

August 27, 2004

MEMORANDUM TO: Melanie Galloway, Section Chief
Technical Support Group
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
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FROM: Tamara D. Powell */RA/*
Technical Support Group
Division of Fuel Cycle Safety
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SUBJECT: MEETING SUMMARY OF THE FCSS STAFF WORKSHOP ON
BASELINE DESIGN CRITERIA, JUNE 15, 2004

On June 15, 2004, the Division of Fuel Cycle Safety and Safeguards (FCSS) conducted a staff workshop on baseline design criteria (BDC). This was the fifth in a series of staff workshops on Integrated Safety Analysis (ISA) Summary reviews. The workshops are in support of the development of interim staff guidance (ISG) to clarify the ISA portions of the Standard Review Plan (NUREG-1520). The resolutions to the items discussed in the workshops will form the ISGs. Two action items that resulted from the discussions are to establish a clear definition of "new" in reference to a new facility or process and to develop guidance for each BDC. The workshop was well attended and staff eagerly provided feedback, asked questions and raised concerns. The workshop slide presentation is included in the Attachment.

Workshop Details

The highlights from each discussion topic follows.

Applicability of Baseline Design Criteria

Section 70.64 specifies the ten BDC that are to be applied to the design of new facilities and new processes. There has been industry concern over what "new" means and there was also confusion amongst the staff. One staff member had a question about putting an old process in a new building or adding a new line to increase capacity, whether or not that would still be considered new. Some participants thought that it would be considered new, while others disagreed and thought that if something was already in place, then BDC doesn't apply so it wouldn't be considered new. A commenter noted that during the revision of Part 70, the argument from industry was that they didn't want to have to retrofit if they were adding a new line. Therefore, the rule was designed to give licensees flexibility by not requiring backfit for a duplicate line, but the licensees are still expected to meet the performance requirements of 70.61. The original intent, when the rule was being written, was that "new" meant a new process that wasn't covered in the license. This would prevent ending up with something less safe than what was already in place.

A few staff felt that licensees are taking exception to labeling something a new process. The comment was made that if a process is duplicated, then it would not be necessary to look at BDC; only the ISA portion would be applicable. Some staff thought that the ISA would reach the same endpoint because if the licensee takes exception to BDC, then it must be explained in the ISA. The suggestion was made to take on a case-by-case basis, but there was some staff concern about licensees knowing what actions other licensees have done to define something as “new”. It was clarified that decisions now should be based on the specifics and merits of each case and not on earlier decisions. Most staff felt that there is often not internal agreement on what “new” is and there was concern about consistency among the staff. There was consensus that a clear, but not too prescriptive, written definition of “new” would be of benefit to the staff.

Level of detail for Baseline Design Criteria Submittals

Licensee submittals should identify and discuss each BDC separately. Information supporting how the BDC is met and a discussion of how the design provides for the requirement should be included. For the quality standards and records BDC, how the design is developed per management measures and how the appropriate records will be maintained should also be discussed.

There was staff concern because of the lack of guidance currently in the SRP on BDC (only a few paragraphs in Chapter 3 of SRP). One commenter felt that the BDC are too broad and suggested a comprehensive discussion in the SRP or some type of guidance to make the BDC more effective. Another commenter agreed that if the SRP was more robust it would be more efficient, for us and for the licensees. There was consensus amongst the participants that it would be worthwhile to develop a comprehensive (but not necessarily all inclusive) list defining what is acceptable for BDC.

Instrumentation and Controls to Monitor and Control Items Relied on For Safety (IROFS)

The BDC for instrumentation and controls systems was given as an example and was discussed. Some possible methods to monitor IROFS are information read-outs in the control room or locally, bypass indication and failure detection diagnostics. Manual initiation of interlocks is an example of a possible method to control IROFS. A staff member questioned the use of manual initiation for controlling an IROFS, but it was further clarified that the manual initiation acts as a duplicate for automatic initiation.

Attachment:
Baseline Design Criteria Workshop Slides

cc: R. Pierson, FCSS
J. Holonich, FCSS

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Baseline Design Criteria Workshop Slides

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