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L. V. MAURIN
Vice President Nuclear Operations

March 3, 1983

W3P83-0660
3-A1.01.04
3-A20.12

Director of Nuclear Reactor Regulation
Attention: Mr. G. Knighton, Chief
Licensing Branch No. 3
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: Waterford 3 SES
Docket No. 50-382
Fire Water System Connection
(Tertiary Backup)
to Lubrication and Cooling
Water for Circulating Water
Pumps

Dear Mr. Knighton:

In SSER #3, dated April, 1982, as part of our resolution to the existing fire protection plan, NRC requested that we disconnect the fire water system as a source of lubricating and cooling water to the circulating water pumps (CWP) so that the fire water supply system provides water only for the fire protection system. At this time, we are requesting that the NRC consider retracting this request based on the following reasoning.

At present, the design is for two 100% pumps for lubrication and cooling of the circulating water pumps. Each of these pumps lubricate and cool all four circulating water pumps. The suction for these lubricating and cooling pumps is taken from the clearwell which is supplied by the water treatment plant onsite as well as an emergency Parish water supply. If one of the lubricating and cooling pumps loses suction or trips off line, the other one starts up automatically. The idea is to leave the pressure regulating valve on the main fire water header as a backup in the unlikely event that a loss of both 100% CWP cooling and lubricating pumps occurs. For this to happen, we would have to:

- 1) lose our Water Treatment Plant water supply
- 2) lose our Parish water supply and
- 3) level in the clearwell to virtually drop to zero.

In the extremely unlikely event that the three above events take place, causing a loss of suction to both 100% CWP cooling and lubricating pumps, the pressure-regulated valve on the main fire header will open actuating

the jockey pump and main fire protection system pump. At the same time an alarm actuates in the control room, to supply cooling and lubricating water (at a maximum rate of 125 gpm) to the CWP cooling and lubricating pumps until all four circulating water pumps are secured.

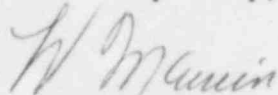
In addition, it is useful to mention that the request to disconnect this line came as a result of an exit interview several years ago by the Senior Resident Inspector at a time when it was thought that this line would be the normal, continuous source of water for the CWP cooling and lubricating pumps. This is clearly no longer the case. Also, ANI raised this concern, but after reviewing our present design, approved our use of this line for the purpose outlined above.

Finally, Ebasco has performed hydraulic calculations proving that the 125 GPM for emergency cooling and lubrication does not adversely affect the largest fire protection water demand in a safety related area.

This design information to reinstate the CWP connection, which has been discussed with your Mr. D. Kubickie, will be incorporated in the FSAR Amendment 31.

If you have any questions regarding this matter, please contact Mr. Roy Prados, Licensing Engineering Supervisor.

Yours very truly,



L. V. Maurin

LVM/WGL/ssd

Attachments

cc: W. M. Stevenson, E. Blake, S. Black, J. Wilson

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M. I. Meyer, J. Hart (EBASCO-N.Y.), Central Records, Nuclear Records (3),
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