

June 9, 1982

Note to: Gerry Mazetis, RSB
From: Mack Cutchin, OELD
Subject: COMMENTS ON "FEED AND BLEED" MEMO

Jensen
file

As requested in Brian Sherons' memo of May 28th I am forwarding my comments on the draft memo and report on "feed and bleed." My comments are set forth below.

1. Although the titles of the memo and report indicate that they address only the Staff's reliance on, and position regarding, "feed and bleed" cooling at the TMI-1 Restart Hearing they are not so limited. It appears that the purpose of the documents is to respond to questions posed by Harold Denton in a memo of April 29, 1982 to Roger Mattson. However, it is not clear from his memo what Harold plans to do with the documents purporting to provide answers to the questions he posed. Without knowing the ultimate purpose of the documents it is difficult to focus my comments. Based on my telecon with Roger Mattson on June 8th I understand that the report is for internal use. If it is to be released outside the agency it should be more sharply focused and supported by detailed citations to the TMI-1 record and any other references relied on, and information extraneous to TMI-1 should be excluded.
2. The report is mistitled. It does not address only the NRC Staff position on feed and bleed cooling at the hearing on restart of TMI-1. That is the main subject of the discussion in item 1 of the report. Items 2, 3 and 4 address other things. The words "at TMI-1 Restart Hearing" should be deleted from the title of the report.
3. Item 1 of the report purports to be a description of the staff position at the TMI-1 restart hearing on the role of "feed and bleed" during a SBLOCA. However, it starts with a caveat and does not provide a direct response. It says "we describe what we understand today about the role of the feed and bleed cooling" and "[w]e believe it is the same understanding we had at the time of the TMI-1 restart hearing." The Staff's position at the hearing was clearly that "feed and bleed" cooling is not relied on for heat removal following a loss of MFW and/or SBLOCA. That should be stated plainly. Citations to the record to support the statement should be provided. (Both Jensen and Wermeil testified that EFW is relied on for heat removal during a SBLOCA but that "feed and bleed" is not.) All of the discussion about defense in depth and allowing reliance on feed and bleed "with proper justification" should be deleted. It is extraneous information and only serves to prompt more questions.

4. Item 2 purports to interpret the Licensing Board's PID regarding the need for reliable "feed and bleed" during a SBLOCA. Again the response is not a direct one. The Board concluded that EFW by itself had not been demonstrated to be adequately reliable but that EFW with HPI as a backup in the "feed and bleed" mode will adequately protect the health and safety of the public. PID, ¶¶ 1050 and 1056. The discussion about the Appeal Board decision in St. Lucie 2 (ALAB-603) was used by the Licensing Board to justify its request for numbers in spite of the Staff's reluctance to provide them. We addressed the Board's use of these numbers in our response to UCS' exceptions to the PID that was filed with the Appeal Board in the TMI-1 Restart Proceeding on May 20th. (See attachment).

5. In Item 3a you state that the "TMI-1 EFW system will, at the time of restart, meet the Commission's requirements for safety-related equipment, if credit for operator action is given." That implies that the EFW system for TMI-1 will be fully safety-grade for all design basis events at the time of restart if credit is given for operator action. That appears to me to be a stronger position than the Staff took at the hearing. There it said that the EFW system would be safety-grade for loss of MFW and SBLOCA events. The last sentence in item 3a refers to safety-grade equipment not being required to be included within the design basis. Should you not merely say that loss of all FW is not a design basis event because....? Equipment is neither included within or excluded from the design basis. The ability to cope with all events included within the design basis using only safety-grade equipment is what is required, is it not?

Moreover, the title of item 3a implies that the discussion under that item includes a detailed explanation of the Staff's technical basis for its position on "feed and bleed" at TMI-1. It does not. The reason is not simply that EFW is required to be available but that the combination of HPI and EFW provides assurance that adequate heat removal to cool the core will be provided by flow out the break or by natural circulation or by both over the entire range of SBLOCAs. If that is not believed to be true our position is different that I understook it to be at the hearing.

6. Item 3 of Denton's letter asks for a clarification of the difference between the "feed and bleed" mode of cooling and the "boiler-condenser" mode of cooling. Although one can determine from the information in Item 3b of the report that the "boiler-condenser" mode of cooling is one of several modes of natural circulation cooling and that the "feed and bleed" mode of cooling is not, the discussion does not provide a direct answer. These are two completely different types of cooling. The "feed and bleed" mode of cooling involves the expulsion of hot water or steam from the reactor coolant system and replacement of the material

that is expelled with material that is cooler. The "boiler-condenser" mode of cooling involves circulation of an essentially unvarying inventory of coolant. One is in effect an open system process and the other is essentially a closed system process for purposes of clarifying the difference.

