

GENERAL ELECTRIC

NUCLEAR ENERGY
PROJECTS DIVISION

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MFN-173-79

June 29, 1979

U.S. Nuclear Regulatory Commission
Division of Operating Reactors
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

→ Attention: Marvin M. Mendonca

Gentlemen:

SUBJECT: TRANSMITTAL OF REQUESTED INFORMATION ON CONTROL SYSTEM
SIMULATION FOR TUBINE TRIP TESTS

Reference: EPRI NP-564, L. A. Carmichael and R. O. Nien, "Transient
and Stability Tests at Peach Bottom Atomic Power Station
Unit 2 at End of Cycle 2," June 1978

This letter transmits the information requested by the staff on the
Peach Bottom 2 control system characteristics for use in transient
simulations. Schematic diagrams are provided for the:

1. Bypass Valve Control System
2. Pressure Control System
3. Feedwater Level Control System
4. M-G Set Speed Controllers

In addition, four figures are supplied which describe functional relationships in the control system simulations.

The behavior of the turbine control, bypass and stop valve were all reported during the Peach Bottom tests (Reference 1) and hence knowledge of the pressure control system characteristics is not required for test analysis. The reactor water level and feedwater flow were also monitored, and provide adequate information for the test simulation. Therefore, control system characteristics are not required for evaluation of the flux and pressure response for the Peach Bottom turbine trip experiments.

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M. M. Mendonca

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The diagrams and constants used in the ODYN control system simulations are also provided. The transient simulation is in general not sensitive to these control system constants.

If you have any questions regarding this transmittal, please contact me at (408) 925-5003.

