



LOUISIANA
POWER & LIGHT

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May 14, 1986

W3P86-0076
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QA

Mr. Robert D. Martin
Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

Subject: Waterford SES Unit 3
Docket No. 50-382
IE Bulletin 85-03

Dear Mr. Martin:

Through IE Bulletin 85-03, "Motor-Operated Valve Common Mode Failures During Plant Transients Due To Improper Switch Settings", the NRC requested certain information for motor-operated valves (MOVs) in the high pressure safety injection (HPSI) and emergency feedwater (EFW) systems.

In accordance with Item (a) of the Bulletin, LP&L has reviewed the design basis for operation of each MOV in the HPSI and EFW systems of Waterford 3. The review results are documented in Attachments 1 and 2. Included in the documentation is the maximum differential pressure expected during opening and closing of the valves for both normal and abnormal events, to the extent that these valve operations and events are present in the existing, approved design basis for Waterford 3.

Using the results of Attachments 1 and 2, LP&L intends to do the following:

1. Switch settings (e.g. torque, torque bypass, etc.) for valve opening and closing will be reviewed and revised, as necessary. This activity will include a program to review the methods for selecting and setting the switches. During the course of this project, should it be determined that a valve is inoperable, LP&L will document appropriate justification for continued operation in accordance with the applicable technical specification.
2. Individual valve settings will be changed, as appropriate, to those established in item 1, above. Each valve identified in Attachments 1 and 2 will be demonstrated to be operable either by:
 - a. testing the valve at the maximum differential pressure established in Attachments 1 and 2 (with the exception of testing a valve under simulated line break conditions), or

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- b. providing appropriate justification for cases where testing under maximum differential pressure is not practicable.

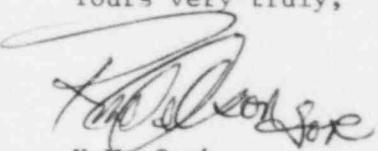
Each valve will be stroke tested, to the extent practical, to verify that the switch settings have been properly implemented.

3. Procedures will be revised, or newly prepared as necessary, to ensure that correct switch settings are determined and maintained. Applicable industry recommendations will be considered.

Items 1-3 above will be completed by November 15, 1987. It is anticipated that valve testing will be primarily conducted during the first refueling outage for Waterford 3, tentatively scheduled to begin in December, 1986. A written report will be provided to the NRC discussing the items suggested in IE Bulletin 85-03 following completion of the program.

As requested in IE Bulletin 85-03, this transmittal is made under affidavit pursuant to Section 182a, Atomic Energy Act of 1954, as amended. Should you have any questions or comments on this matter please contact Mike Meisner at (504) 595-2832.

Yours very truly,



K.W. Cook
Nuclear Support & Licensing Manager

KWC/MJM/ssf

Attachments


cc: NRC Document Control Desk, Washington, D.C. (original)
NRC, Director, Office of II&E
G.W. Knighton, NRC-NRR
J.H. Wilson, NRC-NRR
NRC Resident Inspectors Office
B.W. Churchill
W.M. Stevenson

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of)
)
Louisiana Power & Light Company) Docket No. 50-382
Jefferson 3 Steam Electric Station)

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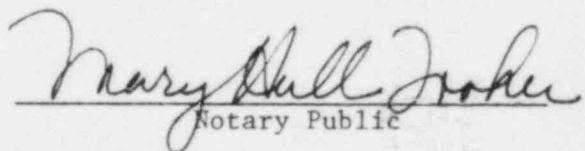
R.M. Nelson, being duly sworn, hereby deposes and says that he is Licensing Manager of Louisiana Power & Light Company; that he is duly authorized to sign and act on behalf of K.W. Cook, Nuclear Support & Licensing Manager and file with the Nuclear Regulatory Commission the attached responses to IE Bulletin 85-03; that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information and belief.