7. Much of the information in Item 3c goes well beyond what was discussed at the TMI-1 hearing and does not enlighten. In my view it raises a number of questions and may also be misleading. For example, one could conclude that all plants have fully safety-grade EFW systems. That is not true for several plants, including TMI-1.

cc: R. Mattson
B. Sheron
J. Gray
J. Scinto

~~They only provide more UCS argument concerning the worth of Staff witness Conran's testimony. Each factual assertion made in a brief must be supported by a reference to the precise portion of the record upon which it is based. 10 C.F.R. 2.762(b). Reliance on proposed findings of fact and conclusions of law filed with a Licensing Board is not sufficient. ALAB-394, supra. An insufficient brief on an issue will be held to be abandonment of the issue. ALAB-355, supra. Having failed to show by citation to the record that TMI-1 does not comply with the Commission's regulations as supplemented by NUREG-0737 or that without the modifications sought by UCS the Board could not find that there is reasonable assurance that TMI-1 can be operated without endangering the health and safety of the public, UCS has not demonstrated that the Board erred in declining to find that upgrading of all systems and components that can cause, or aggravate, or be called upon to mitigate an accident to safety-grade status is necessary at TMI-1. Thus, UCS Exceptions 65-85 should be rejected.~~

II, C. 9. The Licensing Board Did Not Err In Declining To Find That Additional Modifications To The Emergency Feedwater System Are Necessary At TMI-1 Prior To Restart

UCS briefed only four of its six filed exceptions to the Licensing Board's findings on Board Question 6 concerning the reliability of the emergency feedwater (EFW) system for removal of decay heat following a loss of main feedwater transient and SBLOCA.^{18/} Board Question 6 was raised by the Licensing Board under its "sua sponte" authority. See

^{18/} UCS did not brief its Exceptions 105 and 106.

10 C.F.R. 2.760a; See also 10 NRC 147. The Board was seeking information to enable it to determine whether the short-term actions that had been proposed by the DNRR to improve the reliability of the EFW system were "sufficient." Its consideration of the question is presented in Paragraphs 1005 through 1067 of its PID of December 14, 1981.

The Board agreed with the Staff that the EFW modifications to be in place at restart will satisfy the short-term requirements of NUREG-0737, Item II.E.1.2, and found it to be likely that a number of the long-term requirements also would be in place at restart. PID ¶¶ 1035-1038. However, the Board did not stop there. Because of its awareness of certain data related to the frequency of occurrence of feedwater transients and the unavailability on demand of some EFW systems, the Board requested information from Staff and Licensee witnesses to assist the Board in determining to its satisfaction whether the probability of core damage following a loss of main feedwater transient was in its estimation acceptably low. See PID ¶¶ 1039-1050. It noted that it had no particular pass-fail probability in mind and that the Commission has not yet established a numerical safety goal. PID ¶ 1039. In spite of the Staff witnesses' caution that they could not estimate the uncertainties in the numerical results that had been provided by them^{19/} the Board concluded that EFW alone was not sufficiently reliable but that with feed and bleed as a backup the TMI-1 design is acceptable

^{19/} Wermeil and Curry, ff. Tr. 16,718 at 39-40.

without further modifications except any required to resolve the steam generator bypass logic problem. See generally PID ¶¶ 1039-1067.

In its briefing of its Exceptions 103-109 (excluding 105 and 106) UCS asserts that the modifications to the EFW system that are to be in place at restart do not satisfy the single failure criterion in that EFW flow control valves are opened and controlled by the non-safety-grade Integrated Control System and because the solution to the steam generator bypass logic problem will not be in place. UCS Brief at 104-108. UCS also argues that the Board should not have given credit for feed and bleed cooling as a backup to EFW^{20/} and that the Board failed to take into account that heat removal using the EFW requires use of non-safety-grade equipment. UCS Brief at 109-110.