Very truly yours,

K. W. Cook

K. W. Cook, Sr. Licensing Engineer
Special Projects Licensing
BWR Systems Licensing
Safety and Licensing Operation

KWC:bjr/1170-71

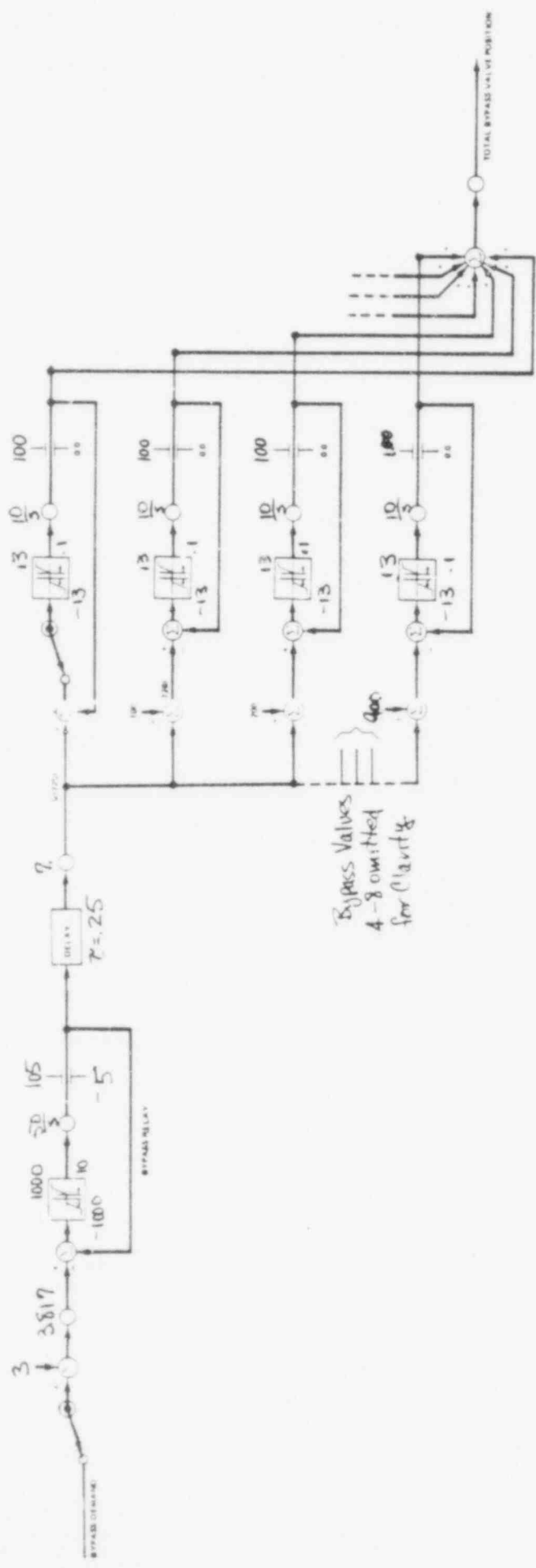
Attachments

cc: L. S. Gifford

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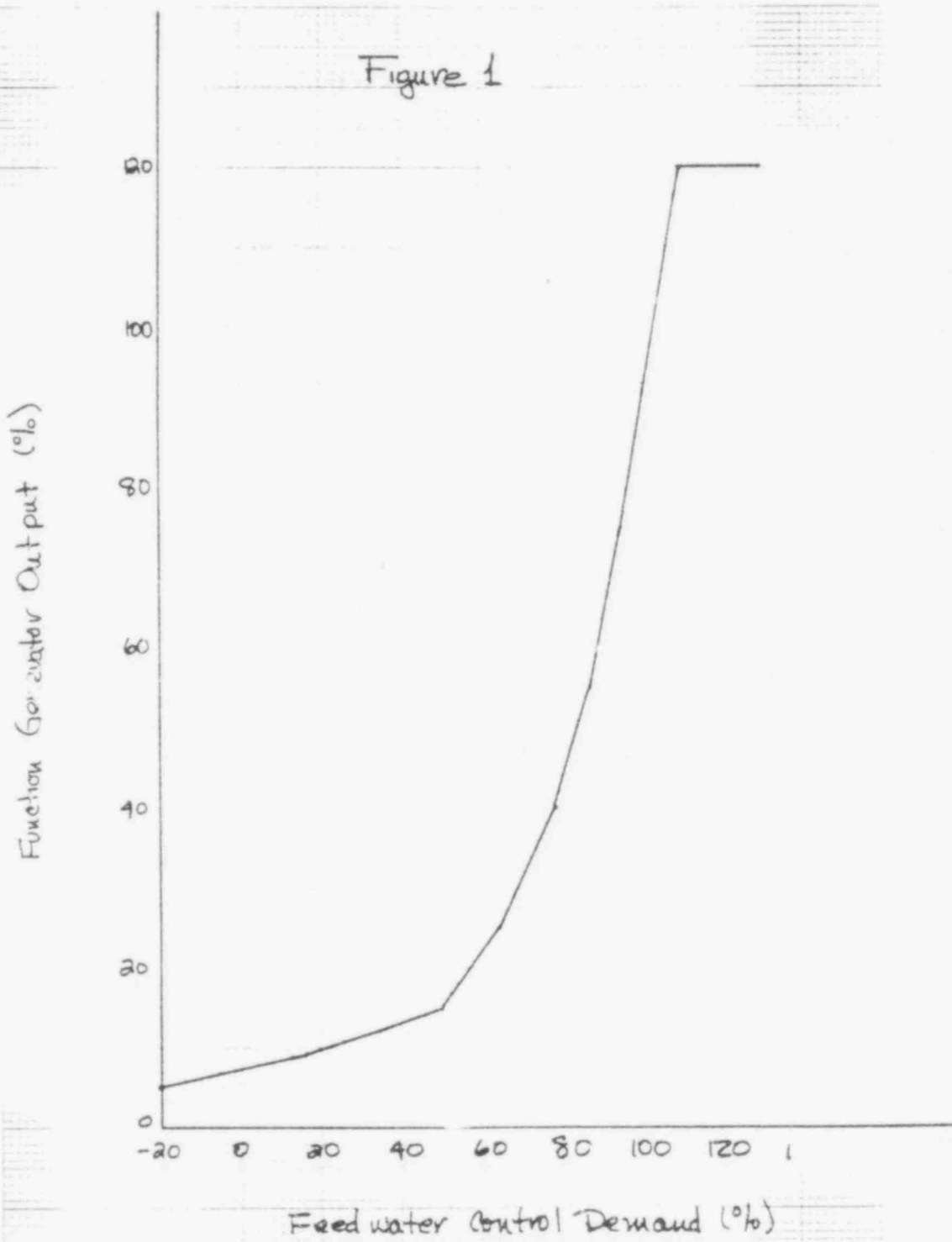


