

April 7, 1997

MEMORANDUM TO: David B. Matthews, Chief
Generic Issues and Environmental Projects Branch
Division of Reactor Program Management, NRR

FROM: James H. Wilson, Senior Project Manager Original Signed By:
Generic Issues and Environmental Projects Branch
Division of Reactor Program Management, NRR

SUBJECT: SUMMARY OF PUBLIC MEETING HELD ON MARCH 12, 1997, WITH THE
BOILING WATER REACTOR OWNERS' GROUP (BWROG) TO DISCUSS THE
BWROG'S PROPOSAL FOR ELIMINATION OF RESPONSE TIME TESTING

On March 12, 1997, the staff held a public meeting with the BWROG at NRC headquarters in Rockville, Maryland to discuss the BWROG's proposal for elimination of additional response time testing requirements for certain instruments from technical specifications. A list of attendees and their affiliations is provided as Attachment 1. A copy of the handouts used by the BWROG in its presentations is provided as Attachment 2.

The BWROG described its supplemental response time testing work that was done to address instrument loops with shorter response time requirements than were previously addressed in the earlier BWROG program documented in NEDO-32291. At present, 14 utilities are participating in this BWROG program. The BWROG provided a description of the scope and outline of the proposed changes that would be submitted in a supplement to NEDO-32291. The BWROG also described how the proposed margin and boundary values would maintain conservatism. The staff indicated that it considered that the failure modes and effects analysis, and the boundary response times resulting from it, was the key issue to be addressed in the review.

The BWROG stated that it planned to submit a revised topical report, NEDO-32291, Supplement 1, in May 1997. The staff stated that once it had received the revised topical report, it would discuss the report with the BWROG before issuing a request for additional information. This discussion would provide an opportunity for the staff to explain any additional information needed in order for the staff to reach a conclusion of acceptability.

After the staff approves the topical report, the BWROG expects to issue a -A (denoting "approved") version.

Project No. 691

Attachments: As stated

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

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LIST OF ATTENDEES AT MEETING WITH BWROG HELD IN
ROCKVILLE, MARYLAND ON MARCH 12, 1997

<u>NAME</u>	<u>AFFILIATION</u>
J. Wermiel	NRC
J. Mauck	NRC
P. Loeser	NRC
J. H. Wilson	NRC
D. Alexander	Detroit Edison
C. Price	PA Power & Light
G. King	GA Power/Southern Nuclear
G. Swihart	Com Ed
D. Boucher	Niagara Mohawk
T. Greene	GE Nuclear Energy
D. Reigel	GE Nuclear Energy

System Analyses For The Simplification Of Selected Response Time Testing Requirements

Planned Licensing Topical Report

Prepared by GE Nuclear Energy for the
BWR Owners' Group Response Time Testing Committee
March 12, 1997

Simplification Of Selected RT Testing Requirements

Planned Licensing Topical Report

Background

- Extension of NEDO-32291-A
 - Addressed RPS (sensors), IAS and ECCS
 - Addressed “long response” functions
 - (10 seconds and greater)
 - Addressed sensors

Scope of current study

- Includes intermediate response time loops
 - RPS and IAS (MSIV)
 - 330 ms to 1050 ms response requirements
- Does not include fast response time loops
 - 100 ms or less
 - e.g., APRM high, Turbine Stop Valve closure
- Does not include sensors

Process used

- Component FMEA and experience review
- Establish “bounding response times” (BRT)
- Sum BRT for loop (less sensor)
- Add BRT for sensor
- Compare total to loop requirement
- Confirm “defense in depth”

Flow charts from report

- Response Time Testing Evaluation Process
- Component Evaluation Process
- Loop Analysis Process
- Application/Implementation Process

