

Donald C. Shelton  
Vice President - Nuclear  
Davis-Besse

300 Madison Avenue  
Toledo, OH 43652-0001  
(419) 249-2300

Docket Number 50-346

License Number NPF-3

Serial Number 1938

May 17, 1991

United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

Subject: Deferral of Several 7RFO Commitments

Gentlemen:

This letter is to confirm the status of several modifications previously committed to be implemented during the upcoming seventh refueling outage (7RFO) for the Davis-Besse Nuclear Power Station Unit 1. The revised schedule for implementation of these commitments was briefly discussed at the April 5, 1991 Quarterly Management meeting.

The duration of the 7RFO had been previously established as 70 days. The critical path for 7RFO was the replacement of the remaining two essential inverters. Since the original scheduling of the refueling outage it was decided that the installation of the remaining two inverters was no longer necessary. Notification of this change was made in Serial 1899, dated March 21, 1991. As a result of this change, the total time to complete the remaining modifications became critical path for the outage.

It also became apparent that the duration of the eighth refueling outage (8RFO) was increasing as the scope of the critical path activity, Reactor Coolant Pump refurbishment, became better defined. As a result of the increased duration of 8RFO, it was decided to review the work scheduled for 7RFO to determine if it could be deferred to 8RFO, thus decreasing the duration of 7RFO.

In order to determine if any modifications could be deferred from 7RFO a reassessment of all approved modifications was performed. Each modification was evaluated relative to its impact on: 1) plant safety, 2) plant reliability, 3) resource availability and 4) impact on overall outage duration.

9105300065 910517  
PDR ADJOCK 05000346  
P PDR

Operating Companies  
Cleveland Electric Illuminating  
Tedo Edison

1001

Docket Number 50-346  
License Number NFF-3  
Serial Number 1938  
Page 2

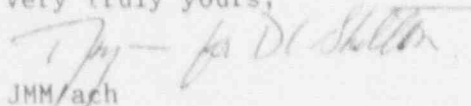
As a result of the reassessment several modifications committed to the NRC to be completed during the outage were deferred. These modifications are in the areas of: B&W Owners Group Safety & Performance Improvement Program (SPIP); Human Engineering Deficiencies (HED) resolution; Makeup System improvements for feed and bleed; and N Bulletin 89-02, stress corrosion cracking of bolting in certain Anchor Darling swing check valves.

Attachment one provides a brief summary of the original commitments and revised implementation schedule.

Toledo Edison has reviewed the deferral of these commitments both on an individual and collective basis and has concluded that their deferral will not adversely impact the continued safe operation of the Davis-Besse Nuclear Power Station.

If you have any questions, please call R. W. Schrauder, Manager - Nuclear Licensing at (419) 249-2366.

Very truly yours,

  
JMM/ach

Attachment

cc: P. M. Byron, NRC Region III, DB-1 Senior Resident Inspector  
A. B. Davis, Regional Administrator, NRC Region III  
J. B. Hopkins, NRC/NRR DB-1 Senior Project Manager  
Utility Radiological Safety Board

Attachment 1

B&W Owner's Group Safety and Performance Improvement Program Items

By letter dated January 24, 1986, the NRC Executive Director for Operations informed the Chairman of the B&WOG that a number of recent events at B&W designed reactors should be re-examined. B&WOG responded by committing to lead an effort to define concerns relative to reducing the frequency of reactor trips and the complexity of post trip response in B&W plants. This program was entitled Safety and Performance Improvement Program. The SPIP program developed 222 technical recommendations (TRs) that were to be evaluated by each utility for applicability to their particular plant. Of the 184 recommendations applicable to Davis-Besse, 170 have been closed and 14 remain open.

The remaining 14 items will be completed during the upcoming outage with the exception of the following items.

TR-159-OPS remote manual control of all post trip steam flow paths

TR-178-ICS safe state on loss of power to ICS/NNI

TR-114-PES installation of synchronized check relays on diesel generators

TR-159-OPS includes installation of motor operated valves to provide control room isolation of various steam paths. This is an operational enhancement to allow selective isolation. Currently this is accomplished by closing the main steam isolation valves.

TR-178-ICS provides for an automatic trip of the reactor on loss of power to Integrated Control System/Non-Nuclear Instrumentation (ICS/NNI) and activation of the Steam Feed Rupture Control System (SFRCS) along with modifying power to the atmospheric vent valves. This function is now accomplished by manual operator actions directed by plant emergency procedures. The atmospheric vent valve power modification is also considered an operational enhancement to allow operation of these valves from the control room versus local manual handwheel in the event of a loss of ICS power.

