constant utilized in the measured T_{avg} lag compensator] are currently specified as 0 seconds, effectively turning off the electronic filter. The new fast response RTDs may respond to temperature spikes which are not representative of actual RCS bulk fluid temperature. Signal conditioning may be required to eliminate these temperature spikes. Although, the current Technical Specifications do not provide for any signal conditioning, the 8 second total response time used in safety analyses has sufficient margin to account for a typical 2 second time constant for signal conditioning. Industry experience has shown that a 2 second filter is adequate in eliminating the spikes.

The proposed fast response RTD/thermowell system also has an overall response time of 8 seconds. However, the time distribution for the parameters differ between the existing and proposed designs. The existing design includes a transport time for RCS fluid to reach the RTD, located in the manifold. The RTDs are directly immersed into the coolant, providing a fast response. The new design no longer has the transport delay. However, because the RTDs are mounted in thermowells, the response time of the RTD/thermowell combination will be increased over the existing system.

The effects of a redistribution of the time responses between the total lag term (pipe transport delay, RTD response and electronic filter delay) and electronics delay term have been evaluated. Westinghouse completed a Safety Evaluation SECL–95–015, ''OT[DELTA]T and OP[DELTA]T Reactor Trip Response Time Safety Evaluation'' to support the revision to the time requirements. The evaluation concludes that, as long as the total response time remains [less than or equal to] 8 seconds, the safety analyses acceptance criteria continue to be met. The OT[DELTA]T and OP[DELTA]T trip functions are unaffected by the change.

The following Updated Final Safety Analysis Report (UFSAR) Chapter 15 events trip on OT[DELTA]T: Loss of Electric Load/Turbine Trip, Uncontrolled RCCA Bank Withdrawal at Power, CVCS Malfunction that Results in a Decrease in the Boron Concentration in the Reactor Coolant, and Inadvertent Opening of a Pressurizer Safety or Relief Valve. In addition, the following events trip on OP[DELTA]T: Steamline Break at Hot Full Power for Core Response, and Steamline Break Superheat Analysis. These events have been reviewed for a change in the distribution of time responses for OT[DELTA]T and OP[DELTA]T. The review concludes that the time response redistribution did not result in a minimum DNBR lower than the safety analyses limit, did not result in a fuel centerline melt, nor did the superheated steam releases change from those currently existing. Therefore, the radiological consequences for these events do not increase as a result of the less restrictive time response breakdown. Thus, the proposed amendment does not result in an increase in the probability or consequences of a previously evaluated accident.

2. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The OT[DELTA]T and OP[DELTA]T trip functions are unaffected by the change. Electronic filtering of the RTD signal has been included, changing the dynamic compensation term of OT[DELTA]T and OP[DELTA]T setpoint equations. No other changes to the setpoint equation result from the proposed modification.

The added 7300 hardware is compatible with the existing 7300 electronic hardware now used. All changes to the 7300 protection cabinets have been qualified. The proposed system is functionally equivalent to the existing one. The proposed modification has been reviewed for conformance with the Institute of Electrical and Electronics Engineers (IEEE) 279–1971 criteria, associated General Design Criteria, Regulatory Guides, and other applicable industry standards. The single failure criterion is satisfied by the proposed modification, since the independence of redundant protection sets is maintained. The new RTD/thermowell system meets the equipment seismic and environmental qualification requirements of IEEE standards 344–1975 and 323–1974, respectively. The proposed changes do not affect the protection system capabilities to initiate a reactor trip. The 2 of 4 voting coincidence logic of the protection sets is maintained. Therefore, the proposed modification meets all appropriate IEEE criteria, industry standards and other guidelines.

In addition, the RTD outputs are used for rod control, turbine runback, pressurizer level and other control systems. These control systems receive the signal after it has been processed at the 7300 cabinets and are therefore unaffected by the proposed modification.

The design and installation of the thermowells is in accordance with the American Society of Mechanical Engineers (ASME) Code requirements. However, should a thermowell fail at the RCS pressure boundary, the resulting accident is enveloped by current design basis accident analyses. Thus, implementation of the proposed amendment does not create the possibility of a new or different kind of accident from any of those previously evaluated.

3. The proposed change does not involve a significant reduction in a margin of safety.

The 7300 protection cabinets calculate individual loop [DELTA]T and T_{avg}, based on the output of the RTDs. These values are used in the OT[DELTA]T and OP[DELTA]T reactor protection trip signals. Electronic filtering of the RTD signal will be included, changing the dynamic compensation term of OT[DELTA]T and OP[DELTA]T setpoint equations. No other changes to the setpoint equation result from the proposed modification. Although the total response time used as input into the safety analyses is unaffected by the proposed modification, the distribution of response times between the total lag (pipe transport delay, RTD response and electronic filter delay) and the electronic delay has changed. The UFSAR events which rely on OT[DELTA]T and OP[DELTA]T trips have been evaluated. The evaluation concludes that the safety analyses acceptance criteria continue to be met, since the total response time is consistent with the safety analyses. The OT[DELTA]T and OP[DELTA]T trips function in the same manner to terminate DNB-related transients. The reliability of the reactor protection system is unaffected by this change. Thus, the proposed modification does not involve a significant reduction in margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the requested amendments involve no significant hazards consideration.

Local Public Document Room location: For Byron, the Byron Public Library District, 109 N. Franklin, P.O. Box 434, Byron, Illinois 61010; for Braidwood, the Wilmington Public Library, 201 S. Kankakee Street, Wilmington, Illinois 60481.

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NRC Project Director: Robert A. Capra.

Commonwealth Edison Company, Docket Nos. STN 50–454 and STN 50–455, Byron Station, Unit Nos. 1 and 2, Ogle County, Illinois

Docket Nos. STN 50–456 and STN 50–457, Braidwood Station, Unit Nos. 1 and 2, Will County, Illinois

Date of amendment request: May 17, 1995.

Description of amendment request: The proposed amendment would modify the technical specifications to allow steam generator tubes to be repaired using the tungsten inert gas (TIG) welded sleeve process developed by ABB Combustion Engineering (ABB/CE), remove the ability to repair steam generator tubes using the Babcock & Wilcox Nuclear Technologies (BWNT) kinetically welded sleeve process, and increase the requirement to inspect the number of sleeved tubes from 3 percent of the total number of sleeved tubes in all four steam generators (SGs) or all sleeved tubes in one steam generator to 20 percent of each sleeve design installed. The proposed amendments would also delete the requirement to conduct additional corrosion testing to establish the design life for the BWNT kinetically welded sleeve in the presence of a crevice.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The proposed change does not involve a significant increase in the probability or