of the OGC revision that the environmental consequences of nuclear and alternative fossil power sources are less quantifiable and more controversial than the economic consequences and that numerous studies have attempted to compare the environmental consequences of nuclear vs. fossil power sources with inconclusive results. While the statements may be correct if only plant-specific impacts are examined (excluding the supporting fuel cycle), the CONAES report cited by OGC is clear that when entire fuel cycles are compared, coal is inferior to nuclear. Licensing reviews of nuclear power plants and the comparison of alternatives must obviously consider entire fuel cycles. In addition, the Inhaber report cited in the OGC revision is controversial from a technical point of view and should not be referenced in the rule. Rather, primary reliance for conclusions regarding the environmental impacts of nuclear plants

and reasonable alternatives thereto should be placed on the environmental impact statements prepared in conjunction with license applications. These statements have invariably concluded that the operation of nuclear plants are environmentally acceptable. It is this past experience which justifies, in part, the finding that the conclusions reached at the construction permit stage on need for power and alternative energy sources are unlikely to change at the operating license stage.

- The focus of this proposed rulemaking is limited to whether need for power and alternative energy source issues have to be considered again at the operating license stage. Accordingly, the environmental impacts of operation is the crucial issue (whether there has been any significant change in the environmental consequences of plant operation previously analyzed at the construction permit stage). The OGC revision uses expansive language which appears to go further than necessary. Language on page 5 of the revision speaks in terms of "the total environmental impacts from nuclear and fossil-fuel plants" and "the substantial economic advantages of nuclear." This language, if retained at all, should be modified to make clear that the discussion does not relate to construction-related matters but is limited to the environmental impacts and economics associated with the operation of nuclear power plants.

Attached are a revised Federal Register notice which incorporates revisions which accommodate these legal concerns, as well as a comparative text of these proposed revisions and the OGC language contained in SECY-81-3176.

Original signed

 by H. K. Shapar

Howard K. Shapar
 Executive Legal Director

Enclosures:

- A. Revised Federal Register notice
- B. Comparative text

cc: W. J. Dircks, EDC
 H. P. Denton, NRP
 G. W. Kerr, SP
 OGC
 OPE

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NUCLEAR REGULATORY COMMISSION

(10 CFR Part 51)

NEED FOR POWER AND ALTERNATIVE ENERGY ISSUES
IN OPERATING LICENSE PROCEEDINGS

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed Rule.

SUMMARY: The Nuclear Regulatory Commission (NRC), proposes to amend its regulations in 10 CFR Part 51, "Licensing and Regulatory Policy and Procedures for Environmental Protection," to provide that, for NEPA purposes, need for power and alternative energy source issues will not be considered in operating license proceedings for nuclear power plants and need not be addressed by operating license applicants in environmental reports submitted to the NRC at the operating license stage. The NRC proposes to take this action to avoid potentially duplicative and unnecessary litigation of issues previously resolved at the construction permit stage.

DATES: Comment period expires 60 days after publication in the Federal Register. Comments received after (insert 60 days after publication in the Federal Register) will be considered if it is practical to do so, but assurance of consideration cannot be given except as to comments received on or before this date.

ADDRESSES: Interested persons are invited to submit written comments and suggestions on the proposal and/or the supporting value/impact analysis to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch. Single copies of the value/impact analysis may be obtained on request from Darrel A. Nash, Office of State Programs, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 (Telephone: 301-492-9882). Copies of the value/impact analysis and of comments received by the Commission may be examined and copied for a fee in the Commission's Public Document Room at 1717 H Street, N.W., Washington, D.C.

FOR FURTHER INFORMATION CONTACT: Darrel A. Nash, Office of State Programs, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 (Telephone: 301-492-9882).