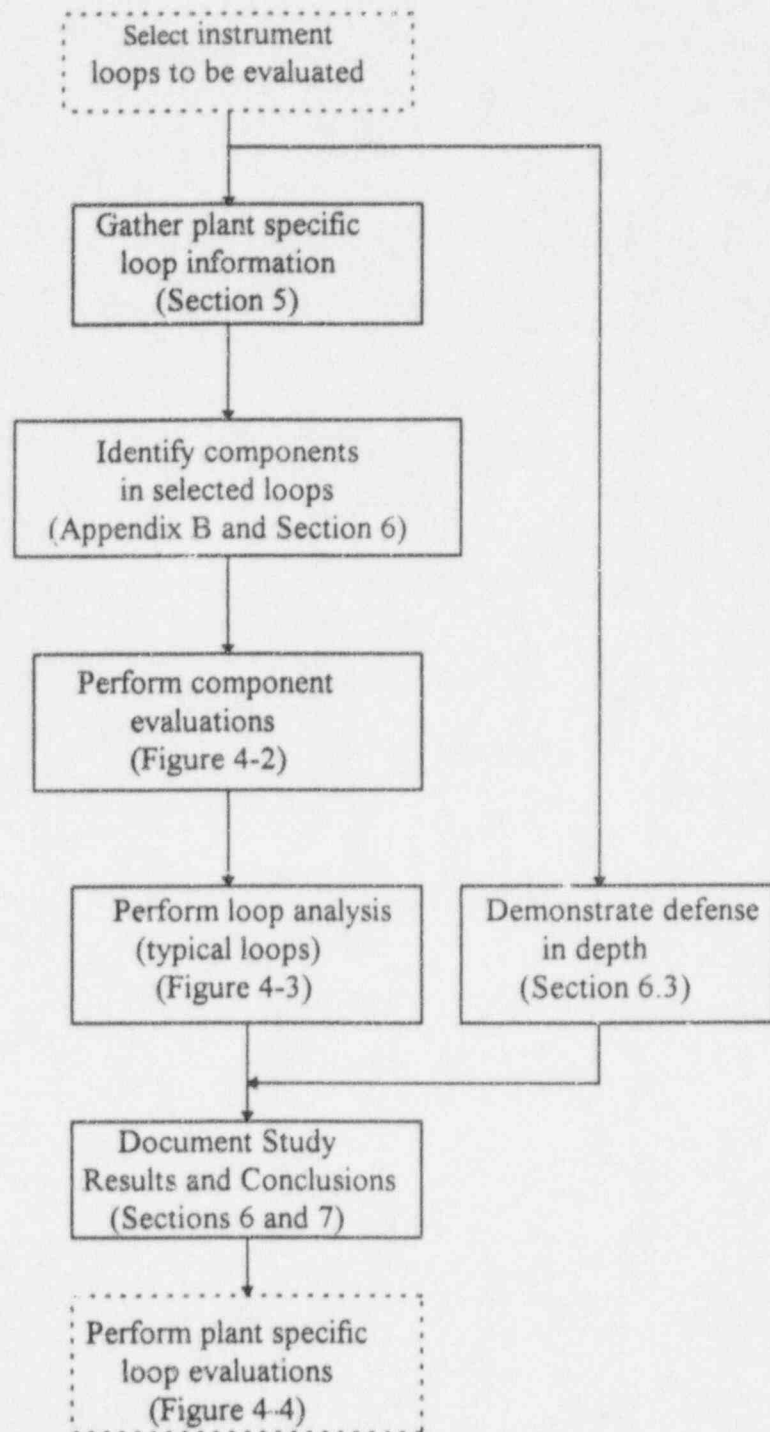


Figure 4-1. Response Time Testing Evaluation Process

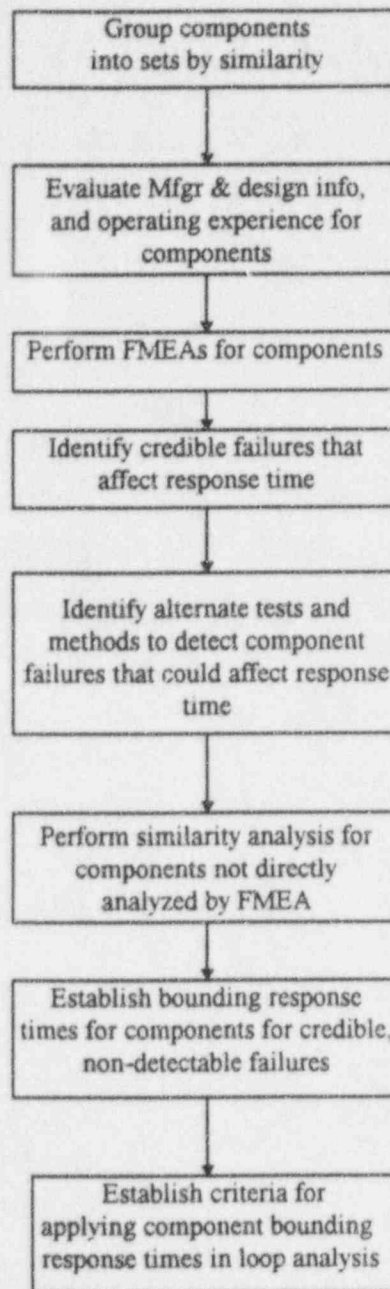


Figure 4-2. Component Evaluation Process
(Appendix B)

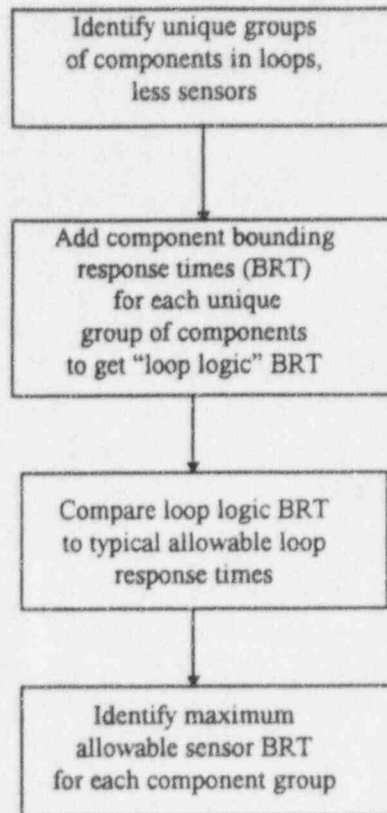


Figure 4-3. Loop Analysis Process
(Appendix C)

