

A:\CATBRK

MEMORANDUM TO: C.BERLINGER, B/C, EELB

27 Oct. 1993

FROM: C.MORRIS

SUBJECT: CATAWBA BREAKER COORDINATION SAFETY EVALUATION

I think that you and I and E. Weiss should meet to discuss the Catawba breaker coordination safety evaluation, because my current instructions, from E.Weiss, are wasting, I believe, the NRC's and the licensee's money, on work, that I am persuaded, cannot yield worthwhile results, in a reasonable time.

The attached package represents the safety evaluation (SE) I gave to E. Weiss on 18 Aug. 1993. After receiving his comments on 07 Sep. 1993 with his instructions to do a "technical analysis" of some unspecified kind which he thought I should be able to guess, I replied with my explanatory memorandum of 21 Sep. 1993. E. Weiss's reply to that memorandum was, "Do not to send me anymore explanations or comments by memorandum." On 23 Sep. 1993, he gave me the Sep. 17, 1993 memorandum, also attached, by T. Murley, entitled, COST BENEFICIAL LICENSING ACTIONS, which I find too equivocal to be useful, but of which E.Weiss said that it would answer all my questions relating to the Catawba SE.

During my review of Catawba's electrical design, to see what kind of "technical analysis" was feasible, I found a line in the licensee's PSAR in section 8.3.2.1.2.1.3.4 125 VDC Vital Instrumentation and Control Power Distribution Centers and Panel boards, pregnant with possibilities; namely, "Each of these two remaining dc distribution centers are powered from two independent sources via auctioneering diode assemblies.... The two auctioneered distribution centers, along with their associated auctioneered diode assemblies, are located in separate rooms in the Auxiliary Building so that a fire in the control complex would not result in the loss of control power to the minimum equipment required to safely shut down the unit.

The implication of this underlined phrase, in fact what it plainly says, is that if the equipment on one of the two auctioned 125 VDC buses per division could be powered, then the plant could be safely shut down for any design basis event. Then if this were so, perhaps EELB could accept uncoordinated 125 VDC safety breakers, because the loss of even an entire not auctioned 125 VDC vital power bus could not disable the minimum required shutdown load set of even one of the two safety divisions.

On 05 Oct. 1993, by telephone, I asked Catawba if this is what was meant by the underlined phrase and whether they would send EELB a letter affirming that the plant could be safely shut down, for all design basis events, if the auctioned bus loads for one auctioned bus in one division were operable. At that time, the licensee's staff said that they didn't know but would investigate.

9605080165 960402  
PDR ADOCK 05000413  
G PDR

and report to the PM, R. Martin.

CATBRK

27 Oct. 1993

- 2 -

On 26 Oct. 1993, in a second telephone conversation, Catawba said that the sentence in the FSAR did not mean as much as I had hoped it would, that it implied too much, and that Catawba could not say that the loads on an auctioned bus were the minimum set of loads needed to safely shut down the plant for every design basis event. Catawba said further that they had tried to see if they could find such a minimum set and had concluded that too many manhours would be needed with no assurance of success, and that the question was very complicated. I fully agree; this is what I unsuccessfully tried to tell E. Weiss on 07 Sep. 1993, when I was told to do a "technical analysis."

You will have understood by now that that is precisely what a "technical analysis" would have to do to be useful; i.e., find the set of loads which must function for the worst case design basis event. If a PRA were available for Catawba, an analysis of it might be made to give a conservative answer for some events. But no PRA has been done for Catawba. ?

I will not repeat here the arguments in the attached SE and the memorandum of 21 Sep. 1993, arguments that we must use in the absence of a PRA or equivalent "technical analysis."

To conclude, we need to meet to resolve the question of whether EELB can accept the licensee's argument as to why he need not correct the breaker lack of coordination. My opinion is that we cannot, for the reasons given in the attachments. Expected resistance from the licensee, CRGR, and others is not a consideration proper to a technical review, however much such resistance may obtrude in the political world.

Following Weiss's instructions to coordinate the issue with J. Lazevnick, he was asked about allowing licensees to operate with uncoordinated safety breakers; his answer was that, if the consequences were not too severe, it might be alright. I do not think such a basis, or anything like it, is acceptable for reasons given above.

Despite your displeasure that this memorandum is sure to evoke, in view of circumstances in the branch at present affecting myself, upon which I will not elaborate here, I think it prudent to record my position on this issue and to explain the lack of progress on this SE, a circumstance which the PM has already commented on.

C. Morris

EELB

cc: E. Weiss, S/C, EELB