R.M. Nelson
Licensing Manager - Nuclear

STATE OF LOUISIANA)
) ss
PARISH OF ORLEANS)

Subscribed and sworn to before me, a Notary Public in and for the Parish and State above named this 15th day of May, 1986.



Notary Public

My Commission expires Life.

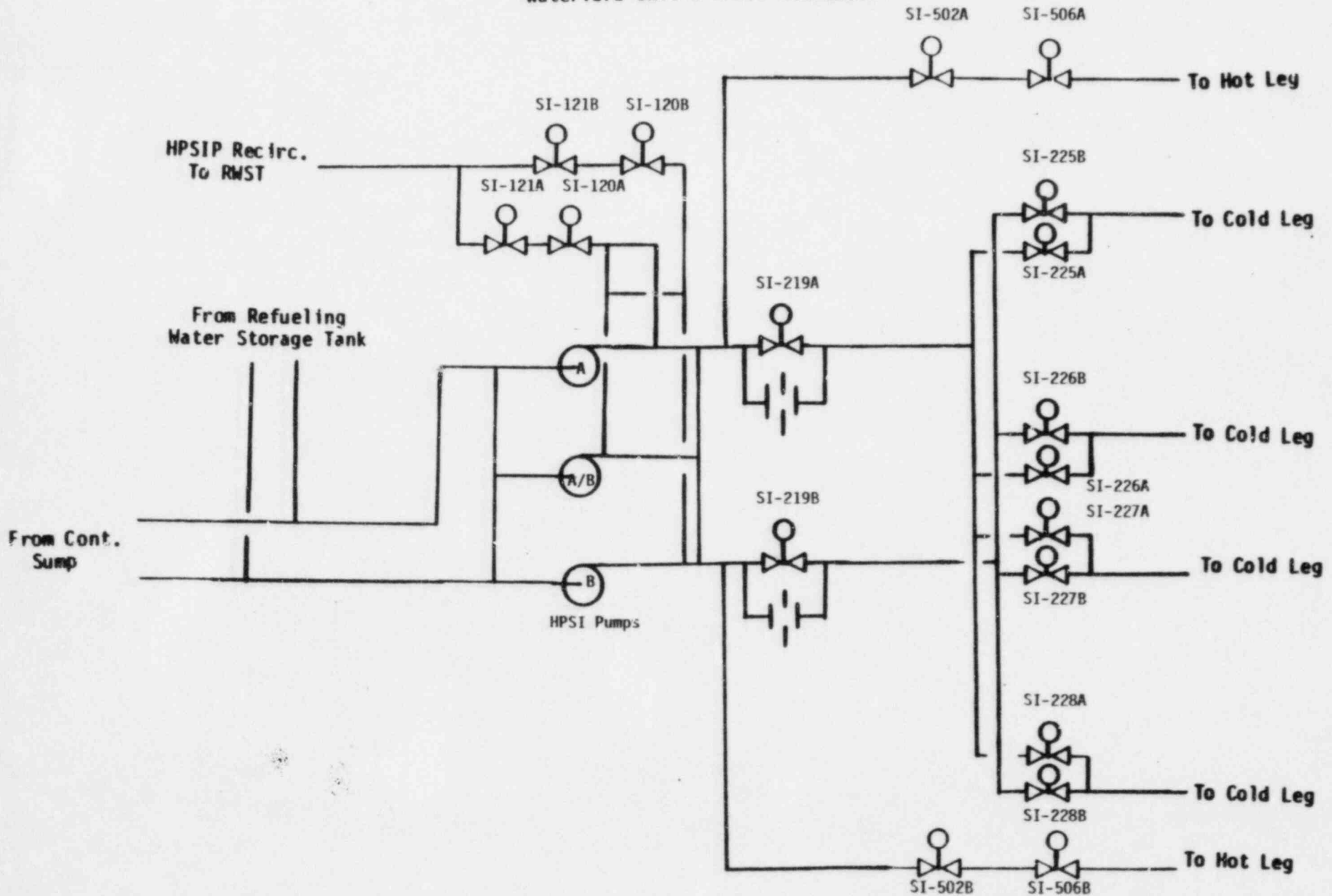
Waterford Unit 3 Design Bases for Operation of HPSIS MOVs

