

Three Mile Island, Unit No. 1
Docket No. 50-289

An analysis has been completed concerning the operator actions necessary to insure an adequate supply of cooling water to the reactor core in the event of a double-ended break in one of the two lines which connect a core flooding tank to the reactor vessel. Our conclusions are contained in the following input material for the Safety Evaluation Report:

Operator Actions

Since the rate of supply of cooling water to the core does not meet the Commission's "abundant emergency core cooling" criterion, the applicant was requested to provide a method of supplying additional water for this postulated accident. This additional water should be supplied at a rate which would insure that the core could be reflooded at a reasonable rate.

To supply this additional water, the applicant has modified the Decay Heat (DH) removal system piping by adding a cross-connect line, and has prepared operating procedures to be used in the event of this accident. These procedures will direct an operator to perform the necessary valving to ensure that water from the DH system will be delivered to the reactor vessel within 15 minutes. The operator will be required to rearrange the valving in the DH system such that at least one-half the flow rate from the DH pumps will be injected into the vessel. This amount of additional water would assure that an abundant supply of cooling water is available to reflood the core and remove stored and decay heat.

1486 002

7910171

0-4

We have reviewed the makeup of the Three Mile Island Unit 1 operating staff and conclude that the shift staffing as specified in the Technical Specifications is sufficient to perform the necessary actions to safely mitigate the consequences of this accident.

1486 003