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BYPASS VALVES

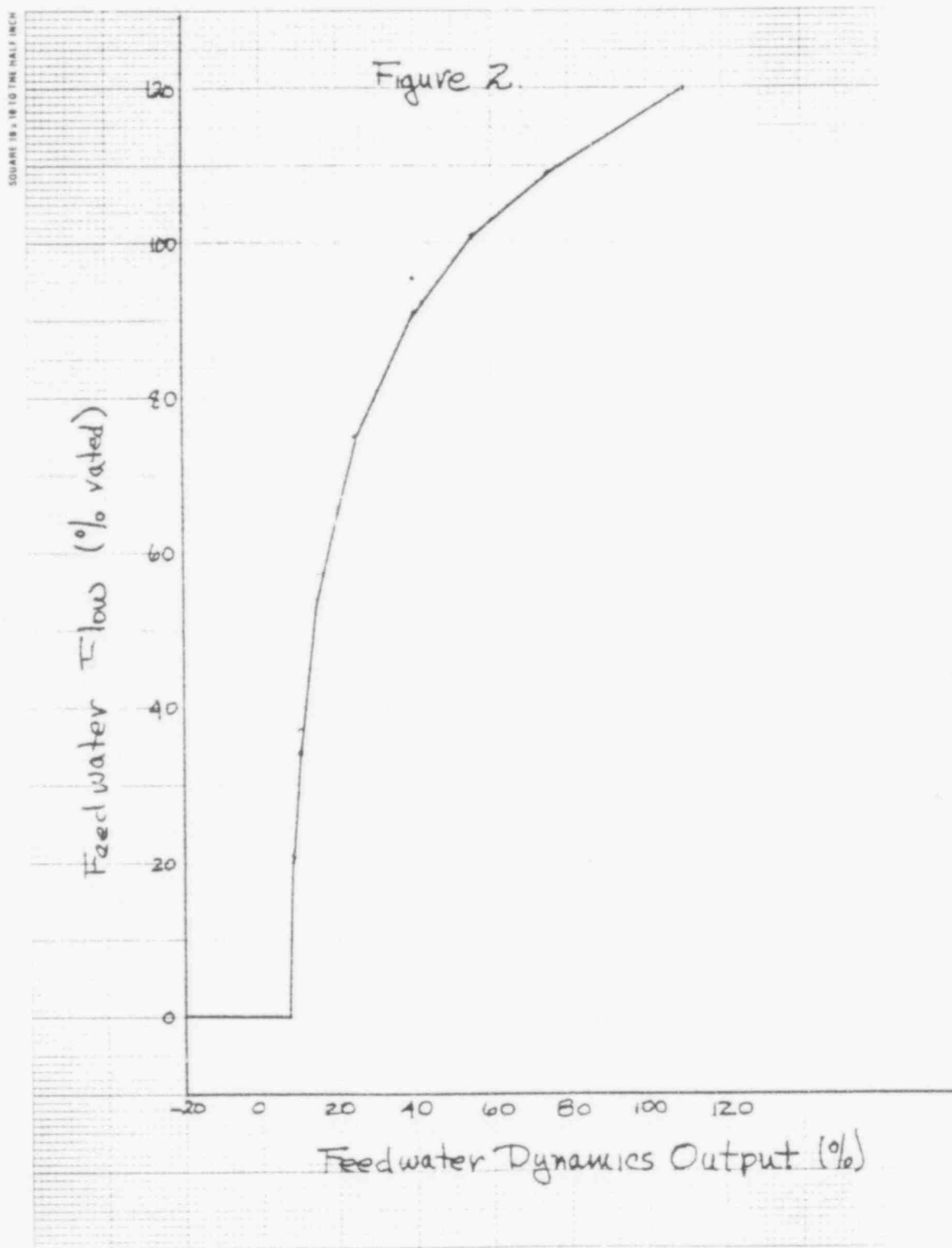
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SQUARE 18 x 18 TO THE HALF INCH



