



Commonwealth Edison

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September 25, 1984

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Byron Generating Station Units 1 and 2
Braidwood Generating Station Units 1 and 2
Instrumentation for the Detection of
Inadequate Core Cooling
NRC Docket Nos. 50-454/455 and 50-456/457

References (a): July 6, 1984, letter from T. R. Tramm
to H. R. Denton

(b): August 20, 1984, letter from T. R. Tramm
to H. R. Denton

Dear Mr. Denton:

This is to inform you of our schedule for completing the installation of the subcooling margin display on Byron 1 prior to initial criticality. This instrumentation is expected to be ready for operation on the other Byron and Braidwood units at the time of fuel load even though it cannot be made operational until the reactor head is installed on the vessel. Additional information on this instrumentation is also being provided.

At Byron and Braidwood the primary display of subcooling is on a CRT at the operator's console. Subcooling can also be determined manually from hard-wired meters on the main control board as described in reference (a). Present schedules indicate that the installation and testing of the computer software which produces the primary display may not be completed prior to October 15, 1984. The instrumentation for manual backup subcooling determination will be available at fuel load but the computer display will not be available until initial criticality.

This is considered acceptable because subcooling determinations are not important until decay heat and a significant fission product inventory are present. The subcooling instrumentation would not be operational during fuel loading anyway because the reactor vessel head must be installed before the thermocouples are in position to indicate core temperature. In this situation reliance upon manual subcooling determinations is entirely adequate.

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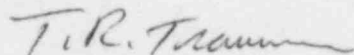
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A correction is necessary to the descriptions of the subcooling margin monitor provided in references (a) and (b). The subcooling indication will be available at all times on the SPDS displays, both wide and narrow range. The operator selects the display for the appropriate plant conditions. The narrow range provides information on plant safety status during power operations (Mode 1). The wide range provides information for Modes 1-5.

As indicated in reference (b), the implementation letter report on the instrumentation for the detection of inadequate core cooling will be submitted as soon as possible. This report will be submitted prior to exceeding 5% power on Byron 1.

Please address questions regarding this matter to this office.

Very truly yours,



T. R. Tramm
Nuclear Licensing Administrator

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