

MEMORANDUM TO: James M. Taylor
Executive Director for Operations

FROM: Charles E. Morris, EELB

SUBJECT: DIFFERING PROFESSIONAL OPINION CONCERNING
UNCOORDINATED CIRCUIT BREAKERS AT
CATAWBA NUCLEAR STATION

On 06 May 1994, I submitted the attached DPV memorandum to W. Russell, NRR/DO, about uncoordinated circuit breakers at Catawba.

On 21 July 1994, W. Russell sent me the attached, "Differing Professional View Re Uncoordinated Breakers at Catawba Nuclear Station." The DPV response said that the licensee should formally submit the proposal to change the FSAR, only, and not the deficient circuit breakers and said further, that if the safety risk from the uncoordinated breakers could be shown to be low, the staff might approve the licensee's application. Plainly, if the licensee can indeed show that the risk is low enough, he might gain staff approval of almost any proposal.

My problem with the DPV Standing Panel (DPV-SP) response is that it did not address what I said in my memorandum to W. Russell of 04 May 1994: "The most important concern raised in this DPV is that if the staff accepts the licensee's argument that because a fully redundant safety train might perform the requisite safety functions... the staff can permit the licensee to change the FSAR, only, and can allow him to operate with known safety deficiencies."

The same subject was further addressed in my 21 September 1993 memorandum to E. Weiss, entitled: Catawba Breaker Coordination; to wit: "(1) The staff cannot accept a continuing failure to coordinate safety breakers because of associated costs, because: (1.1) Redundant safety trains are...part of the defense-in-depth against random operational failures. Redundant safety trains cannot be used to excuse known design deficiencies." This memorandum was attached to my DPV submittal.

Despite my emphasis on the question of covering safety deficiencies by redundancy, instead of reserving its use for those random operational failures that always surprise us, the DPV-SP did not comment on the question that I described in my DPV submittal to W. Russell as, "an issue which requires for its resolution a more responsible level of management than could be found in EELB."

I further wrote, in the same DPV memorandum, "What is needed, now, is a policy statement, from a higher level than branch, that an argument so generally applicable to all plant safety systems is acceptable to the NRC. I believe, and have so stated in the attached memoranda, that it is not. If the DPV panel decides it is, then some reason to limit the general argument to safety breakers must be given in their response."

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Thus, given these repetitions, it is not possible that the DPV-SP overlooked my principle concern, and I am driven, therefore, to an even higher level of management for an answer.

Another related concern, in my DPV of 06 May 1994, was the repeated application of the principle in question, namely, covering known safety train deficiencies by the redundant safety train, or what I shall refer to hereinafter as the covering principle, if it were once accepted by the NRC. I wrote then: "The concerns expressed in this DPV are mitigated by the frequent absence of consistency between SEs, but this lack of consistency might disappear with respect to this particular licensee argument, because of the enormous relief repeated applications of it could bring to licensees who were willing to operate with discovered, manifold deficiencies, depending, in each case on the other safety train to safely shut down the plant."

Even as the DPV-SP should have been considering the covering principle, in EELB, a branch of DE, for which B. Sheron, a member of the DPV-SP, is the division director, the attached memorandum, entitled "Staff Actions Resulting From the Diagnostic Evaluation at Quad Cities Nuclear Power Station (TAC Nos. M88667/M88668)", from C. Berlinger, B/C, was issued on 13 July 1994. In this memorandum EELB says, "Since most plant designs have two independent 100-percent divisions of electrical power for all analyzed events, the overall single-failure criterion has been met by providing independent sensing for each division." Just as in the case of the uncoordinated breakers, the staff proposes to accept non-compliance with NRC requirements for each division on the basis of a probability calculation. The Catawba calculation has not been done so it cannot be criticized, but the SPSB calculation of the CDF frequency for failed UVR coinciding with DBLOCA is inadequate for acceptance of so important a change in regulating procedures as the continued application of the covering principle.

There are few pleasures as irresistible as quoting one's own words and of finding one's predictions coming so promptly true; in this case these pleasures serendipitously coincide in the following quote in my May 6th DPV, to wit: "The concerns expressed in this DPV are mitigated by the frequent absence of consistency between SEs, but this lack of consistency might disappear with respect to this particular licensee argument, because of the enormous relief repeated applications of it could bring to licensees who were willing to operate with discovered, manifold deficiencies, depending, in each case on the other safety train to safely shut down the plant." QED.

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One may charitably suppose that in the case of the Quad Cities memorandum, the concurring parties saw no connection with the pending DPV-SP report on the very issues addressed in both documents.

Permit me to urge you to make haste resolving this DPO for, "... you know that I have but little time to stay, and once departed may return no more."

C. Morris

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Attachments:

- (1) Staff Actions Resulting From the Diagnostic Evaluation at Quad Cities Nuclear Power Station....(July 13, 1994)
- (2) Documentation of Generic Safety Issues on Degraded Voltage Protection, (July 13, 1994)
- (3) Follow-up Actions to NRR Standing Panel RE DPV on Uncoordinated Breakers at Catawba Nuclear Station, (July 22, 1994); and all its attachments.