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December 29, 1983
5211-83-377

Office of Nuclear Reactor Regulations
Attn: John F. Stolz, Chief
Operating Reactors Branch No. 4
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Abnormal Transient Operating Guidelines (ATOG)
Implementation (NUREG 0737, I.C.1)

In our April 15, 1983 response to Generic Letter 82-33 we committed to implementing revised Emergency Operating Procedures (EOPs) at TMI-1 in accordance with NUREG 0737, Supplement 1 guidance, prior to Cycle 6 startup. Because of the progress made by the B&W Owners Group on ATOG, our own internal ATOG Implementation Committee and the recent issuance of the NRC Staff SER for ATOG (Generic Letter 83-31, dated September 19, 1983), we have been able to advance our schedule for implementation of revised EOPs. As we described in our meeting with the Staff on December 16, 1983, we planned implementation of revised EOPs by January 1984. This is to advise you that the revised EOPs will be in effect for use by the operators in January 1984.

With this letter we are submitting for the Staff's review copies of our:

1. Training materials that include copies of the draft revised procedures (Attachment 1).
2. Schedule for training on the simulator (Attachment 2)

We plan to provide the finalized Procedure Generation Package by January 31, 1984. This package will consist of a copy of the plant specific guidelines, a description of our verification/validation (V/V) program and a writer's guide.

The procedures (see Attachment 1) we have implemented were developed using the TMI-1 ATOG documents issued by B&W in April 1983 as well as guidance developed internally by the TMI-1 ATOG Committee(s). (The current committee is comprised of representatives from Plant Operations, Plant Engineering, Safety Analysis & Plant Control, Training, Quality Assurance, and Human Factors Engineering.) These procedures represent a significant improvement in that they simplify the

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operators approach to transient management. As we described in our April 15, 1983 response to Generic Letter 82-33, the basic concepts included in the rules and guidelines have previously been incorporated into the existing plant procedures. These include:

- . HPI initiation and throttling based upon subcooling margin and loss of heat sink,
- . RC pump trip on loss of subcooling margin,
- . RC pump restart criteria,
- . OTSG level control at 95% when subcooling is lost,
- . Improved feedwater control to prevent overcooling,
- . RCS pressure/temperature limits,
- . Inadequate Core Cooling,
- . Diagnosis of plant symptoms using Pressure and Temperature Plots.

The following material has also been considered as part of the baseline ATOG material and incorporated into plant procedures:

- . ATWS guidelines provided to NRC Staff in July 1983
- . Natural circulation interruption actions during LOCA provided to NRC Staff in July 1983
- . Steam Generator Tube rupture procedures for single and multiple ruptures in one or both OTSGs previously provided to the NRC Staff.

The final aspect of ATOG implementation is the synthesis of all of the above technical improvements into a symptom oriented approach. ATOG also provides an opportunity for greater consistency in plant operation by defining rules and guidelines that apply to all emergency conditions. Finally, the ATOG format simplifies and makes the procedures more usable by control room operators.

We developed abnormal transient procedures (ATP) for TMI-1 and a training program during October, November, and December. During the week of December 12, 1983, the ATPs were used at the Lynchburg simulator in response to plant casualties. A crew consisting of three Reactor Operators and one Senior Reactor Operator used the procedures. Comments generated during this session were evaluated and incorporated as appropriate, into the ATPs and training material. This and previous procedure walk-throughs in the TMI-1 control room served as partial validation of the draft ATPs.

The training program for licensed operators will be completed by March 1983 and consists of two phases. Phase I is complete and began on December 17, 1983. Phase I consisted of five hours of classroom and on shift training to provide the operator with an introduction to the new ATPs. The training included a history of ATOG development, an introduction to the ATOG symptom oriented philosophy, and a preliminary review of the proposed ATPs. The training on the ATPs consisted of a step by step review to emphasize any differences between the ATPs and the procedures previously in place. The lesson material used in this program is in Attachment I. Additionally, Pressure/Temperature Plot training, conducted at TMI, was completed on December 19, 1983.

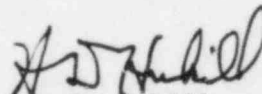
GPU has contracted with Babcock & Wilcox for use of its Lynchburg simulator during the months of January and February 1984 for Phase II Operator Training at the B&W simulator and will include classroom sessions and simulator exercises. The schedule of the classroom and simulator training is contained in Attachment 2.

Inasmuch as the above schedule does not provide 3 months for NRC review as envisioned by Item 7.2.b of NUREG 0737 Supplement 1, we propose to meet with the NRC Staff during the first week of January. In the meeting we will describe in detail our ATOG approach. We will also identify and discuss reasons for differences between our approach and the baseline ATOG documents. By January 31, 1984 we will provide our finalized procedure generation package consisting of the plant specific guidelines that will document the above differences, a description of the validation program, and a finalized writer's guide.

We believe that the above plan is consistent with the intent of the NRC Staff's SER on ATOG issued on September 19, 1983. We also believe that because of the ongoing NRC involvement with the B&W Owners Group over the past several years, coupled with the Staff's desire to implement ATOG as expeditiously as practical, this approach is acceptable from the standpoint of scheduling NRC Staff review.

Please contact us as soon as possible to make final arrangements for the requested meeting.

Sincerely,


H. D. Hukill
Director, TMI-1

HDH:CWS:vjf

Attachments

cc: J. Van Vliet
R. Conte
H. L. Thompson