SUPPLEMENTARY INFORMATION: In accordance with the Commission's NEPA responsibilities, the need for the power to be generated by a proposed nuclear power plant and alternative energy sources for the generation of the power, including no additional generating capacity at all, are considered and resolved in the construction permit proceeding associated with the proposed facility. The construction permit proceeding is the appropriate forum in the Commission's two step licensing process for resolution of these issues. As the Commission's Appeal Board has recognized, "absent some 'need for power,' justification for building a facility is problematical" (emphasis

added).^{1/} Alternative energy source issues are also highly relevant at the construction permit stage. Prior to the start of construction there has been essentially no environmental disruption at the proposed site and only a relatively small capital investment has been made by the license applicant. Hence, as a practical matter, at the construction permit stage, real alternatives to the construction and operation of the proposed facility exist, including no additional generating capacity at all if no "need" exists or generation of the needed electricity by some non-nuclear energy source. Accordingly, need for power and alternative energy sources are often litigated by interested parties in construction permit proceedings.^{2/}

The situation is significantly different at the operating license stage, however. This stage of the licensing process is reached only after a prior finding by the Commission or its adjudicatory tribunals at the construction permit stage that there existed a need for the power the proposed facility would generate and that, on balance, no superior alternative energy sources existed. At the time of the operating license decision, construction related environmental impacts have already occurred at the site and the

^{1/} Public Service Company of New Hampshire, (Seabrook Station, Units 1 & 2), ALAB-422, 6 NRC 33,90 (1977).

^{2/} It should be noted that as a matter of policy the Commission endorses placing substantial reliance on State assessments of need for power, energy conservation, and alternative energy source analyses to fulfill NRC's NEPA responsibilities at the CP stage and has requested its staff to develop procedures to solicit input from the states and the Federal Energy Regulatory Commission for use in the environmental impact statement and for testimony before licensing boards in construction permit proceedings.

construction costs have been incurred by the licensee. The facility is essentially completely constructed and ready to operate when the Commission's Atomic Safety and Licensing Board renders its decision on the operating license application.

Operation of a nuclear power plant entails some environmental cost which should be justified, under NEPA, by some benefit from plant operation. In all cases to date, and in all foreseeable future cases, there will be some benefit in terms of either meeting increased energy needs or replacing older less economical or less environmentally advantageous generating capacity. Experience shows that completed plants are in fact used for either purpose and licensees authorized to operate such plants do, in fact, operate them to the maximum extent of their availability to produce electricity. Such facilities are not abandoned in favor of some other means of generating electricity. For purposes of this proposed rule the Commission has assumed, conservatively, that the plant is not needed to satisfy increased energy needs, but rather is justified, if at all, as a substitute for other generating capacity. The benefits derived by this "substitution theory" have been upheld in several cases as justification for construction and operation of nuclear-generated units by the Commission's Appeal Board. E.G., Niagara Mohawk Power Corporation (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347 (April 8, 1975).

NEPA also requires the Commission to consider alternatives to the proposed action. This is not to say that need for power and alternative energy source

issues previously considered in the construction permit proceeding need be reconsidered at the operating license stage. On the contrary, judicial precedent makes clear that NEPA does not require the Commission to duplicate at the operating license stage its review of alternatives absent new information or new developments. Calvert Cliffs' Coordinating Committee, Inc. v. A.E.C., 449 F.2d 1109, 1128 (D.C. Cir. 1971). Union of Concerned Scientists v. A.E.C., 499 F.2d 1069, 1079 (D.C. Cir. 1974). As noted earlier, at the time the operating license stage has been reached, the Commission or its adjudicatory tribunals have already determined that, on balance, no superior alternative energy source exists. These findings have been made by the Commission in construction permit cases since the Calvert Cliffs' decision and are documented in the Final Environmental Statement and adjudicatory decisions issued at the construction permit stage. Moreover, the environmental consequences of the proposed plant, both as to the impact of construction and of operation, have been found to be small relative to the benefits expected from the availability and operation of the nuclear facility. Absent some new information showing unexpected and significant adverse environmental impacts associated with the operation of the constructed nuclear facility which have not been previously considered, or new developments showing the availability of an alternative energy source not previously considered which could provide the needed power in an environmentally superior manner, the Commission cannot readily conceive of a situation in which the prior conclusions could be changed and the NEPA cost-benefit balance tipped against issuance of the operating license. In fact, there has never been a showing in a Commission operating license proceeding that a viable environmentally superior alternative to

operation of the nuclear facility exists, although time and resources have been spent litigating alternatives to operation which, typically, had been previously decided at the construction permit stage.