UCS again apparently fails to recognize that it must demonstrate that actions in addition to those required by the Commission's regulations as supplemented by NUREG-0737 are necessary or that actions required by the regulations as interpreted or supplemented are not being taken. For example, to support its assertion that the Board erred in giving credit for feed and bleed UCS must first show the Board was correct in finding, in spite of Licensee's compliance with the EFW requirements of the regulations as interpreted and supplemented by Items

^{20/} In making this argument UCS relies in part on non-record material and takes quotes from that material out of context. Not only is the non-record material irrelevant in the Staff's view because of design differences between TMI-1 and the Davis-Besse plant but the Appeal Board may not base a decision upon factual material that is not in evidence. Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A, 1B and 2B), ALAB-463, 7 NRC 341, 351-2 (1978).

II.E.1.1 and II.E.1.2 of NUREG-0737, that EFW alone is not sufficiently reliable to provide reasonable assurance that TMI-1 can be operated without endangering the health and safety of the public and then show that EFW backed up by feed and bleed is not sufficiently reliable.

In the Staff's view EFW alone as it is to be modified to comply with Items II.E.1.1 and II.E.1.2 of NUREG-0737 is sufficiently reliable to remove decay heat following a loss of main feedwater transient or SBLOCA, and the Licensing Board improperly concluded otherwise. See PID ¶ 1017 and Staff testimony cited there. Therefore, to the extent UCS asserts that the Board's manipulation of numbers does not support its conclusions the Staff agrees. However, the Staff believes that the numbers, because of their inapplicability and uncertainty, could not provide a basis for the Board's conclusion that EFW alone is unreliable and that more is necessary. In the Staff's view the Board no less than UCS had to adequately support its position that the actions required by the Commission's regulations as interpreted and supplemented by NUREG-0737 are not sufficient to provide reasonable assurance that TMI-1 can be operated without endangering the health and safety of the public. See also Staff arguments at Section II.C.1 and 2 supra.⁴ *(See attached pages E-17.)* That the Staff and Licensee failed to challenge the Board's findings that EFW with feed and bleed as backup is sufficient or that a solution to the steam generator bypass logic problem was necessary does not lessen UCS' burden to support its appeal. The Staff submits that UCS has not met its burden of demonstrating that it has been injured by any of the Board's rulings of which it complains in its briefing of its exceptions to the Board's findings on Board Question 6. See ALAB-482, supra.

Thus, UCS has not shown that the Board erred in declining to find that additional modifications to the emergency feedwater system are necessary at TMI-1 prior to restart. UCS Exceptions 103-109 should be rejected.

~~10. The Licensing Board Did Not Improperly Delegate Board Functions To The Staff Or Err In Recommending That Restart Be Authorized, Prior To Specifying Conditions To Be Imposed On The License~~

In its briefing of its Exceptions 111-116 UCS asserts that the Licensing Board improperly delegated Board functions to the Staff and erred in recommending restart of TMI-1 prior to establishing conditions to be imposed on the license. UCS Brief at 57-61. UCS obviously does not understand the roles of the Licensing Board and the Staff in the TMI-1 Restart Proceeding as established by the Commission in CLI-79-8 and quoted by the Board in Paragraph 1216 of its PID of December 14, 1981:

Satisfactory completion of the required actions will be determined by the Director of Nuclear Reactor Regulation. However, prior to issuing its decision the Board shall have authority to require staff to inform it of the detailed steps staff believes necessary to implement actions the Board may require and to approve or disapprove of the adequacy of such measures. 10 NRC 148.

Having made its adjudicative determinations on the plant design and procedures issues and recognizing that to leave to the Staff the decision as to the conditions to be imposed on the license would be an unwarranted delegation, the Board directed the Staff to report on its enforcement plans. PID W 1214 and 1217. Following receipt of the

~~be called upon to mitigate, an accident to safety-grade status is necessary at TMI-1.~~

9. Whether the Licensing Board erred in declining to find that additional modifications to the emergency feedwater (EFW) system are necessary at TMI-1 prior to restart.
10. Whether the Licensing Board improperly delegated Board functions to the Staff or erred in recommending that restart be authorized prior to specifying conditions to be imposed on the license.
11. Whether the Licensing Board erred in denying admission of UCS-Contention-17 to the proceeding.