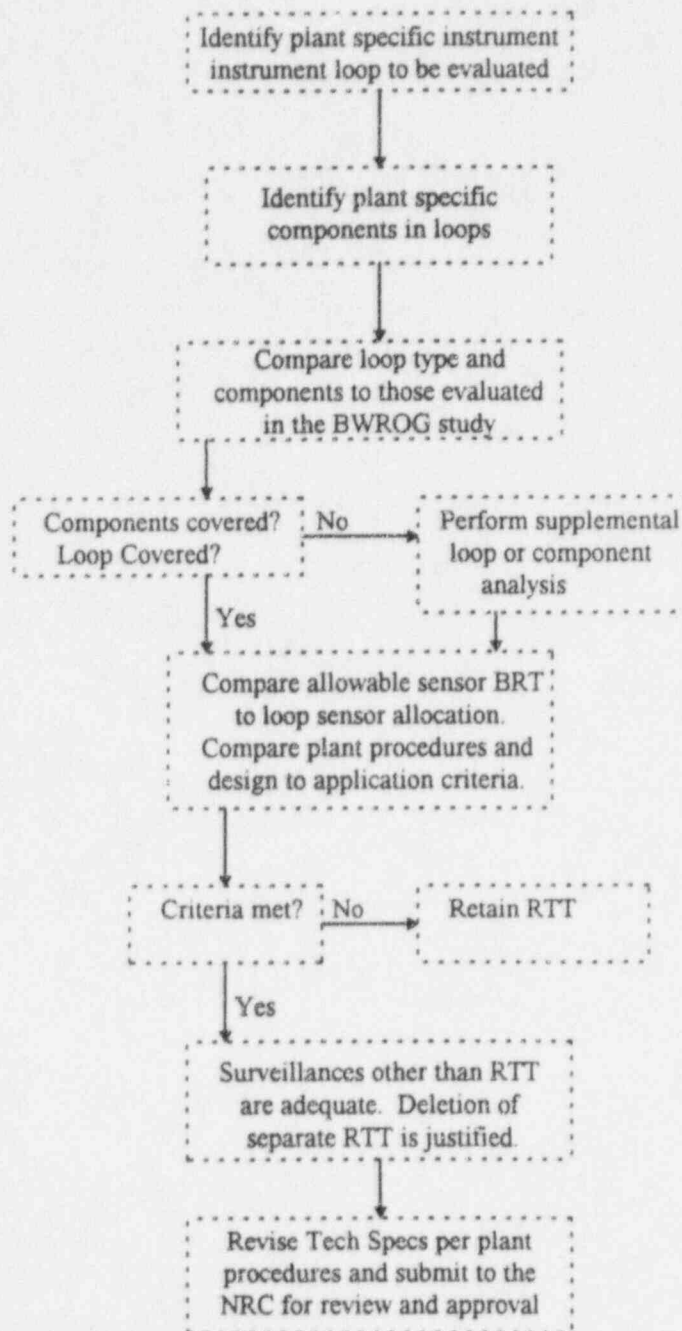


Figure 4-4. Application/Implementation Process
(Section 8)

Outline of Report

- Executive Summary
- Introduction
- Benefits

Study Process and Methodology

- Instrument Loops Included

Outline of Report (cont.)

- Study Results
- Conclusions
- Application Guidelines
- Supporting Appendices
 - Detailed analysis
 - ISTS markup

Conclusions

- Undetected response time degradation can be bounded
- Surveillance other than RTT can detect significant increase in response times
- For the loops evaluated, surveillances other than RTT provide adequate assurance

Project No. 691
Boiling Water Reactor Owners Group

cc: K. P. Donovan, Chairman
Boiling Water Reactors Group
Centerior Energy
Perry Power Plant
MC A210
P. O. Box 97
Perry, OH 44081

C. D. Terry
Vice President, Nuclear Engineering
Niagara Mohawk Power Corporation
Nine Mile Point-2
PO Box 63
Lycoming, NY 13093

D. B. Feters
PECO Energy
Nuclear Group Headquarters
MC 62C-3
965 Chesterbrook Blvd.
Wayne, PA 19087

L. A. England
Entergy Operations Inc.
PO Box 31995
Jackson, MS 39286

K. K. Sedney
GE Nuclear Energy
175 Curtner Ave, M/C 182
San Jose, CA 95125

T. J. Rausch
Commonwealth Edison Company
Nuclear Fuel Services
1400 Opus Place, 4th Floor ETWIII
Downers Grove, IL 60515