Unless the nuclear plant has environmental disadvantages in comparison to reasonable alternatives, differences in financial cost are of little concern in the NEPA process. But if there are available alternatives which would result in lesser adverse environmental impact than the nuclear plant, then, of course, cost-benefit balancing including financial cost factors would assist in reaching a reasoned decision, including the possibility of not allowing the operation of the nuclear plant. See Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-458, 7 NRC 155, 161-163 (1978).^{3/} Hence it is only after an environmentally superior alternative has been identified that economic considerations become relevant. In the specific context of alternative energy source issues in operating license proceedings, the NEPA issue is whether an environmentally superior alternative exists. If one does not exist, then economic considerations are not relevant. If an environmentally superior alternative does exist, then economic considerations are considered in the cost-benefit balance and may offset environmental disadvantages.

However, even if the existence of an environmentally superior alternative is alleged to exist at the operating license stage, reports available to the

^{3/} That case involved a proceeding to determine whether the construction permits of a licensee should be suspended in light of a judicial remand. However, the NEPA principle involved is equally applicable to operating license proceedings.

Commission show that the economic costs of operating completed nuclear power plants are clearly below the operating costs of other available methods of baseload fossil generation.^{4/} See Steam-Electric Plant Construction Cost & Annual Production Expenses - 1978, December 1980, DOE/EIA-0033(78); Draft Environmental Statement Relating to the Operation of Grand Gulf Nuclear Station Units 1 & 2, NUREG-0777, May, 1981, pp. 2-1 to 3-1; Cost & Quality of Fuels for Electric Utility Plants - December 1980, DOE/EIA-0075 (80/12). Therefore, given the substantial economic advantages to operating nuclear plants, the Commission believes that even an alternative which is shown to be marginally environmentally superior in comparison to operation of a nuclear facility is unlikely to tip the NEPA cost-benefit balance against issuance of the operating license. In making the above economic evaluations, the Commission makes the assumption that in the event a completed nuclear power plant is not licensed, the costs of the capital investment involved will eventually be paid by the utility's ratepayers. Depending on plant-specific conditions and state regulatory decisions, a utility burdened with a fully-built but unusable plant would ultimately have to recover the costs of construction from ratepayers. This would occur either directly through rate increases or indirectly by the utility being forced to pay a substantially higher rate of interest on its bonds in order to attract understandably cautious investors. These higher interest rates would in turn be reflected in higher rates charged to the utility's customers.

^{4/} Hydroelectric plants, which would rarely, if ever, be shut down in lieu of a new nuclear plant, can be operated at a lower cost than nuclear plants.

Therefore, based on all of the above, the Commission believes that case-specific need for power and alternative energy source evaluations need not be included in the environmental evaluation for a particular nuclear power plant operating license since new information or new developments concerning such issues are unlikely to tip the NEPA cost-benefit balance against issuance of the operating license. An exception would be made to this rule if, in a particular case, special circumstances are shown in accordance with 10 CFR § 2.758 of the Commission's regulations. Such special circumstances could exist if, for example, it could be shown that nuclear plant operations would entail unexpected and significant adverse environmental impacts which had not been previously considered.

