

*Docket Room*

FEB 4 1986

Docket No. 50-289

MEMORANDUM FOR: Harry Kister, Chief  
Projects Branch No. 1

FROM: Allen R. Blough, Chief  
Reactor Projects  
Section 1A

SUBJECT: TMI-1 STATUS REPORT FOR THE PERIOD JANUARY 24-31, 1986

Enclosed is the TMI-1 weekly status report from the NRC Resident Office. The enclosed report covers the period from 8:00 a.m., January 24, 1986, to 8:00 a.m., January 31, 1986, and is issued weekly by Projects Branch No. 1.

These reports are intended to provide NRC management and the public with highlights from an NRC regulatory perspective of TMI-1 activities for the previous week. Subsequent inspection reports will address most of these topics in more detail.

Original Signed By:

Allen R. Blough, Chief  
Reactor Projects Section 1A  
Branch 1, DRP

Enclosure:  
As stated

OFFICIAL RECORD COPY TMI1 WEEKLY STATUS REPORT

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H. Kister

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cc w/enclosure:

F. Miraglia, NRR

W. Travers, NRR

J. Thoma, NRR

J. Partlow, IE

T. Gerusky, BRP/DER, Commonwealth of Pennsylvania

R. Benko, Governor's Office of Policy, Commonwealth of Pennsylvania

TMI Alert

Susquehanna Valley Alliance

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bcc w/enclosure:

K. Abraham, RI

P. Lohaus, RI

R. Starostecki, RI

H. Kister, RI

R. Conte, RI (20 cys)

Region I Docket Room (w/concurrences)

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*fr* TMIRS:RI  
RConte  
2/3/86

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TMI1 WEEKLY STATUS REPORT -

02/03/86

## ENCLOSURE

### TMI-1 STATUS REPORT FOR THE PERIOD JANUARY 24-31, 1986

#### 1. Plant Status

As of 8:00 a.m. on January 31, 1986, TMI-1 was in a cold shutdown condition.

#### 2. Facility Operations Summary

At 8:08 p.m. on January 27, a planned shutdown of the reactor was commenced because key parameters being monitored indicated that the condition of the expansion bellows on the eighth stage extraction steam line from the main low pressure turbine had worsened. The shutdown had been deferred from January 17. The reactor reached a cold shutdown condition on January 29, and remained there throughout the rest of the report period.

#### 3. Items of Special Interest

##### 3.1 Partial Loss of ICS/NNI Power

With the plant at 100% power and the Integrated Control System (ICS) in full automatic (auto) control, a 30 amp ICS auto power (subfeed) breaker tripped open at 11:24 a.m. on January 24. A loss of all auto power to all ICS Bailey control stations was experienced. As designed, both feedwater pumps ran back to approximately 4100 rpm.

Operators successfully took manual control of the plant and maintained reactor power at about 95% - 97%; only a very minor plant transient occurred. The affected breaker was closed at 12:38 p.m., the ICS was placed in automatic control, and the plant was returned to 100% power.

Preliminary investigation indicates that a loose wire associated with the ICS auto power breaker caused it to open.

##### 3.2 Steam Line Expansion Bellows Leak

The licensee broke vacuum in the main condenser at 12:46 p.m. on January 29, and shortly thereafter entered the "C" condenser through an access hole cut in the condenser shell. The licensee found one of two bellows on the eighth stage extraction lines in the "C" condenser to be completely destroyed. The licensee searched for the liner from this bellows inside the main condenser and extraction steamline but was not able to locate it. On January 31, a qualified diver was to be sent into the flooded portion of the main condenser (hotwell) to determine if the liner was there.

The remaining bellows on the eighth stage extraction line in the "C" condenser and the remaining four bellows on the eighth stage extraction lines in the "A" and "B" condensers were found to be cracked.

The licensee is replacing them. The licensee is not sure what caused the failures, but preliminary investigation indicates that welding splatter on the bellows during plant construction may have caused stress risers that led to premature failure.

Visual inspection of other bellows on other stages of steam extraction lines from the low pressure turbines revealed no abnormal problems. When work is complete, the licensee will return to full power operation.

### 3.3 NRC Reassessment of B&W Reactors

The NRC staff has concluded that there is a need to reassess the long-term safety of nuclear reactors designed by Babcock & Wilcox. Utilities operating B&W plants were notified in a January 24, 1986, letter from Victor Stello, Acting Executive Director for Operations.

The NRC staff expects to develop a detailed program plan by mid-February and to complete the re-examination in 1986. The staff is requesting the B&W Owners' Group's assistance in developing the reassessment program plan. However, the NRC staff believes the reactors can operate safely in the interim. Although the reassessment is being coordinated by NRC Headquarters, NRC Region I plans to contribute.

In his letter, Mr. Stello pointed out that the NRC staff has recognized since the TMI-1 accident in 1979 that B&W plants are more sensitive in their response to operational events than other pressurized water reactors. A number of recent events at other B&W plants, such as Davis-Besse and Rancho Seco, has reinforced this concern.

The licensee has made numerous modifications to TMI-1 and there are significant differences between TMI-1 and other B&W plants. During TMI-1 restart, NRC Region I staff had obtained preliminary information indicating that the events at Davis-Besse and Rancho Seco did not warrant immediate action relative to TMI-1, although some long term generic activities had been expected. It is not certain what effect, if any, the NRC's generic reassessment plan will have on TMI-1. The NRC staff will have to determine if the present set of requirements for B&W reactors are appropriate in the long term.

### 3.4 Steam Generator Tube Plugging Criteria

On January 29, the resident inspector attended a meeting between GPUN and the NRC licensing staff in Washington, D. C., to discuss a proposed change to the Once-Through Steam Generator tube plugging criteria. Presently, the technical specifications require that a tube with an indicated defect of greater than 40% be removed from service. The meeting focused mainly on the technical perspective of relaxing this requirement, necessary testing required by the licensee to support any change in the criteria, and whether the staff would be receptive to an interim relaxation of the 40% criteria to 50% for the

upcoming eddy current outage. A meeting summary will be issued by the Office of Nuclear Reactor Regulation (NRR) and a transcript will also be publicly available. Region I and the resident office will continue to follow this area.

4. TMI-1 Staff Status During the Period

During this report period, routine coverage was provided by the normal Region I organization. The staff consisted of the senior resident inspector and resident inspector, supplemented by several Region I based inspectors listed in paragraph 5.

The staff's inspection plan for this period covered the primary functional areas of operations, maintenance, surveillance, security, and required technical and safety reviews. The staff continued to evaluate the performance of licensee personnel and the plant.

The last weekly status report for the period January 17, 1986, to January 24, 1986, was issued on January 28, 1986.

During this period, Region I issued one preliminary notification on January 27, 1986, concerning the plant shutdown due to the steam line expansion bellows leak.

5. TMI-1 Staff Composition During Period

The TMI-1 staff was comprised of the following personnel during the period:

- A. R. Blough, Chief, Reactor Projects Section 1A
- R. J. Conte, Senior Resident Inspector
- F. I. Young, Resident Inspector
- R. J. Urban, Reactor Engineer
- W. N. Baunack, Project Engineer
- J. M. Dunlap, Physical Security Inspector
- C. M. Tavares, Physical Security Inspector
- W. J. Madden, Physical Security Inspector
- C. P. Hix, Secretary
- L. M. Prough, Secretary