UNITED STATES
NUCLEAR REGULATORY COMMISSION
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MEMORANDUM FOR: Darrell G. Eisenhut, Director
Division of Licensing

THRU: Frank J. Miraglia, Assistant Director
for Safety Assessment
Division of Licensing

Cecil O. Thomas, Chief
Standardization & Special Projects Branch
Division of Licensing

FROM: Gary C. Meyer, Project Manager
Standardization & Special Projects Branch
Division of Licensing

SUBJECT: CESSAR FINAL DESIGN APPROVAL (FDA)

Recently we issued Supplement No. 2 to the CESSAR SER which closed out the last of the outstanding issues for CESSAR. Though there remains a few confirmatory items, we are now in a position to issue the CESSAR FDA. However, as you are aware, Combustion Engineering (CE) has taken exception to some of the limitations placed in the GESSAR FDA and has stated that similar limitations for CESSAR would be unacceptable to them. In question are three basic issues as follows:

1. Question: Should new CP applications be allowed to reference the CESSAR FDA?

   Discussion: The GESSAR FDA states that GESSAR-II. . . "is acceptable for incorporation by reference in applications for operating licenses for those plants that referenced the Preliminary Design Approval . . . at the construction permit stage." Clearly, therefore, GESSAR does not permit referencing by new CP applications. This is consistent with the proposed Severe Accident Policy Statement which indicates that the Commission will expect something additional of future standard designs beyond its current requirements; and that approved standard designs will have to be updated to meet these new requirements. Therefore, though we can not precisely define these new requirements, we must anticipate their existence and, for now, prohibit referencing of the CESSAR FDA in new CP applications.

   Recommendations: Restrict referencing of the CESSAR FDA in a manner identical to that used in GESSAR.

2. Question: Should the CESSAR FDA have a time limit in it for those applications which referenced the CESSAR PDA at the CP stage.

Discussion: The GESSAR FDA states that it ". . . is effective as of its date of issuance and shall expire on July 27, 1986 unless extended by the NRC staff. The expiration of this Final Design Approval on July 27, 1986 shall not affect its use for reference in operating license applications docketed prior to such date." Hence, if the FDA expires and is not extended by the staff, a CP holder would not be permitted to reference the FDA. The concept of an expiration date for a FDA is not new (see discussion below), but the restriction on referencing by CP holders does place additional limitations beyond those contained in the 1978 Policy Statement on standardization. The staff, however, considers this a reasonable restriction, given the current state of the CP holders referencing standard designs. Though maintaining "valid" CP's, the applicants referencing standard designs, which have not filed OL applications, have all announced either cancellation or indefinite deferment.

It is the potential for an extended construction schedule which we view as a problem. An FDA, when issued, is direction to the NRC staff to rely upon the FDA review during their review of any individual facility license application which incorporates by reference the approved design. Realistically, how long can the staff rely upon its previous review? Since the design is not approved through rulemaking all design issues could be subject to litigation at an OL hearing. With what certainty can the staff face a possible hearing relying on a review conducted years in the past? Hence, if no time restrictions are specified I think we would misrepresent the utility of the FDA. We should not imply that the staff's review will be relied upon forever, as long the subject CP is "valid."

Because of the potential for long delays, the inactive CP's referencing CESSAR become difficult to distinguish from a new CP. Currently, we would not accept a new CP application that simply references the CESSAR FDA, but if such an application was approved it is conceivable that construction could be completed under this new CP before construction was completed under a deferred CESSAR CP. Therefore, we would be inconsistent if we reject a new CP application referencing CESSAR while allowing an old CP to continue referencing CESSAR for an indefinite period of time.

The FDA provides a mechanism to alleviate this problem. The design approval is good unless ". . . there exists significant new information which substantially affects the determination set forth . . ." in the FDA. However, after the design is approved, there is no formal process for considering the impact of new information on CESSAR. In order to permit continued referencing for an indefinite period of time, we should provide some form of checkpoint. This can be done by tying in to the Severe Accident Policy Statement. We could specify that referencing by the inactive CP's could continue indefinitely as long as CE files for a severe accident review within three years. The staff, in its severe accident review, would then have a specific, well-defined opportunity to look at the question of "significant new information."

Recommendation: Specify a three year time limit as follows:

"The NRC has issued for public comment, a proposed Severe Accident Policy Statement. The final Severe Accident Policy Statement, when published will specify the requirements that an application for a Final Design Approval (FDA) must satisfy before the NRC will grant a FDA to be used as a reference in a new construction permit application. If Combustion Engineering files an application for a severe accident review, the NRC will accept this application as a request for an amendment to FDA-2, if the application is filed prior to the expiration of FDA-2. If the final Severe Accident Policy Statement is published before October , 1984, the NRC will not grant an extension to FDA-2 for the sole purpose of providing additional time to submit an application for a severe accident review. If an application for a severe accident review is submitted prior to the expiration of FDA-2, the expiration of FDA-2 shall be held in abeyance pending completion of the NRC's review. After expiration of FDA-2, the applicability of FDA-2 for use as a reference in OL applications in accordance with paragraph 4, shall be reviewed and approved on a case-by-case basis."

3. Question: Should the CESSAR FDA be issued with an expiration date?

Discussion: The GESSAR FDA expires three years from its date of issuance, unless extended by the staff. The use of an expiration date is consistent with the 1978 Policy Statement on standardization, which states that the ". . . staff will permit referencing of the FDA-1 in applications . . . for a period beginning with the docketing date of the FDA-1 application and terminating 3 years after the expiration date of the PDA . . ." Since we do not plan to allow forward referencing in the CESSAR FDA, it could be argued that the expiration date of the FDA is unimportant. That is, it could expire after one day, one year or ten years and it wouldn't matter. This would probably be true if it weren't for the proposed Severe Accident Policy Statement. If the FDA has not expired, the proposed severe accident review could be conducted as part of an amendment to the FDA. Once the FDA expires, however, would the applicant (e.g., CE) have to file a new application with all the appropriate fees? Would the staff have to conduct a new review and publish a complete new SER? It would be to CE's advantage to delay the FDA expiration as long as possible. Again, however, the staff would be in a position similar to that described in Question 2. We would be faced with a rulemaking process to certify the standard design,

based on a review completed some years earlier. There should be some reasonable expiration date as a compromise between the problems of requiring a new application and relying on an old review. We view three years as a reasonable compromise. It assumes that the proposed Severe Accident Policy Statement will be finalized with one year, leaving two years for CE to file an application for an FDA amendment.

Recommendation: Set the CESSAR FDA expiration date at three years from the date of issuance.

The recommendations presented above have been discussed with Mary Wagner Joe Scinto of OELD. Their position on this matter is that the issue of backward referenceability is strictly a policy question and they see no legal problem with my proposal. However, Joe Scinto feels that the rationale we used in arriving at the three year limit for GESSAR should also apply to CESSAR and, hence, the same limit should be used.

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