Accordingly, the Commission proposes to amend its regulations in 10 CFR Part 51 to provide that need for power and alternative energy source issues will not be considered in operating license proceedings for nuclear power plants and need not be addressed by operating license applicants in environmental reports submitted to the NRC at the operating license stage.^{5/} An

^{5/} Promulgation of these proposed rules in final form is not inconsistent with the Commission's earlier denial of a petition for rulemaking, PRM-51-4, submitted by Boston Edison Company, et al. See 45 FR 10492 (February 15, 1980). That petition would have excluded consideration of such matters as need for power, alternative sites, and alternative energy sources at the operating license stage. The denial of the petition was grounded largely on the petitioners' erroneous and overly narrow assumption concerning the scope of an operating license safety review. However, the Commission specifically noted in the denial that it might be possible to limit the NEPA review at the OL stage to new information of significance to the ultimate decision on the proposed action.

exception to or waiver of the rule, if adopted, would be permitted in particular cases if special circumstances are shown in accordance with 10 CFR 2.758 of the Commission's regulations, "Consideration of Commission rules and regulations in adjudicatory proceedings." The rules, if adopted in final form, will apply to ongoing licensing proceedings then pending and to issues or contentions therein.

Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980, 5. U.S.C. §605(b), the Commission hereby certifies that this proposed rule will not, if adopted, have a significant economic impact on a substantial number of small entities. The proposed rule eliminates certain reporting requirements for owners of nuclear power plants licensed pursuant to Sections 103 and 104b of the Atomic Energy Act, as amended, 42 U.S.C. 2133, 2134b. Owners of nuclear power plants are not within the definition of small business found in Section 3 of the Small Business Act, 15 U.S.C. §632, or within the Small Business Size Standards set forth in 13 CFR Part 121.

Paperwork Reduction Act Statement

Pursuant to the provisions of the Paperwork Reduction Act of 1980 (Pub. L. 96-511), the NRC has made a preliminary determination that this proposed rule does not impose new reporting or recordkeeping requirements. This proposed rule has nevertheless been submitted to the Office of Management

and Budget for its consideration of any potential or new reporting or recordkeeping requirements, pursuant to Pub. L. 96-511.

Pursuant to the Atomic Energy Act of 1954, as amended, the National Environmental Policy Act, of 1969, as amended, the Energy Reorganization Act of 1974, as amended, and Section 553 of Title 5 of the United States Code, notice is hereby given that adoption of the following amendments to 10 CFR Part 51 are contemplated:

It is proposed that 10 CFR Part 51 be amended as follows:

1. The authority citation for Part 51 be revised to read as follows:

Authority: Sec. 161h., i., o., Pub. L. 83-703, 68 Stat. 948 (42 U.S.C. 2201 (h), (i), and (o)); Sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332); Sec. 201, as amended, Pub. L. 93-438, 88 Stat. 1242; Pub. L. 94-79, 89 Stat. 413 (42 U.S.C. 5841)

2. 10 CFR 51.21 be revised to read as follows:

§ 51.21 Applicant's Environmental Report - Operating License Stage.

Each applicant for a license to operate a production or utilization facility covered by § 51.5(a) shall submit with its application the

number of copies, as specified in § 51.40, of a separate document, to be entitled "Applicant's Environmental Report-Operating License Stage." which discusses the same matters described in § 51.20 but only to the extent that they differ from those discussed or reflect new information in addition to that discussed in the final environmental impact statement prepared by the Commission in connection with the construction permit. The "Applicant's Environmental Report-Operating License Stage" may incorporate by reference any information contained in the Applicant's Environmental Report or final environmental impact statement previously prepared in connection with the construction permit. With respect to the operation of nuclear reactors, the applicant, unless otherwise required by the Commission, shall submit the "Applicant's Environmental Report-Operating License Stage" only in connection with the first licensing action that would authorize full power operation of the facility. No discussion of need for power or alternative energy sources for the proposed plant is required in the report.*

3. Present § 51.53 be retained and designated paragraph (a) and a new paragraph (b) be added to read as follows:

* The underscored words are proposed to be added. The underscoring will be removed prior to transmittal to the Federal Register.

§ 51.53 Hearings - Operating Licenses.

- (b) Presiding officers may not admit contentions proffered by any party concerning need for power or alternative energy sources for the proposed plant in operating license hearings and may not raise such issues sua sponte.

Dated at Washington, D.C. this day of , 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Chilk
Secretary of the Commission

ENCLOSURE 2

construction costs have been incurred by the licensee. The facility is essentially completely constructed and ready to operate when the Commission's Atomic Safety and Licensing Board renders its decision on the operating license application.