TR-114-PES provides protection to assure the diesel generators cannot be synchronized to the grid out of phase. The modification to implement this recommendation will install synchronized check relays for the output breakers to ensure the breakers cannot be closed with the generators out of phase from the grid. Emergency Diesel Generator (EDG) 1-1 will be completed this outage while EDG 1-2 will be completed by the end of 8RFO. The new diesel generator scheduled to be installed this outage, to satisfy 10 CFR 50.63 will be installed with the synchronized check relays in place.

Docket Number 50-346  
License Number NPF-3  
Serial Number 1938  
Attachment  
Page 2

Toledo Edison had previously notified the NRC that all remaining SPIP items would be completed prior to restart from the 7RFO. The recommendations remaining after 7RFO will be completed by the end of 8RFO.

#### Human Engineering Discrepancy (HED) Resolution

In August 1990, (Serial 1820), Toledo Edison submitted an addendum to the 1988 Detailed Control Room Design Review (DCRDR) Summary Report. This addended report contained a section providing a schedule for the completion of outstanding HEDs. Toledo Edison committed to complete the remaining items by the end of 7RFO. Toledo Edison is deferring two of the remaining HEDs due to emergent work with greater safety significance for the facility. The two items being deferred are HED numbers 4.1.020 and 9.8.044.

HED 4.1.020 is to install dual light indication on motor operated throttle valves. Of the sixteen valves requiring modification, five non-safety related valves remain to be modified. One valve will be worked during 7RFO, while the remaining four valves will be worked during cycle eight.

HED 9.8.044 is to modify indication lights on motor operated valves to represent actual travel limits. Of the approximately 150 valves requiring modification, fifteen non-safety related valves remain to be worked. The work on these valves is currently scheduled during 8RFO; however, should any of these valves require corrective maintenance this outage the indication lights will also be modified.

#### Reactor Coolant System (RCS) Makeup System Upgrades for Feed and Bleed

Toledo Edison made a long term commitment in a November 4, 1985, submittal (Serial 1207) to enhance the existing primary system feed and bleed capability at Davis-Besse. The original commitment, based upon a preliminary evaluation, involved installation of Reactor Coolant System (RCS) blowdown valves. In subsequent submittals (Serial numbers 1382, 1526, and 1656 dated June 25, 1987, August 8, 1988 and May 5, 1989, respectively), the original blowdown valve approach was modified because detailed analysis could not fully support viability of the method. As a result, in order to achieve an effective method of feed and bleed cooling capability, RCS makeup system flow enhancements and upgrade modifications were made during the fifth and sixth refueling outage.

Docket Number 50-346  
License Number NPF-3  
Serial Number 1938  
Attachment  
Page 3

In letter Serial 1836, dated September 18, 1990, Toledo Edison informed the NRC of the status of the Feed and Bleed modifications after the sixth refueling outage. This letter stated that TE satisfied its commitment to enhance the feed and bleed capability with the exception of qualification/replacement of the AC powered makeup pump bearing oil pump motors. Toledo Edison committed to install new qualified motors during 7RFO.

As previously stated, when compared to the other modifications scheduled for this outage, this modification does not contribute to plant safety and reliability to the degree that the other modifications do, therefore it was determined that this modification be deferred until 8RFO.

NRC Bulletin No. 89-02, Stress Corrosion Cracking of High-Hardness Type 410 Stainless Steel Internal Preloaded Bolting in Anchor Darling Model S350W Swing Check Valves or Valves of Similar Design

Toledo Edison responded to NRC Bulletin 89-02 on June 14, 1990 (Serial 1807) by stating that no Anchor Darling swing check valves are installed at Davis-Besse in safety related applications. However, the review identified twelve Velan valves of similar design. Toledo Edison reported that modifications have been completed on eleven of the twelve identified valves.

Visual examination of eleven Velan valves during the sixth refueling outage (6RFO) identified no cracking of the retaining bolts. The remaining valve, Component Cooling Water Valve CC-91, was not inspected during the 6RFO as stated in Serial 1807 and was to be inspected during 7RFO. Inspection of CC-91 requires CCW Train 2 drainage. This would create a condition in which CCW Train 1 would be available with Train 2 drained and fuel in the core. This is not a preferred plant condition as a fault in Train 1 would result in loss of all CCW cooling.

Inspection of CC-91 is not considered critical since it was disassembled and inspected during 5RFO. No evidence of bolting degradation was identified at that time. Further, four similar valves of the same type as CC-91 were inspected and no evidence of bolting failure was found. Also, as part of the In-Service-Test (IST) Program, CC-91 will be reverse flow tested during the 7RFO.

Based on the above, CC-91 inspection is being rescheduled for 8RFO when the preferred plant condition, full reactor core off-load, is scheduled.