ATTACHMENT A

Revise the Technical Specification pages as follows:

Remove	Insert
3.5-6	3.5-6

TABLE 3.5-1 (CONTINUED)
PROTECTION SYSTEM INSTRUMENTATION

NO.	FUNCTIONAL UNIT	1 TOTAL NO. of CHANNELS	2 NO. of CHANNELS TO TRIP	3 MIN. OPERABLE CHANNELS	4 PERMISSIBLE BYPASS CONDITIONS	5 OPERATOR ACTION IF CONDITIONS OF COLUMN 1 OR 3 CANNOT BE MET	6 CHANNEL OPERABLE ABOVE
11.	Turbine Trip	3	2	2		5	50% Power
12.	Deleted						
13.	Lo Lo Steam Generator Water Level	3/loop	2/loop	2/loop		5	Hot Shutdown
14.	Undervoltage 4 KV Bus	2/bus	1/bus (both busses)	2/bus (on either bus)		6	5% Power
15.	Underfrequency 4 KV Bus	2/bus	1/bus (both busses)	2/bus (on either bus)		6	5% Power
16.	Quadrant power tilt monitor (upper & lower ex-core neutron detectors)	1	NA	1		Log individual upper & lower ion chamber currents once/hr & after a load change of 10% or after 48 steps of control rod motion	Hot Shutdown

Proposed

ATTACHMENT B

The Analog Steam Generator Feedwater Control System is being replaced with a Digital Feedwater Control System. The digital system uses three steam generator (SG) narrow range level signals vs. one used by the analog system. The three narrow range SG level signals are processed by the computer and the computer rejects any signal that is faulty. The software that does this processing is referred to as the "Median Signal Selector" (MSS). The MSS is described in more detail in Attachment C (WCAP-12347). The MSS design and software is the same as installed in Prairie Island (WCAP-11931). Attachment D summarizes the differences between WCAP-12347 and WCAP-11931.

As stated in the attached WCAP the only purpose of the low feedwater flow reactor trip (steam flow/feed flow mismatch reactor trip) is to satisfy the requirements of IEEE-279-1971 paragraph 4.7.3. Since the digital feedwater controller uses three level signals to the MSS vs. one in the existing analog system, there is no single random failure that can generate a condition requiring protective action. Therefore, the requirements of IEEE-279-1971 are satisfied without the steam flow/feed flow mismatch reactor trip. Also, no credit is taken for steam flow/feed flow mismatch reactor trip in any UFSAR Chapter 15 accident analysis.

No limiting conditions of operation are required if the MSS should fail because failure of the MSS would not preclude protective action on SG level. Also, failure would be annunciated and the feedwater control would be switched to the backup computer. Failure of the backup computer would also be required before the system transferred to manual. This is similar to the current, less redundant system where one failure could require control to be transferred to manual.

Software of the MSS is verified prior to use and administrative procedures control any software modifications.

In accordance with 10CFR50.91, this change to the Technical Specifications as specified on Table 1 has been evaluated to determine if the operation of the facility in accordance with the proposed Amendment would:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or

2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or

3. Involve a significant reduction in a margin of safety.

   Removing the steam flow/feed flow mismatch reactor trip does not increase the probability of an accident previously evaluated because the trip does not cause an accident; therefore, the trip can not effect the probability of an accident. The consequences are not effected because no credit is taken for the trip when the accidents are evaluated.

Removal of the steam flow/feed flow mismatch trip does not create the possibility of a new or different kind of accident than previously evaluated because the trip can not create an accident.

The circuitry can only create an inadvertent trip which is bounded by a required trip or failure to trip which is acceptable because no credit is taken for the trip in accident evaluation.

Removal of the trip does not reduce the margin of safety because no credit is taken for the trip in the UFSAR Chapter 15 accident analysis.

TABLE 1

Detailed Technical Specification Changes

Location	Description of Change	Reason For Change
Page 3.5-6 item 12	Item 12 has been deleted and the word DELETED inserted	Removal of the steam flow/feed flow reactor trip

ATTACHMENT C

WCAP-12347

"Advanced Digital Feedwater Control System Median Signal Selector for R.E. Ginna"

ATTACHMENT D

Westinghouse Electric Corporation Energy Systems

Box 355
Pittsburgh Pennsylvania 15230-0355

RGE-90-606

August 16, 1990

Mr. R. Baker
Rochester Gas & Electric Corporation
49 East Avenue
Rochester, NY 14649

ROCHESTER GAS & ELECTRIC CORPORATION
R E GINNA STATION
RG&E P.O. NO. NQ-11641-B-RD/(W)G.O. NO. SY-00026
NRC Action Item Response

Dear Mr. Baker:

Following a presentation to the NRC by representatives of RG&E and Westinghouse on July 24, 1990, on the Ginna Advanced Digital Feedwater Control System (ADFCS) program, an action was defined for Westinghouse to provide the NRC with a summary of the differences between the WCAPs on the ADFCS Median Signal Selector (MSS) for the Prairie Island units and Ginna (WCAPs 11931 and 12347, respectively). WCAP-11931 was submitted to the NRC in the Fall of 1988 as part of the licensing documentation for the Prairie Island ADFCS program. The MSS design and the actual MSS software is the same for both the Prairie Island units and Ginna. Furthermore, the MSS implementation in the respective ADFCSs as described in the WCAP documents is the same. The following is a summary of the differences between the respective documents to assist the NRC in their review of WCAP-12347 for Ginna.

The Median Signal Selector (MSS) is used in both the Prairie Island and Ginna ADFCS designs on the three narrow-range steam generator level inputs per loop to justify elimination of the Low Feedwater Flow (i.e., low steam generator level coincident with steam flow>feedwater flow) reactor trip function in addition to enhancing fault tolerance to input signal failures. WCAPs 11931 and 12347 are very similar and include descriptions of 1) the basis for the diverse trip function, 2) MSS logic, testing, and implementation, 3) justification of elimination of the Low Feedwater Flow trip based on MSS operation and 4) reliability of the ADFCS hardware/software system. Use of the MSS to justify Low Feedwater Flow trip elimination is the same for both Prairie Island and Ginna ADFCS designs. Changes incorporated in WCAP-12347 are minor and were made to 1) include editorial revisions and delete unnecessary text, 2) add detail to some sections, and 3) respecify bracketing of some text. The more significant of these are described further, below.

Editorial Revisions (1):

- Section 1.2 in WCAP-11931 has been relocated to Section 2.3 in WCAP-12347.

- Section 3.1 in WCAP-11931 which describes protection logic for plants with four narrow-range level channels per loop has been deleted.

Additional Text (2):

- A Section 4.4 has been added to describe the capabilities of the ADFCS to withstand input channel overrange conditions.

- Subsections 6.2.1 and 6.2.2 have been added to describe the MSS Configuration Certification process.

Bracketing (3):

The bracketing of proprietary information throughout the text has been revised. In most cases, this was done to eliminate the bracketing on some text that was protected in WCAP-11931.

Other changes have been made to include clarification, revisions in terminology, and simplifications in specific sections of text.

Please contact Mr. J. Pepka or myself if you have any questions.

Very truly yours,

WESTINGHOUSE ELECTRIC CORPORATION

John F. Hofscher, J

J. F. Hofscher
Project Engineer
New York Area

/jag

cc: N. Oliva
R. Eliasz
D. Lewis (W)