[OGC revisions begin here; delete remainder of page 4 and page 5 up to indicated section.] Operation of a nuclear power plant entails some environmental cost which should be justified, under NEPA, by some benefit from plant operation. In all cases to date, and in all foreseeable future cases, there will be some benefit in terms of either meeting increased energy needs or replacing older less economical or less environmentally advantageous generating capacity. Experience shows that completed plants are in fact used for either purpose and licensees authorized to operate such plants do, in fact, operate them to the maximum extent of their availability to produce electricity. Such facilities are not abandoned in favor of some other means of generating electricity.

For purposes of this proposed rule the Commission has assumed, conservatively, that the plant is not needed to satisfy increased energy needs, but rather is justified, if at all, as a substitute for other generating capacity. The benefits derived by this "substitution theory" have been upheld in several cases as justification for construction and operation of nuclear-generated units by the Commission's Appeal Board. E.g. Niagara Mohawk Power Corporation (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347 (April 8, 1975). ~~Thus, the relevant inquiry for purposes of this proposed rule is whether some alternative method of providing the needed power is preferable to permitting the completed nuclear power plant to operate.~~

NOTE: Staff additions are underscored. Recommended deletions from OGC revisions are lined out.

NEPA also requires the Commission to consider alternatives to the proposed action. This is not to say that need for power and alternative energy source issues previously considered in the construction permit proceeding need be reconsidered at the operating license stage. On the contrary, judicial precedent makes clear that NEPA does not require the Commission to duplicate at the operating license stage its review of alternatives absent new information or new developments. Calvert Cliffs' Coordinating Committee, Inc. v. A.E.C., 449 F.2d 1109, 1128 (D.C. Cir. 1971). Union of Concerned Scientists v. A.E.C., 499 F.2d 1069, 1079 (D.C. Cir. 1974). As noted earlier, at the time the operating license stage has been reached, the Commission or its adjudicatory tribunals have already determined that, on balance, no superior alternative energy source exists. These findings have been made by the Commission in construction permit cases since the Calvert Cliffs' decision and are documented in the Final Environmental Statement and adjudicatory decisions issued at the construction permit stage. Moreover, the environmental consequences of the proposed plant, both as to the impact of construction and of operation, have been found to be small relative to the benefits expected from the availability and operation of the nuclear facility. Absent some new information showing unexpected and significant adverse environmental impacts associated with the operation of the constructed nuclear facility which have not been previously considered, or new developments showing the availability of an alternative energy source not previously considered which could provide the needed power in an environmentally superior manner, the Commission cannot readily conceive of a situation in which the prior conclusions could be changed and the NEPA cost-benefit balance tipped

against issuance of the operating license. In fact, there has never been a showing in a Commission operating license proceeding that a viable environmentally superior alternative to operation of the nuclear facility exists, although time and resources have been spent litigating alternatives to operation which, typically, had been previously decided at the construction permit stage.

Unless the nuclear plant has environmental disadvantages in comparison to reasonable alternatives, differences in financial cost are of little concern in the NEPA process. But if there are available alternatives which would result in lesser adverse environmental impact than the nuclear plant, then, of course, cost-benefit balancing including financial cost factors would assist in reaching a reasoned decision, including the possibility of not allowing the operation of the nuclear plant. See Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-458, 7 NRC 155, 161-163 (1978).^{*}/ Hence it is only after an environmentally superior alternative has been identified that economic considerations become relevant. In the specific context of alternative energy source issues in operating license proceedings, the NEPA issue is whether an environmentally superior alternative exists. If one does not exist, then economic considerations are not relevant. If an environmentally superior alternative does exist, then economic considerations are considered in the cost-benefit balance and may offset environmental disadvantages.

