U.S. NUCLEAR REGULATORY COMMISSION

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

DOCKET NUMBER: 50-346

FILE NUMBER:

TO: Mr. John F. Stolz

FROM: Toledo Edison Company
Toledo, Ohio
Lowell E. Roe

DATE OF DOCUMENT: 4/25/77

DATE RECEIVED: 4/27/77

LETTER: ✗ ORIGINAL ☐ COPY ☐ NOTORIZED ✗ UNCLASSIFIED

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DESCRIPTION:

Ltr. indicating that the information requested in the NRC 4/12/77 ltr. concerning Overpressure Protection During Startup or Shutdown was submitted in their 4/7/77 ltr.

PLANT NAME:

Davis-Besse Unit No 1

DISTRIBUTION FOR REACTOR VESSEL INFO FOR NON-OPERATING REACTORS PER N. SMITH 9-6-76

RJL (1-P)

ENCLOSURES:

ACKNOWLEDGED

FOR ACTION/INFORMATION

ASSIGNED AD:
PROJECT MANAGER: Stolz
LIC. ASST.: Engle
Hylton

INTERNAL DISTRIBUTION

REG FILE
I & E (2)
OELD
SITE ANALYSIS
STRUCTURE ANALYSIS
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ACRS
PLANT SYSTEMS
M. SLATER
CHEM ENG

EXTERNAL DISTRIBUTION

LPDR: Pt Clinton, OH
TIC:
NSIC:
ACRS 16 CYS HOLDING AS CAT A

CONTROL NUMBER: 770480102

MA 4
60

NRC FORM 195 (2-76)

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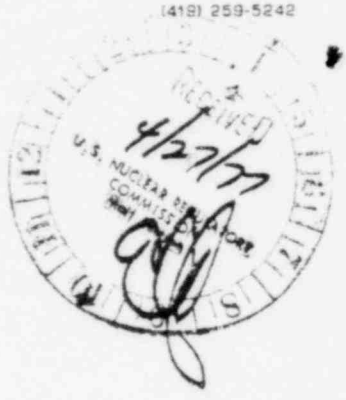
TOLEDO EDISON

LOWELL E. ROE
Vice President
Facilities Development
(419) 259-5242



April 25, 1977

Docket No. 50-346

Serial No. 269

Director of Nuclear Reactor Regulation
Attn: Mr. John F. Stolz, Chief
Light Water Reactor Branch No. 1
Division of Project Management
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Stolz:

The information requested in your letter dated April 12, 1977 concerning Overpressure Protection During Startup or Shutdown of Davis-Besse Unit 1 was submitted in our letter to you dated April 7, 1977, Serial No. 260. If you have any further questions regarding these matters, please let us know.

Yours very truly,

Lowell E Roe

cp c/23

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7.6.1.1.2 System Description

The design of the decay heat removal system includes controls on each of the high-pressure motor-operated valves in the suction line from the RC system. These independent and diverse controls are designed to automatically close the valves or to prevent the opening of the valves when the RC pressure is above 280 psig sensed at the centerline of DH-11 and DH-12. A relief valve is also included in the DH system piping. 22 23

In addition, an interlock is being provided which trips off the pressure heaters if the primary system pressure reaches 280 psig and either one or both valves are not fully closed.

NOTE

Until such time as this interlock for the pressurizer heaters is installed (prior to the second fuel cycle), the following temporary changes are being made to the system:

1. The setpoint for the auto closure feature on valves DH-11 and DH-12 will be changed from 280 psig to greater than 413 psig (referenced at the centerline of DH-11 and 12) which is 93 psig higher than the setpoint of decay heat removal system suction line relief valve PSV-4849. This is determined as follows: 27

Relief valve setting	320	psig	
Setpoint tolerance (3%)	10	psig	92.75 (rounded off to 93)
Relief valve accumulation (10%)	32	psig	
RCS transmitter inaccuracy and drift	13.25	psig	
SFAS accuracy	32.5	psig	
SFAS drift	5.0	psig	
Tech Spec setpoint	413.0	psig	

2. Power will not be removed from DH-11 and DH-12 when the decay heat removal system is in operation.

3. Only one decay heat removal pump will be used to take a suction through DH-11 and DH-12 at one time.

This prevents overpressurizing the DH system in the event the valves are inadvertently left open during heatup or if an operator prematurely tries to open the valves during cooldown.

The automatic closing signal to one of the valves is derived from an RC pressure switch located in RC loop one(1). The automatic closing signal to the other valve is derived from a signal comparator located in the SFAS cabinet. The signal comparator receives its RC pressure signal from the RC loop two(2) wide-range RC pressure transmitter that supplies the signal to the SFAS. 22

TOLEDO EDISON

LOWELL E. ROE
Vice President
Facilities Development
(419) 259-5242

Docket No. 50-346

May 2, 1977

Serial No. 271

REGULATORY DOCKET FILE COPY

Director of Nuclear Reactor Regulation
Attention: Mr. John F. Stolz, Chief
Light Water Reactor Branch No. 1
Division of Project Management
United States Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Stolz:

Resulting from an April 27, 1977 telephone conversation between Mr. G. R. Mazetis of your staff and our Mr. F. R. Miller concerning Overpressure Protection During Startup or Shutdown of Davis-Besse Unit 1, we are enclosing the revised Section 7.6.1.1.2 of the Davis-Besse Nuclear Power Station Unit 1 FSAR. This revision describes the basis for the margin between the relief valve pressure setting and the auto-closure instrumentation set point for DH-11 and DH-12. The enclosed Section 7.6.1.1.2 supersedes the revision which was enclosed in our letter to you dated April 7, 1977, Serial Number 260, and will be included in the next revision to the FSAR.

Yours very truly,

Lowell E. Roe /ew

Enclosures: Davis-Besse Nuclear Power Station Unit 1 FSAR Section 7.6.1.1.2

wp a/1