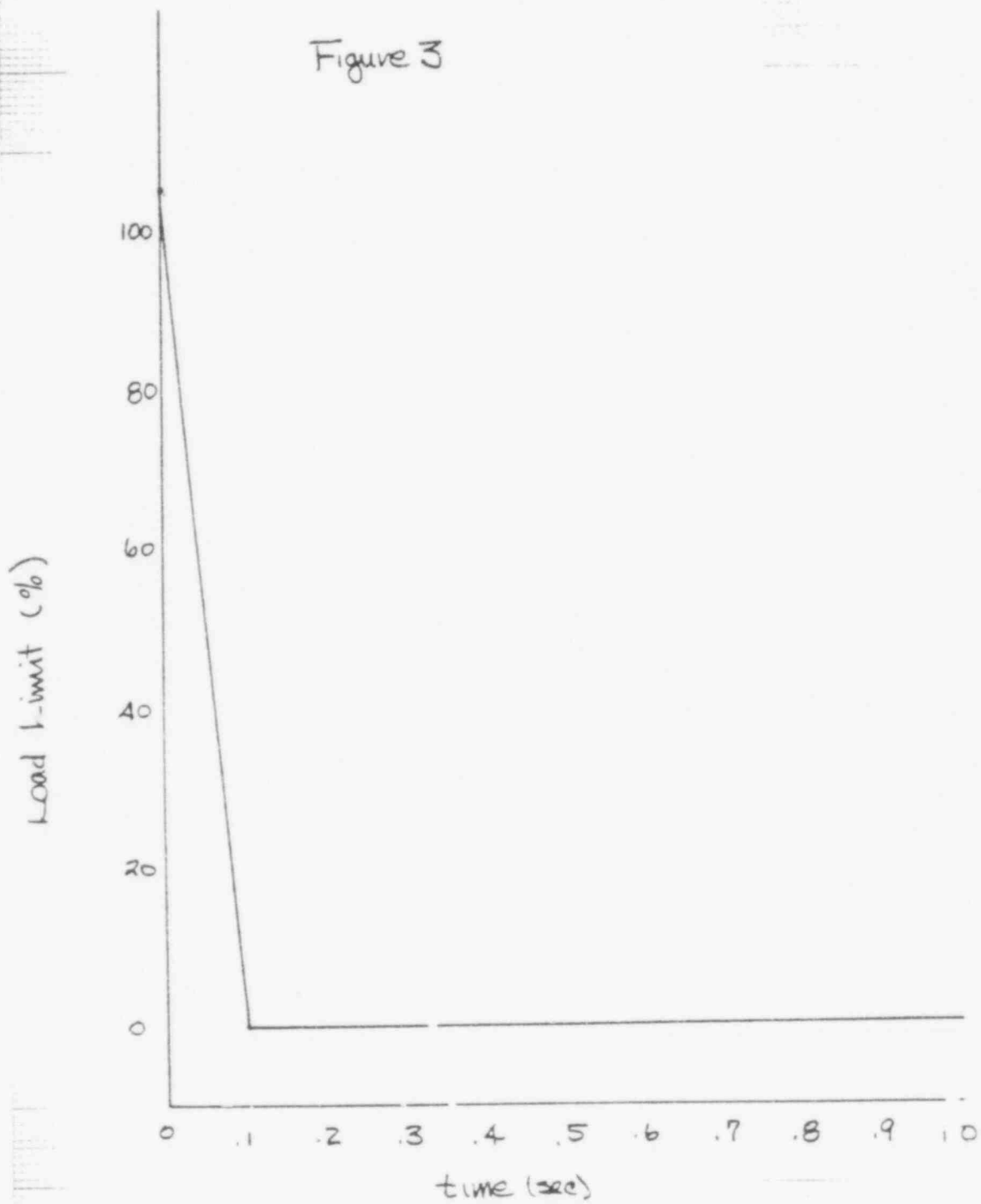
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GRAPH 18 x 18 TO THE RIGHT INCH

