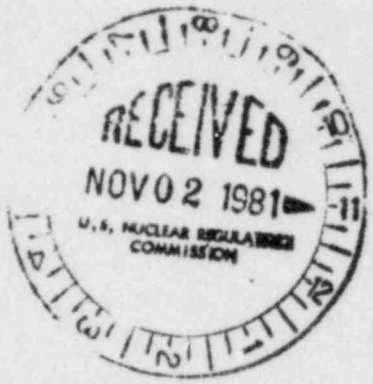
October 26, 1981




Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Mr. Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

Subject: Calvert Cliffs Nuclear Power Plant
Unit No. 1&2, Docket No. 50-317 & 50-318
Supplement to Request for Amendment

Reference: (a) BG&E letter dated 10/16/81 from A. E. Lundvall, Jr. to H. R. Denton, Request for Amendments.
(b) NUREG-0737, Item II.F.1.(6)
(c) BG&E letter dated 12/15/80 from A. E. Lundvall, Jr. to D. G. Eisenhut, Response to NUREG-0737

Gentlemen:

Reference (a) contains our request for several changes to the Calvert Cliffs Technical Specifications. Two of those changes concern the hydrogen analyzers; the first asks for an extension of the time one analyzer may be inoperable before the specified ACTION Statement must be followed; the second asks for a suspension of the provisions of paragraph 3.0.4, which prevents changing modes while in an ACTION Statement.

The purpose of this letter is to provide supplementary information concerning the background and justification for those two changes.

BACKGROUND

The hydrogen analyzers are being replaced as a part of the modifications required by the NRC's TMI-2 Action Plan (See Reference (b)) and as committed to in Reference (c).

There are two hydrogen analyzer systems installed at Calvert Cliffs which together serve both Units. The systems are cross-connected such that one system can draw samples from three pre-selected sample points in each containment, and the other system can draw samples from three different pre-selected sample points in each containment. Both systems can also draw samples from the reactor coolant waste receiver and waste monitor tanks. The cross-connect piping directs the sampled atmosphere back into the appropriate containment or tank. When one analyzer system is inoperable, the three sample points in each containment that are served by that analyzer are not used. However, the second analyzer still samples both containments using its three assigned sample points in each containment.

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The hydrogen analyzers are only necessary for containment sampling following a loss-of-coolant accident, when hydrogen generation may be expected. In addition, one analyzer system or the other is used on a weekly basis to obtain a sample from the waste receiver and monitor tanks. Both analyzer systems have a manual grab sample capability. Grab samples are used routinely for monitoring the waste receiver and monitor tanks for hydrogen and the grab sample capability can also be used to monitor the containment atmosphere if the analyzer unit itself is inoperable. The analyzer system pump must be operating to draw the sample.

JUSTIFICATION

The hydrogen analyzer systems will be replaced one at a time. The Technical Specifications for each Calvert Cliffs Unit require ACTION to be taken if an inoperable analyzer is not restored to an operable condition within 30 days. Since only two analyzers serve both units, the loss of a single analyzer for more than 30 days would require the shutdown of both reactors. This is unnecessarily restrictive as discussed below.

Replacement of each analyzer (in response to NRC post-TMI requirements) is expected to physically take more than the 30 days allowed by the Technical Specifications. The most ambitious estimate for replacement of one analyzer is 60 days. Allowing for unanticipated difficulties, 120 days could be required to fully replace and test each system. Therefore, the requested extension from 30 days to 120 days will, by necessity, have to be invoked twice in succession. Hence, a total of about 8 months may be required to complete both system changeouts.

During the period when one analyzer system is out of service, the second system will be available to perform all necessary sampling evolutions. The replacement system will be fully installed and tested before the second analyzer system is replaced. If, while one analyzer is being replaced, the second analyzer is needed for operation (e.g. following a loss-of-coolant-accident or to sample the radwaste tanks), and if the second analyzer system experiences a single failure, the design function of the system can still be accomplished by using the grab sample feature if the analyzer itself fails or by substituting the pump from the inoperable analyzer system which will remain in its present installed location) if the pump is the component which fails.

CONCLUSION

The above discussion, augmented by previous telephone conversations with your staff, provides reasonable assurance that the hydrogen analyzer systems can be taken out of service for the indicated period of time without causing any undue risk to the public health and safety. Additional assurance is provided by the extreme unlikelihood that a major loss-of-coolant-accident will occur during the additional short time that an analyzer may be out of service.

As discussed with your staff, we expect to begin replacement of the hydrogen analyzers on or about November 9, 1981 and would like to have prior to that time verbal assurance that the request will be granted so that we may proceed in confidence with the

modifications. We further request that the extension as granted remain in effect until both analyzer systems are replaced and fully tested (a period of about 8 months from 11/9/81).

If you still require additional information, please contact the undersigned.

We have determined that this submittal constitutes supplementary information to a previous request and that, pursuant to 10CFR Part 170, no additional fee is required.

Sincerely,

R. C. L. Olson
Principal Engineer
Nuclear Licensing & Analysis Unit

cc: Messrs: J. A. Biddison
G. F. Trowbridge
D. K. Jaffe
R. E. Architzel