II. C. Argument

1. UCS Has Not Demonstrated That It Was Harmed By The Licensing Board's Ruling That "Necessary" Actions Are Those That Are Reasonable In View of The Technology, Resources and Risk Involved

In its Exception No. 110 UCS asserts that the standard used by the Licensing board for determining whether actions are necessary to provide reasonable assurance that the Three Mile Island Unit 1 facility can be operated without endangering the health and safety of the public and set forth in paragraph 689 of its PID is in error. Because in discussing and explaining the background of the dispute between the Licensee and

the Staff over the so-called "water-level indicator issue" the Board stated in paragraph 674 of its PID that the discussion also explains how it arrived at the "necessary" standard for deciding other plant modification issues, UCS assumes that the standard set forth in paragraph 689 of the PID was used by the Board in determining whether actions proposed by UCS were "necessary" within the context of the Commission's Order.

In paragraph 689 of its PID the Licensing Board stated that it had adopted a standard that "necessary" modifications as stated in the Commission's August 9, 1979 Order are those which would produce a substantial and additional protection to the public health and safety and which based upon the record are reasonable in view of the technology, resources and risk involved.

UCS complains that by including consideration of the technical feasibility of proposed actions the Licensing Board employed an incorrect standard for determining whether actions are "necessary ... to provide reasonable assurance that the [Three Mile Island Unit 1] facility can be operated ... without endangering the health and safety of the public...." UCS Brief at 49.

Although the Board used the standard challenged by UCS in deciding to impose a requirement that the Licensee install additional instrumentation to detect inadequate core cooling (See PID, ¶¶ 674-689), it is not obvious that the Board employed the same standard in rejecting actions proposed by UCS. In fact, although UCS devotes about eight pages of its brief to its attack on the Licensing Board's standard for

determining "necessary" actions, it admits that "... the Board does not specifically discuss feasibility in ruling on various actions proposed by the parties." UCS Brief at 55. UCS merely argues that:

[O]ne must assume that the Board took feasibility into account in reaching all of its conclusions. Otherwise, the Board would have had no need to undertake its extensive and obviously difficult decision of the issue. UCS Brief at 55.

Thus it is not clear even to UCS that the Board used the standard objected to by UCS to reject any of UCS' proposed actions. UCS only speculates that "the Board may well have rejected a proposed action on feasibility grounds although the action is otherwise required to assure safety" and only asserts without proof that "[i]f that is true, permitting TMI-1 to reopen would pose a threat to the public health and safety." UCS Brief at 56.

The Staff submits that such general and speculative assertions are of little assistance to one trying to deal with concrete issues. At their current level of generality, UCS' complaints do not provide an adequate basis for determining that the Licensing Board actually applied the "necessary" standard that is challenged by UCS to the resolution of any issue other than that involving additional instrumentation for detection of inadequate core cooling. Under the normal rule, an appeal will lie only from an action taken by a Licensing Board. Duke Power Company (Cherokee Nuclear Station, Units 1, 2 & 3), ALAB-482, 7 NRC 979, 980 (1978). Where, as here, UCS has not shown at the outset that the Licensing Board actually applied its "necessary" standard in deciding

issues covered by UCS exceptions, UCS has not shown that the Board took an action (i.e., applying an inappropriate standard) from which an appeal normally will lie.

Nevertheless, since the Licensing Board's decision does not clearly show that, for other than the inadequate core cooling instrumentation issue, the Board did not, in fact, consider feasibility, UCS arguments regarding the standard for determining what is "necessary" warrant analysis.

UCS asserts that the standard set forth by the Board in paragraph 689 of its PID is "half right." UCS believes that any modification that would produce a substantial and additional protection to the public health and safety is "necessary". But it believes that considering the feasibility of the action is wrong. UCS Brief at 50.

The Staff, however, disagrees entirely with the standard set forth in paragraph 689 of the PID and is exercising its right to challenge the reasoning used by the Licensing Board to reach results that were satisfactory to the Staff. Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-282, 2 NRC 9, 10 at n.1 (1975); Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 357 (1975). Although, the Staff agrees with UCS that the Licensing Board's including consideration of the feasibility of proposed actions in the standard employed for determining whether the actions are necessary was inappropriate, the Staff does not agree that the outcome would have been different for UCS had the Board employed the correct standard. The correct standard is, in the view of the Staff, set forth by the