<u>Valve Function</u>	<u>Valve Tag. No</u>	<u>Postulated Upstream Condition</u>	<u>Postulated Downstream Condition</u>	<u>Notes</u>
Manually open from Control Room	SI-121B SI-120B SI-120A SI-121A	High: HPSI pump shutoff head	Low: RWSP @ atmos. pressure	- HPSIP mini flow recirculation line isolation valves
Manually Close on RAS	SI-121B SI-120B SI-120A SI-121A	High: HPSI Pump shutoff head	Low: RWSP @ atmos. pressure	
Manually open from Control Room	SI-506A SI-506B SI-502A SI-502B	High: HPSI pump shutoff head	Low: RCS at atmos. pressure	- Hot Leg Injection isolation valves
Manually close Following Hot Leg Injection	SI-506A SI-506B SI-502A SI-502B	High: HPSI pump shutoff head	Low: RCS at atmos. pressure	
Manually open from Control Room	SI-219A SI-219B	High: HPSI pump shutoff head	Low: RCS at atmos. pressure	- HPSI Train Isolation Valves
Manually close from Control Room to divert fraction of HPSI flow to hot leg	SI-219A SI-219B	High: HPSI pump shutoff head	Low: RCS at atmos. pressure	
Open on SIAS	SI-225B SI-225A SI-226B SI-226A SI-227B SI-227A SI-228B SI-228A	High: HPSI pump shutoff head	Low: RCS at atmos. pressure	- HPSI isolation valves
Manually close from Control Room following Shutdown or due to inadvertent opening	SI-225B SI-225A SI-226B SI-226A SI-227B SI-227A SI-228B SI-228A	High: HPSI pump shutoff head	Low: RCS at atmos. pressure	

Waterford Unit 3
High Pressure Safety Injection System
Design Basis Maximum Differential Pressure

<u>Valve Function</u>	<u>Valve ID</u>	<u>Design Basis Δ P Open (psi)</u>	<u>Design Basis Δ P Close (psi)</u>
HPSIP Mini Flow Recirculation Line Isolation	SI-121B	1502	1502
	SI-120B	1502	1502
HPSIP Mini Flow Recirculation	SI-120A	1502	1502
	SI-121A	1502	1502
Hot Leg Injection Isolation	SI-506A	1502	1502
	SI-506B	1502	1502
	SI-502A	1502	1502
	SI-502B	1502	1502
HPSI Train Isolation	SI-219A	1499	1499
	SI-219B	1498	1498
HPSI Isolation	SI-225B	1502	1502
	SI-225A	1502	1502
	SI-226B	1502	1502
	SI-226A	1502	1502
	SI-227B	1502	1502
	SI-227A	1502	1502
	SI-228B	1502	1502
SI-228A	1502	1502	

