TOLEDO EDISON

RICHARD P. CROUSE
Vice President
Nuclear
(419) 259-5221

Docket No. 50-346

License No. NPF-3

Serial No. 1093

November 21, 1984

Director of Nuclear Reactor Regulation
Attention: Mr. John F. Stolz
Operating Reactor Branch No. 4
Division of Licensing
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Stolz:

On September 19, 1984 a meeting was held between Toledo Edison (TED) and the Nuclear Regulatory Commission (NRC) Staff concerning the Auxiliary Feedwater (AFW) System. During the meeting we proposed a new Startup Feedwater Pump (SUFP) which would also serve as a diverse powered third AFW source for the Davis-Besse Nuclear Power Station Unit No. 1. Per the NRC Staff's request, attached is a general system description (Attachment 1) and flow diagram (Attachment 2).

This proposed SUFP will provide improved flexibility in plant operation at low power levels and a means to supply water to the Steam Generators (SG) via the AFW system should the AFW pumps become unavailable. The initiation of AFW operations via the new SUFP will be manual.

The new SUFP system is still under conceptual design and should any major design problem be encountered, TED will inform the NRC. The actual implementation schedule will be discussed with the Davis-Besse NRC Project Manager and be the subject of future communications.

Very truly yours,

RP Crouse/TDM

RPC:GAB:lah
attachments

cc: DB-1 NRC Resident Inspector

A012
1/1

Docket No. 50-346
License NO. NPF-3
Serial No. 1093
November 21, 1984
Attachment 1

PROPOSED SUFP
GENERAL SYSTEM DESCRIPTION

This description provides the general design criteria for the proposed Startup Feedwater Pump (SUFP) for installation at Davis-Besse. This non-safety grade, non-seismic pump will be installed in the turbine building and will have a sufficiently high flow rating to permit the pump to also be utilized as a 100% capacity, diverse powered, third auxiliary feedwater source.

Power for this electric motor driven SUFP will be obtained from either normal power or, in the event of a loss of offsite power, from the Emergency Diesel Generators (EDG). Selection of the power source will be accomplished manually from the control room. The pump will be capable of being started manually from either the control room or locally.

During normal plant operation the suction side of the pump will be lined up to the deaerator storage tank. Suction may be switched to the condensate storage tank by locally aligning the manual valves which are located in the turbine building near the proposed SUFP.

The normal pump discharge will supply water to the inlet of the high pressure feedwater heaters (see attached flow diagram) and, thereby, to the main feedwater nozzles on the steam generators. When the pump is utilized as a third auxiliary feedwater source, it will be capable of supplying water to either steam generator. Selection of one steam generator will be accomplished by locally operating the applicable manual valves which will also be located in the turbine building near the SUFP.

Level control for the selected steam generator is accomplished with an electric motor operated control valve (see attached flow diagram) which can be operated from the control room or locally at the valve. Power for this control valve will be available from either EDG by manually selecting the power source at a motor control center located in the turbine building near the SUFP.

The associated piping will be ANSI B31.1, non-safety grade, and non-seismic within the turbine building and will be classified as ANSI B31.1, safety grade, and seismic within the auxiliary building.

Docket No. 50-346
License No. NPF-3
Serial No. 1093
Attachment 2