Board in Paragraph 675 of its PID. Moreover, the Staff believes that the Commission's August 9, 1979 Order indicated that the standard in Paragraph 675 is the proper one. In that Order the Board was directed to consider whether certain actions "are necessary and sufficient to provide reasonable assurance that the Three Mile Island Unit 1 facility can be operated without endangering the health and safety of the public...." Thus, the Order itself characterized a "necessary" action as one that is required "to provide reasonable assurance that the facility can be operated without endangering the health and safety of the public." Stated differently a "necessary" action is an action without which the Board cannot find that there is reasonable assurance that the the Three Mile Island Unit 1 facility can be operated without endangering the health and safety of the public. Correspondingly, the totality of the actions that are "necessary" is "sufficient" to enable the Board to find that there is reasonable assurance that the Three Mile Island Unit 1 facility can be operated without endangering the health and safety of the public. In other words, to find that the actions to be taken are not "sufficient," the Board must find at least one additional action to be "necessary." Had the Board employed the standard for determining necessary actions that is set forth in paragraph 675 of its PID, the Staff would have had no reason to disagree. But, the Licensing Board went astray by looking to the Commission's backfit rule, 10 CFR 50.109, for guidance in determining whether installation of additional instrumentation to detect inadequate core cooling is a necessary action. PID §§ 674-689. The Chairman of the Licensing Board, although recognizing that the Commission did not

vest the Board with general backfitting jurisdiction, nevertheless concluded that the Board could impose any remedy that would merely enhance the safety of TMI-1 with respect to a circumstance having a close nexus to the TMI-2 accident. PID ¶¶ 691-695 and 705.

In expanding the standard for finding actions to be "necessary" to encompass any actions "which would produce a substantial and additional protection to the public health and safety" the Board was incorrect. The Commission may establish standards for imposing actions deemed by it to be either "necessary" or "desirable". Atomic Energy Act of 1954, Section 161b. The Licensing Board, however, was not empowered to impose a remedy that merely enhances safety. The enhancement of safety that would be provided by a remedy imposed by the Board had to be an enhancement without which the Board could not find that there is reasonable assurance that the Three Mile Island Unit 1 facility can be operated without endangering the health and safety of the public. The Staff outside of this proceeding and with the approval of the Commission can require actions of Licensees that are "desirable," but not necessary, but the Licensing Board in this TMI-1 Restart Proceeding could not. The Board's authority was not so broad. The Commission only directed the Board to determine whether proposed actions were necessary and sufficient.

Although the Staff has concluded that the Board used an overly broad standard it does not agree that UCS should prevail on its contentions. The correct standard for determining whether UCS' proposed actions are "necessary" is a more stringent standard than that assumed by UCS to have been used by the Board in rejecting actions proposed by UCS.

UCS appears to recognize that to prevail on an issue it is required to prove that operation of TMI-1 would be unsafe if the actions that it proposes are not taken. UCS Brief at 56. However, it does not seem to recognize that to do that it must demonstrate that without the actions that it proposes being taken the actions to be taken are not "sufficient" to provide reasonable assurance that the TMI-1 facility can be operated without endangering the health and safety of the public. In other words, UCS must demonstrate that the additional actions proposed by UCS are "necessary."

In this case UCS has argued that the Board should require various actions going substantially beyond the requirements of the Commission's regulations, beyond those proposed by the Director of Nuclear Reactor Regulation as set forth in the Commission's August 9, 1979 Order, and going beyond the supplementation or interpretation of the regulations set forth in NUREG-0737 as approved by the Commission for near term operating licenses and discussed infra. As the proponent of such further requirements UCS bears the burden of demonstrating that the additional actions are necessary. This burden is fully consistent with the guidance given by the Commission for the conduct of NTOL proceedings in its Revised Statement of Policy, "Further Commission Guidance for Power Reactor Operating Licenses." 45 Fed. Reg. 85236 (December 24, 1980). In that Revised Statement of Policy the Commission decided that pending applications for operating licenses should be measured against the regulations as augmented by the TMI-1 related requirements found in NUREG-0737, "Clarification of TMI Action Plan Requirements." The Commission by its Revised Statement of Policy also allowed previously forbidden challenges to the sufficiency of the supplementation to the

regulations that is provided by the TMI Action Plan items in NUREG-737. Compare 45 Fed. Reg. 85236 (December 24, 1980) with 45 Fed. Reg. 41738 (June 20, 1980).^{9/} Thus the Revised Statement of Policy allows parties to challenge the sufficiency of the regulations as supplemented by NUREG-0737 without following the procedural requirements of 10 CFR 2.758. However, it does not relieve the party making the challenge of the burden of demonstrating that compliance with the Commission's regulations, as supplemented, is not a sufficient basis upon which to grant a license; or, as in the case of TMI-1, a sufficient basis upon which to reinstate a suspended license. See Maine Yankee Atomic Power Company (Maine Yankee Nuclear Power Plant, Unit 2), ALAB-161, 6 AEC 1003 (1973), affirmed sub nom. Citizens for Safe Power v. NRC, 524 F.2d 1291 (D.C. Cir. 1975).

