

Detroit
Edison

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October 25, 1979

EF2-50,633

Mr. James G. Keppler
Regional Director
Directorate of Regulatory Operations
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

Detroit Edison's Second Response to IE Bulletin 79-15

On October 1, 1979, Mr. Frank Jablonski of NRC Region III telephoned Mr. H. A. Walker, Edison EF2 Site QA Engineer, and indicated that Edison's response to NRC IE Bulletin 79-15 (EF2-45,816 of August 16, 1979) required further clarification. NRC IE Bulletin 79-15 requires that all vertical turbine pumps of the "deep draft" type be addressed.

Detroit Edison has investigated this matter again, and our second response to NRC IE Bulletin 79-15 is contained on the attached Edison memorandum (EF2-46,675 of October 15, 1979 - "Additional Information on NRC IE Bulletin 79-15").

If you require additional action by Edison in this matter, please advise us.

Very truly yours,

Edward Hines

HE/lm

Enclosure

cc: Office of Inspection and Enforcement
Division of Reactor Inspection Programs
U.S. Nuclear Regulatory Commission
Washington D.C. 20555

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ENRICO FERMI UNIT 2 PROJECT

ENGINEERING

October 15, 1979

EF2 - 46,675

TO: R. W. Barr

FROM: W. F. Colbert *EL*

SUBJECT: Additional Information on NRC IE Bulletin 79-15

Attached is Engineering's input for Edison's response to IE Bulletin 79-15 questions. It is noted that this bulletin requests a "package" be made up at the site for these pumps including drawings, design specifications, QA manuals, installation procedures, etc. This information is available at site document control.

Written by: R. C. Anderson *RCA*

Attachment

cc w/attachment: E. Lulis
G. J. Butterworth
T. G. Wallace
Document Control (Clears EF2 - 45,693)

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IE Bulletin 79-15

Edison submits the following information in response to the questions in this bulletin.

1. Question: The number of deep draft pumps similar to those shown in Figures 1 and 2 utilized in safety related applications in each facility.

Response: Fermi 2 utilizes a total of 10 vertical turbine ESF service water pumps similar to Figure 1 in IE Bulletin 79-15. These pumps are not used to pump primary coolant water but service water from the RHR Complex building water reservoir.

2. Question: Manufacturer, model, capacity and plant application.

Response: Fermi 2 utilizes these pumps in three systems, RHRSW, EESW, and DGSW systems. Each system is described separately.

RHRSW - (4 pumps)

Two parallel pumps in each division supply the service water to the RHR Heat Exchanges.

Manufacturer: Gould Pumps Vertical Pump Division

Model: VITX-SD, 12 x 18 JMC - 2 stage

Capacity: 4500 gpm each pump.

EESW (2 pumps)

One pump in each division supplies RHR reservoir water to the EECW heat exchangers. The EECW provides auxiliary cooling water to various ESF systems.

Manufacturer: Goulds Pump Vertical Pump Division

Model: VIT, 8 x 14 JMC - 2 stage

Capacity: 1600 gpm.

DGSW (4 pumps)

One DGSW pump supplies each Emergency Diesel Generator with cooling water from the RHR Reservoir..

Manufacturer: Goulds Pump Vertical Pump Division

Model: VIT - 8 x 12 JMC, 2 stage.

Capacity: 800 gpm.

3. Question: Overall dimensions of pumps.

Response: The overall pump length (OPL) from the top of the driver to the bottom of the suction bell is given below. In addition, the TPL from the bottom of the mounting plate to the bottom of the suction bell is included as this dimension is essentially the length of the suction column on figure 1 of this Bulletin.

	<u>OPL</u>	<u>TPL</u>
RHRSW Pumps	48' - 9 7/8"	40' - 10 1/2"
EESW Pumps	45' - 5 1/8"	39' - 6"
DGSW Pumps	43' - 11 5/8"	39' - 4"

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4. Question: Summary of Startup, testing, and routine maintenance history.

Response: The pumps have only been operated during the factory shop tests. They have not yet been operated at the plant site. The Factory tests were conducted on each pump and measured pump head and flow to calculate NPSH and Head-capacity vs. flow curves. All pumps met the design specifications and the curves and data sheet are included in the vendors' Type I manual.

5. Question: Operational problems and major repair efforts.

Response: There have been no repairs necessary to the pumps or motors as they have not been operated. Upon receipt at the Fermi 2 site the pumps were given an inspection for general workmanship and dimensional correctness and were found to be in compliance. It was also verified that the proper "N" stamp was affixed noting acceptance by an authorized inspector.

It should be noted that these pumps and motors were built under a QA Level I inspection program and meeting the requirements of the ASME Section III, Class 3 Code. The pressure retaining parts were subject to NDT (non-destructive testing).

6. Question: The longest interval that each pump has been available for operation without corrective maintenance. Identify the number of cycles of operation during this interval, the duration of each cycle and the operating mode (s) (recirculation, rated flow, etc.) Identify the longest continuous operation at or near rated flow conditions for each pump and the status of the pump operability at the end of the run.

Response: Edison has no operating data on these pumps.