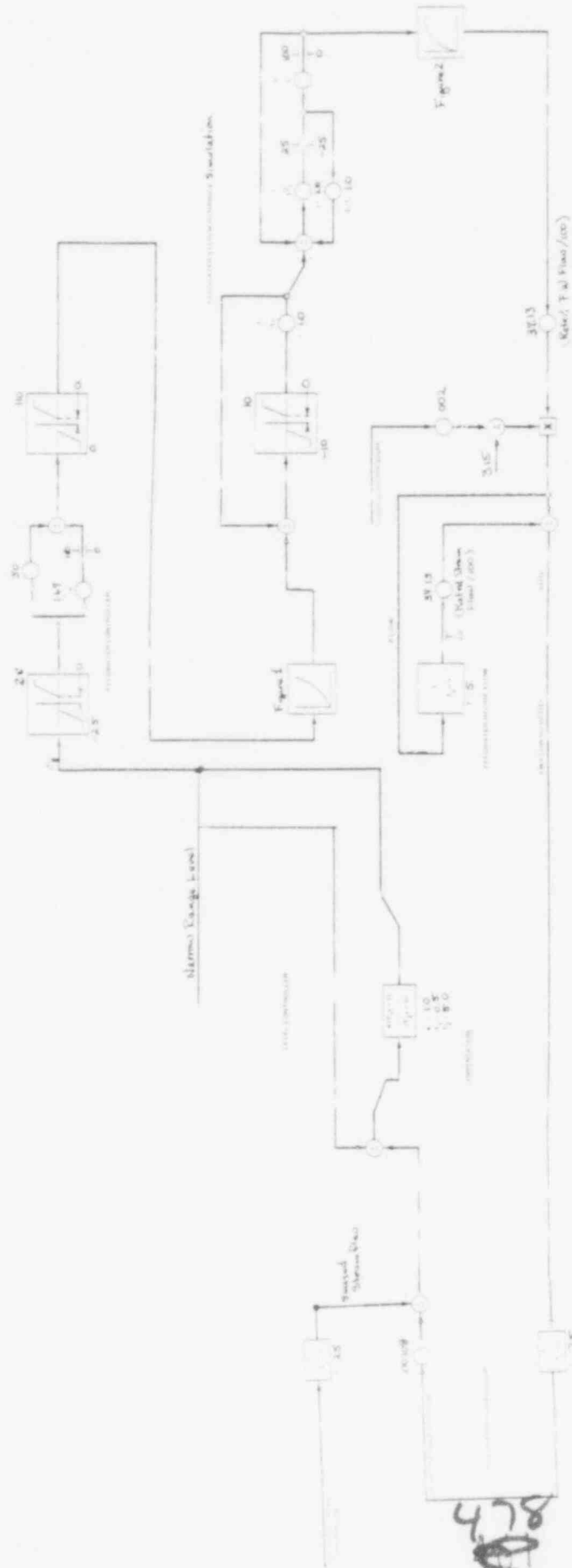


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Feedback Level Control System

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