Waterford Unit 3 HPSIS Schematic



Waterford Unit 3 Design Bases for Operation of EFWS MOVs

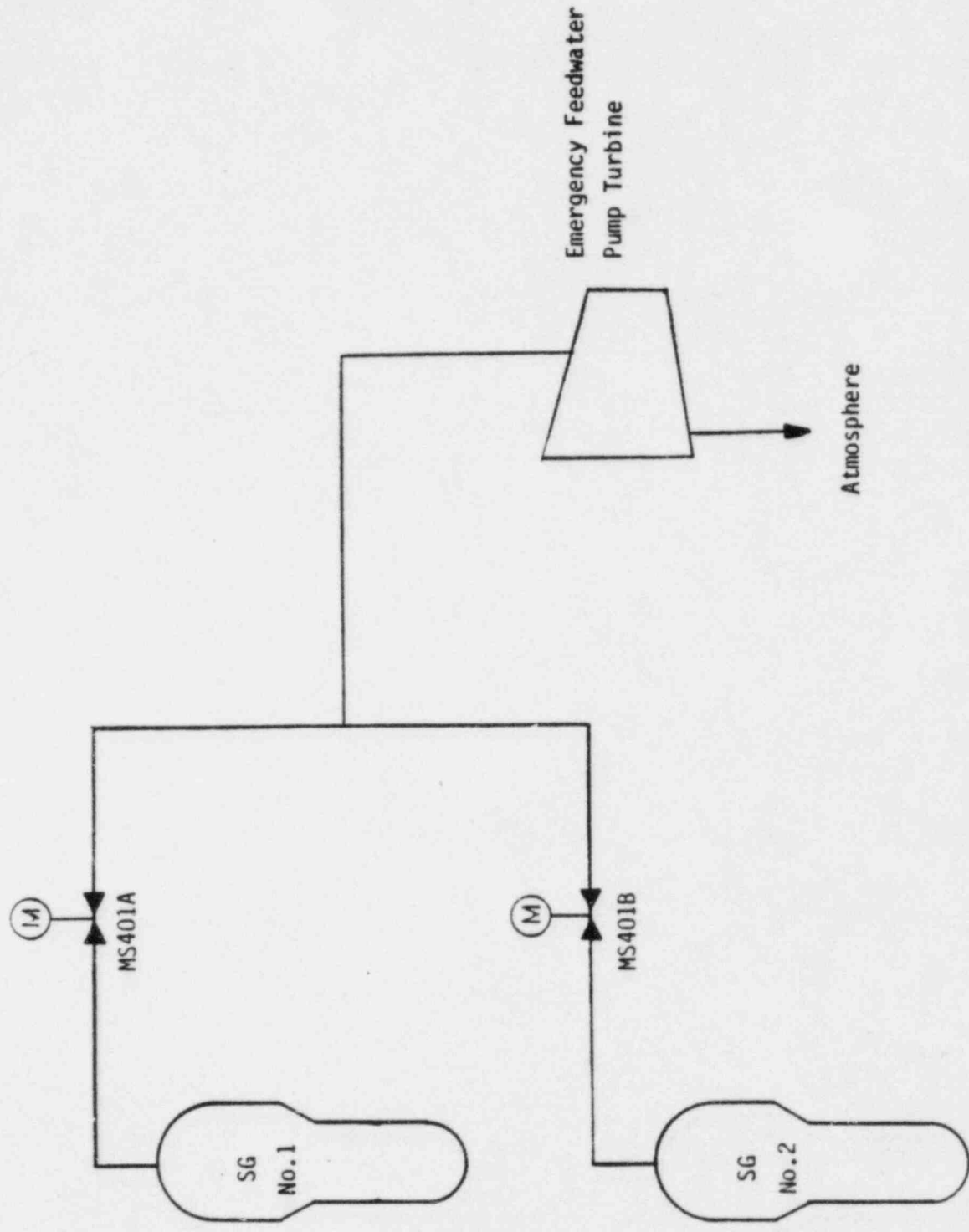
<u>Valve Function</u>	<u>Valve Tag. No</u>	<u>Postulated Upstream Condition</u>	<u>Postulated Downstream Condition</u>	<u>Notes</u>
Manually open and close from control room. Opens on EFAS	MS401A MS401B	High: main steam pressure	Low: atmos. press.	- EFWP Turbine Driver isolation valves

Waterford Unit 3

Emergency Feedwater System

Design Basis Maximum Differential Pressure

<u>Valve Function</u>	<u>Valve ID</u>	<u>Design Basis Δ P Open (psi)</u>	<u>Design Basis Δ P Close (psi)</u>
EFWP Turbine	MS-401A	1135	1135
Driver Isolation	MS-401B	1135	1135



WATERFORD UNIT 3 EMERGENCY FEEDWATER SYSTEM SCHEMATIC