

December 26, 2001

MEMORANDUM TO: Chairman Meserve COMEXM-01-0001
Commissioner Dicus
Commissioner Diaz
Commissioner Merrifield

FROM: Edward McGaffigan, Jr. /RA/

SUBJECT: D.C. COOK POTENTIAL RED FINDING, AND THE
IMPLEMENTATION OF THE SIGNIFICANCE DETERMINATION
PROCESS WITHIN THE REACTOR OVERSIGHT PROGRAM

The staff proposes to issue a preliminary Red finding to D.C. Cook, without having conducted a Phase 3 significance determination process (SDP) analysis, based on a flawed Phase 2 SDP analysis following an August 2001 event. I strongly oppose this action and urge instead that Region III follow the example of other Regions, which carry out Phase 3 analyses before issuing preliminary above Green findings.

The Commission approved the April 1, 2000, implementation of the Reactor Oversight Program (ROP) in the Staff Requirements Memorandum (SRM) for SECY-99-007 and -007A. The ROP replaced the previous SALP program, and was intended to be a more objective and risk-informed process. As we stated at several public meetings, the ROP was, and still is, a "work in progress," and additional changes and clarifications would almost certainly need to be made as the Agency gained experience with the process. Commission oversight of ROP implementation is an integral part of the overall process, and I feel strongly that such oversight is now necessary.

The sequence of Agency actions to assess inspection findings in the ROP was depicted in the two attached figures within SECY-99-007A. These figures are ambiguous and unfortunately lend themselves to multiple interpretations. My reading of those figures, then and now, was that the ROP would use the SDP as a multi-level screen to review inspection findings. The last "box" on the first figure ("Assessment and Enforcement Process") was, then, the issuance of a public letter and the conduct of a public meeting. The "box" before that one was labeled, "Engage Licensee and NRC Risk Analysts for Refinement." On the other attached figure, the lowest "box" has the identical title ("Engage Licensee and NRC Risk Analysts to Refine Results") and it is explained as "Phase 3 Risk Refinement (as required)." Putting those two figures together (they are one page apart in SECY-99-007A), I expected that the staff would thus be conducting Phase 3 analyses **prior** to public issuance of preliminary significant (above Green) findings and holding any public meetings on them. Such has indeed been the case in three of the four Regions.

Let me compare the effects of conducting the Phase 3 SDP analyses with not conducting them.

Since the beginning of the ROP, using only those cases involving commercial power reactor safety cases, and not using those case types that involve potentially less mature SDP assessment tools such as security, emergency planning, fire protection, health physics, and environmental qualification, there have been 16 non-Green (preliminary) cases as follows:

<u>Region</u>	<u>EA#</u>	<u>Prelim. Color</u>	<u>Final Color</u>	<u>Downgraded?</u>
Region I	00-179	Red	Red	No
Region I	00-236	White	White	No
Region I	01-132	White	White	No
Region I	01-115	White	White	No
Region I	01-136	White	Green	Yes
Region I	01-206	Yellow	Yellow	No
Region II	00-137	White	White	No
Region II	00-248	Yellow	White	Yes
Region II	00-263	White	White	No
Region II	01-126	White	White	No
Region III	00-128	White	Green	Yes
Region III	00-225	White	Green	Yes
Region III	00-282	Yellow	White	Yes
Region III	01-192	White	White	No
Region III	01-248	White	Green	Yes
Region IV	01-130	White	White	No

Of the four Regions, Region III has been the only one which has implemented the SDP in such a way that highly conservative, deeply flawed Phase 2 SDP results were considered sufficient to issue public letters and hold public meetings. The NRR staff states now, see Dr. Travers' memo of December 26, that the approach used by Region III is the one that the program office had intended in SECY-99-007 and -007A. In fact, the staff intends to have all the other Regions adopt the Region III/NRR approach on the basis of "consistency."

I am strongly of the view that, in effect, Region III has piloted this alternate SDP strategy of not conducting early Phase 3 SDP analyses for significant findings, and I do not like the results. If five out of every six cases results in a "false positive," then the SDP portion of the ROP appears subjective, especially as so few of the Phase 2 SDP notebooks have been benchmarked (14 of 69, and Cook is not one of them) and even fewer have had the defects fixed that were discovered during the benchmarking process. Apparently it will be 2006, six years after the ROP was implemented, before all 69 Phase 2 SDP notebooks will be benchmarked and fixed. This is despite the fact that the ACRS has urged that the fundamental tools of the ROP be promptly updated. I believe that the Commission needs to give the staff clear guidance to reprogram funds to correct this problem promptly, not by 2006. Analyses under current conditions with broken, unbenchmarkable notebooks are very sensitive to assumptions, such as exposure times presented by equipment problems, and are not reliable.

Literally 60% of the cases Region III publicly issued as non-Green findings and on which public meetings were held had to be downgraded to the level where no meetings would have been held at all (Green findings).

The main driver for the staff's desire to proceed apace with the D.C. Cook Red finding appears to be a laudable interest in timeliness. However, timeliness numbers are goals, and the staff should take the time to conduct the necessary Phase 3 analyses for significant (above Green) findings and ask for more time for those cases, if more time is needed.

The staff also makes a public confidence argument related to the scrutability of the Region III/NRR process, as opposed to the process in the other three regions. I believe public confidence considerations weigh in favor of the other three regions. Getting and keeping the number of public "false positives" or "color over-calls" low is a vital contributor to public confidence. Batting averages such as experienced by Region III, if scaled up for all Regions, would likely erode public confidence by the constant alarmist barrage of "over-calls."

I am not swayed by scrutability arguments. Using an obviously flawed SDP tool to make a high percentage of highly public "false positive" determinations makes us the prisoner of a broken process.

The staff should not issue a finding on the Cook case until completion of a Phase 3 SDP analysis. The staff should, as a general matter, conduct Phase 3 SDP analyses on significant (above Green) reactor safety findings prior to issuing any public communication. Finally, the Commission should direct the staff to reprogram the funds necessary so that the Phase 2 SDP notebooks can be benchmarked and corrected by the end of FY 2003. Perhaps then the NRR/Region III approach will be workable.

SECY please track.

Attachments: As stated

cc: EDO
OGC
SECY