In substance UCS' assertions amount at most to arguments that actions proposed by it would or may enhance safety. UCS has not provided specific examples of actions that it believes it has proven to be necessary but that the Licensing Board declined to find to be necessary using an incorrect rather than the correct standard for making the determination. Nor has UCS shown that the standard proposed by UCS rather than the standard used by the Licensing Board is the correct standard. In the Staff's view UCS has failed to demonstrate that the Licensing Board's alleged unfavorable action has caused UCS injury. Thus, UCS Exception No. 110 should be rejected.

^{9/} Challenges to the necessity of the supplementary actions had already been allowed. Normally, only an Applicant or Licensee would challenge the necessity, and only an Intervenor would challenge the sufficiency, of actions.

2. The Licensing Board Used An Improper Standard To Determine Whether Additional Instrumentation To Detect Inadequate Core Cooling Is Necessary

In its briefing of its Exception No. 1 the Licensee asserts that the Staff failed to sustain its burden of proving that additional instrumentation to detect inadequate core cooling is necessary and thus that the Board erred in finding such instrumentation to be necessary. Licensee Brief at 18.

Because the Staff prevailed on the issue, it normally would not be in a position to appeal any part of the Licensing Board's decision on the issue of whether additional instrumentation to detect inadequate core cooling is necessary. ALAB-482, supra. Moreover, even if as in this instance the issue were to be appealed by another party, the Staff could challenge the reasoning used by the Licensing Board only to support the result reached by the Licensing Board. ALAB-264, supra. However, because a critical portion of the reasoning used by the Licensing Board to reach results favorable to the Staff on the Board action appealed by Licensee is the same as was challenged by the Staff in defending against a UCS assertion of error by the Board in Section II.C.1, supra, the Staff believes that it has a duty to call the Appeal Board's attention to the fact that employment by the Licensing Board of the standard believed by the Staff to be the correct one for determining whether a proposed action is "necessary" would have resulted in a finding favorable to the Licensee and unfavorable to the Staff on the matter of additional instrumentation to detect inadequate core cooling. The Staff believes it has such a duty even though the Licensee chose to base its appeal on other grounds and did not challenge the correctness of the standard

employed by the Licensing Board to determine whether actions are necessary. To be consistent with the reasoning espoused by the Staff in Section II.C.1 supra, the Licensing Board, to find additional instrumentation to detect inadequate core cooling to be necessary, would have had to find that without such instrumentation there is not reasonable assurance that TMI-1 can be operated without endangering the health and safety of the public.^{10/} The Staff did not take that position in the TMI-1 Restart Proceeding^{11/} and does not believe that the evidence of record otherwise supports such a position. Nor did the Board properly make such a finding.^{12/} The Board used an improper standard in reaching its conclusion. Because the standard used by the Board was critical to its determination, the Licensing Board erred in finding that additional instrumentation to detect inadequate core cooling is necessary at TMI-1. Licensee's Exception No. 1 should be accepted.

^{10/} The Commission's regulations as supplemented by NUREG-0737, Item II.F.2, would appear to require installation of additional instrumentation to detect inadequate core cooling. Licensee, as is its right, has challenged whether such additional instrumentation is necessary. See, Revised Statement of Policy, 45 Fed. Reg. 85236 (December 24, 1980) supra.

^{11/} Nor does it now take such a position; see Memorandum, Harold R. Denton to Victor Stello, "Briefing Report in Preparation for CRGR Review of TMI Action Plan II.F.2 Requirements," dated March 16, 1982.

^{12/} It is not mandatory that the Staff be able to support a finding that additional instrumentation to detect inadequate core cooling is necessary to require its installation. As was discussed in Section II.C.1 supra, the Staff, outside of the TMI-1 Restart Proceeding and with the approval of the Commission, can require actions of Licensees that are "desirable" but not necessary. Thus, regardless of whether additional instrumentation to detect inadequate core cooling is found to be necessary at TMI-1 in the TMI-1 Restart Proceeding, if such instrumentation can be developed and is deemed by the Commission to be desirable, it may be required by rule, regulation or order to be installed on the class of plants to which TMI-1 belongs.