However, even if the existence of an environmentally superior alternative is alleged to exist at the operating license stage, reports studies available to the Commission show that nuclear plants are used as substitutes for other baseload fossil generation, and the economic costs of operating completed nuclear power plants are clearly below the operating costs of other available methods of baseload fossil generation.* See Steam-Electric Plant Construction Cost & Annual Production Expenses - 1978, December 1980, DOE/EIA-0033(78); Final Supplement to the Final Environmental Statement Related to Construction of Allens-Creek Nuclear Generating Station Unit No. 1, August 1978, NUREG-0470 and sources cited at pgs. S-D-20-22; Draft Environmental Statement Relating to the Operation of Grand Gulf Nuclear Station Units 1 & 2, NUREG-0777, May, 1981, pp. 2-1 to 3-1; Cost and Quality of Fuel for Electric Utility Plants - December 1980, DOE/EIA-0075 (80/12).

Therefore, given the substantial economic advantages to operating nuclear plants, the Commission believes that even an alternative which is shown to be marginally environmentally superior in comparison to operation of a nuclear facility is unlikely to tip the NEPA cost-benefit balance against issuance of the operating license. In making the above economic evaluations, the Commission makes the assumption that in the event a completed nuclear power plant is not licensed, the costs of the capital investment involved will eventually be paid by the utility's ratepayers. Depending on plant-specific conditions and state regulatory decisions, a utility burdened with a fully-built but unusable plant would likely retire the plant early -

* Hydroelectric plants, which would rarely, if ever, be decommissioned-shut down in lieu of a new power nuclear plant, can be operated at a lower cost than nuclear plants.

in-which-case ratepayers-would-ultimately bear-the-costs-of construction- ultimately have to recover the costs of construction from ratepayers. In- any case, the utility would likely-be This would occur either directly through rate increases or indirectly by the utility being forced to pay a substantially higher rate of interest on its bonds in order to attract understandably cautious investors. These higher interest rates would in turn be reflected in higher rates charged to the utility's customers.

In-short, the Commission concludes that in any-reasonably foreseeable future- case, there would-be substantial economic advantages-to operation-of the- completed nuclear plant. - Given this, - the critical-question under NEPA-is whether these economic benefits-are offset-by environmental disadvantages.

The environmental consequences-of nuclear-and-alternative-fossil power sources are less-quantifiable and more-controversial-than-the-economic consequences. - Numerous studies have attempted to-compare-these consequences-with inconclusive-results: See Energy in Transition 1985-2010, - Final Report of the Committee on Nuclear-& - Alternative Energy Systems, - National Research Council, - 1979 (CONAES Report); Herbert Inhaber, Risk of Energy Production, - Atomic Energy Control Board; 4th Edition, - Ottawa, - Canada.

Given that-the economic-advantages of utilizing a completed nuclear plant clearly outweigh-the use of-alternative-fossil-fueled plants; the relative environmental costs and benefits are only-important-insofar as they would be-so large-as to tip the balance against-licensing-a-completed-plant. - Based on-the studies-that

have been done on comparative environmental impacts, we are prepared to state that the total environmental impacts from nuclear and fossil-fired plants are at least comparable in terms of both the magnitude and the uncertainty of environmental impacts. Given this, and given the substantial economic advantages of nuclear, it follows that absent some unusually severe environmental impact from nuclear plant operations, a NEPA analysis would favor nuclear plant operations:

Therefore, based on all of the above, the Commission believes that case-specific need for power and alternative energy source evaluations need not be included in the environmental evaluation for a particular nuclear power plant operating license since new information or new developments concerning such issues are unlikely to tip the NEPA cost-benefit balance against issuance of the operating license. An exception would be made to this rule if, in a particular case, special circumstances are shown in accordance with 10 CFR § 2.758 of the Commission's regulations. Such special circumstances could ~~would~~ exist if, for example, it could be shown that nuclear plant operations would entail ~~unusually-severe-environmental-impacts-of-that, for-some-unusual-reason,~~ ~~some-other-elements-of-the-foregoing-analysis-are-incorrect~~ unexpected and significant adverse environmental impacts which had not been previously considered. (End of OGC revision)

