44 75

50-461

**GE Nuclear Energy** 

OG96-115-64\_\_\_\_ February 16, 1996

M. A. Lyon

9604110285 9602

ADOCK 05000461

| General Electric Company<br>175 Curtner Avenue, Sari | ,<br>Jose, CA 95 | 125             |      |     |       |        |      |     |
|--|------------------|-----------------|------|-----|-------|--------|------|-----|
|  |                  | 5               |      | B   | 1     | () (V) | [FC] | [7] |
| Post-It" brand fax transmittal                       | memo 76          | 71 + of         | page | Sh  | 2     |        | ;    | U   |
| Dept Project Mor- Uni                                | Phone #          | 11:00)<br>(217) | 5    | Pol | ner - |        | NC   |     |
|  | 1                | 88              | 91   | X   | .34   | 31     |      |     |

Director of Licensing Illinois Power Company Clinton Power Station P.O. Box 678 Clinton, IL 61727

## SUBJECT: Clarification of Clinton Trip Units Referenced in Response Time Testing Evaluation

References: (1) "System Analyses for the Elimination of Selected Response Time Testing Requirements", BWROG Licensing Topical Report, NEDO-32291, dated January 1994.

The purpose of this letter is to document our response to an inquiry made by IPC during February, 1995, concerning the Trip Units listed in Reference 1 for the Clinton Power Station. Table G-2 in Appendix G of Reference 1 refers to GE 147D8505G004, Trip Unit, and references Section 5.3.1.2. Section 5.3.1.2 is incorrect and should actually be Section K.1.2 in Appendix K. The Trip Units discussed in Section K.1.2 are the GE Master Trip Unit, Drawing 184C5988, designed as a replacement for the Rosemount 510 and 710 Trip Units. They are not identical to the 147D8505 Trip Units, thus, the discussion in Section K.1.2 is incomplete and warrants clarification for the Clinton Trip Units.

During February, 1995, we reviewed the design for the Clinton 147D8505 Trip Units (referenced in Table G-2) and concluded that it is covered by the existing Licensing Topical report. The basis for this conclusion is that the 147D8505 Trip Unit design is similar to the 184C5988 Trip Unit design listed in Reference 1. Similarities in circuitry and components exist in the analog input section of both designs. Resistive/capacitive filters are used in both designs prior to the operational amplifier input. Thus, the failure modes analysis discussed in Section K. 1.2 of Reference 1 for the 184D5988 Trip Unit design bounds this portion of the Clinton 147D8505 Trip Unit design. Also, since the 147D8505 Trip Units are utilized in the Clinton Nuclear Systems Protection System (NSPS), the units are self-tested such that any component failure in the downstream circuitry affecting response time will be detected and reported by the NSPS self-test

LFOI Add: Doug Pickett

system. Manual calibration checks and functional tests conducted periodically would identify any untested failure modes within the 147D8505 Trip Unit circuitry which could delay the normal response time.

The above should clarify the Trip Unit questions specifically related to Clinton. If you have any further questions regarding the above information please contact either Bill Sullivan at (408)925-6992, or the undersigned.

Very truly yours,

TA Green Senior Technical Project Manager BWR Owners' Group Projects Tel: (408)925-1308 Fax: (408)925-2476 Mail Code 182

cc: CF Canham, GE SJ Stark, GE WP Sullivan, GE DP Thompson, Illinois Power Company