OGC CHANGES IN RESPONSE TO JUNE 25 ELD MEMORANDUM ARE UNDERLINED AND LINED OUT FOR NEW PAGES 5 AND 6:

issues previously considered in the construction permit proceeding need be reconsidered at the operating license stage. On the contrary, judicial precedent makes clear that NEPA does not require the Commission to duplicate at the operating license stage its review of alternatives absent new information or new developments. Calvert Cliffs' Coordinating Committee, Inc. v. A.E.C., 449 F.2d 1109, 1128 (D.C. Cir. 1971). Union of Concerned Scientists v. A.E.C., 499 F.2d 1069 1079 (D.C. Cir. 1974). As noted earlier, at the time the operating license stage has been reached, the Commission or its adjudicatory tribunals have already determined that, on balance, no superior alternative energy source exists. Moreover, the environmental consequences of the proposed plant, both as to the impact of construction and of operation, have been found to be small relative to the benefits expected from the availability and operation of the nuclear facility. These findings have been made by the Commission in construction permit cases since the Calvert Cliffs' decision and are documented in the Final Environmental Statement and adjudicatory decisions issued at the construction permit stage. ~~Absent some new information showing unexpected and significant adverse environmental impacts associated with the operation of the constructed nuclear facility which have not been previously considered, or new developments showing the availability of an alternative energy source not previously considered which could provide the needed power in an environmentally superior manner, the Commission cannot readily conceive of a situation in which the prior conclusions could be changed and the NEPA cost-benefit balance tipped against issuance of the operating license.~~ In fact, Moreover, there has never been a showing finding in a Commission operating license proceeding that a viable environmentally superior alternative to operation of the nuclear facility exists, although

substantial time and resources have been spent litigating alternatives to operation which, typically, had been previously decided at the construction permit stage. Past experience in conducting NEPA reviews suggests, therefore, that rarely, if ever, will an alternative energy source, including use of an existing fossil-fired unit as substitute for the nuclear plant, be found environmentally superior to the nuclear plant.

Unless the nuclear plant has environmental disadvantages in comparison to reasonable alternatives, differences in financial cost are of little concern in the NEPA process. But if there are available alternatives which would result in lesser adverse environmental impact than the nuclear plant, then, of course, cost-benefit balancing including financial cost factors would assist in reaching a reasoned decision, including the possibility of not allowing the operation of the nuclear plant. See Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-458, 7 NRC 155, 161-163 (1978). ^{3/} Hence it is only after an environmentally superior alternative has been identified that economic considerations become relevant. In the specific context of alternative energy source issues in operating license proceedings, the NEPA issue is whether an environmentally superior alternative exists. If one does not exist, then economic considerations are not relevant. If an environmentally superior alternative does exist, then economic considerations are considered in the cost-benefit balance and may offset environmental disadvantages.

However, even if the existence of an environmentally superior alternative is alleged to exist at the operating license stage, reports available to the

^{3/} That case involved a proceeding to determine whether the construction permits of a licensee should be suspended in light of a judicial remand. However, the NEPA principle involved is equally applicable to operating license proceedings.

PDR

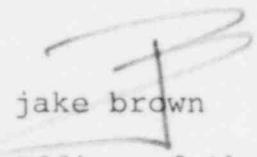
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DATE: JULY 9, 1981

Attached are the PDR copies of a Commission meeting transcript/s/ and related meeting document/s/. They are being forwarded for entry on the Daily Accession List and placement in the Public Document Room. No other distribution is requested or required. Existing DCS identification numbers are listed on the individual documents wherever possible.

1. Transcript of: Affirmation Session 81-27,
July 9, 1981. (1 copy)
 - a. Memo from H. Shapar, ELD, to the Commissioners dated June 25, 1981, Subj: SECY-81-317, SECY-81-317B - Proposed Rulemaking to Eliminate Need for Power and Alternative Energy Source Issues in Operating License Proceedings in the Absence of Special Circumstances.
(1 copy)


jake brown

Office of the Secretary

