

ILLINOIS POWER COMPANY



CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

June 11, 1986

Docket No. 50-461

Director of Nuclear Reactor Regulation
Attention: Dr. W. R. Butler, Director
BWR Project Directorate No. 4
Division of BWR Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Clinton Power Station (CPS)
Safety Parameter Display System (SPDS)
Display of Containment Isolation Valve Group Status

Dear Dr. Butler:

Illinois Power (IP) Letter U-600250, dated September 13, 1985, provided the NRC Staff with the SPDS "Dynamic Simulation Test Results Report." This test demonstrated, through man-in-the-loop interaction on the CPS Simulator under various postulated transient/accident conditions, that the CPS SPDS design performance objectives were met. The test was performed and the results evaluated in accordance with the SPDS Verification and Validation (V&V) Plan. The Staff utilized this report, in part, to establish the basis for closure of NUREG-0737, Supplement #1, Action Plan Item I.D.2, in the CPS Safety Evaluation Report, Supplement #5 (SSER #5), dated January 1986.

The purpose of this letter is to inform the Staff of IP's plans to modify the SPDS on the basis of operator comments noted during the referenced test relative to the display of Containment isolation valve status. On page 68 of the referenced SPDS "Dynamic Simulation Test Results Report," several operator comments from this test are discussed. Comment #20 states, in part, "...it was noted that the number of Containment Isolation valve groups has been changed from 11 to 13." The V&V evaluation of this comment indicated that the SPDS display should be corrected to show the status of all 13 Containment isolation valve groups. Since this test was performed, detailed reviews of the CPS Containment isolation valve grouping arrangement have been conducted. As a result of these reviews, appropriate changes to the SPDS display have been evaluated.

The original 11 Containment isolation valve groups, in which the SPDS provided status indication, were based on the Containment isolation valves and their groupings required for CPS Off-Normal Procedure No. 4001.02, "Automatic Isolation." Evaluations for appropriate groupings of all the automatic primary Containment isolation valves presently in Final Safety Evaluation Report (FSAR) Table 6.2-47 and the necessary changes to the "Automatic Isolation" procedure have concluded the following impact on the SPDS display of primary Containment automatic isolation valve group status:

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1. Additional Primary Containment Automatic Isolation Valves

There are a total of 51 primary Containment automatic isolation valves which are not currently statused by the appropriate group on the SPDS.

- (a) Of the 51 valves, 47 presently provide signal input to the Plant Process Computer. The SPDS will be revised (primarily software changes) to include these 47 primary Containment automatic isolation valves prior to exceeding 5% power.
- (b) The remaining 4 valves do not have computer points available and will require field wiring to the Plant Process Computer. These design changes will be completed, including the addition of these 4 primary Containment automatic isolation valves to SPDS, prior to startup following the first regularly scheduled refueling outage.

2. Primary Containment Isolation Valve Groups on SPDS

The above 51 valves and other primary Containment isolation valves currently statused on SPDS will be grouped into 13 unique groups. The groups are based on valves with common automatic isolation signals. The signals used and their descriptions are identified in FSAR Table 6.2-47.

3. Drywell, Secondary Containment Isolation, and Other Valves

Drywell and Secondary Containment isolation valves will be designated with group numbers proposed to be 14 through 19 and will be shown on Plant Process Computer displays other than the SPDS. Valves which close on a containment isolation signal but are not containment, drywell, or secondary containment isolation valves, will be designated as group 20. This information is considered useful to the operators but is not required to be part of the SPDS design scope. The appropriate changes to implement these computer display enhancements will be implemented prior to startup following the first regularly scheduled refueling outage.

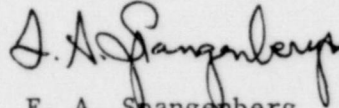
4. Changes to CPS Procedure No. 4001.02, "Automatic Isolation"

This procedure will be revised to address all valves in groups 1 - 19 with an automatic isolation signal. These revisions will specify which valve groups are statused on SPDS. In addition, this procedure will indicate the SPDS primary containment automatic isolation valve group configuration pending completion of the changes identified in Items 1 and 2 above.

These revisions to the isolation valve groups used at CPS will necessitate changes to various Main Control Room isolation valve group annunciator tiles. These changes (to reflect the appropriate group numbers) will be completed prior to exceeding 5% power operation.

IP has reviewed the impact of these SPDS changes on the NRC Staff closure of SPDS issues in Section 7.5.3.2 of SSER #5. This review indicates that there is no impact on the conclusions reached by the Staff. Should the Staff have any questions regarding these SPDS changes, please contact me.

Sincerely yours,



F. A. Spangenberg
Manager - Licensing and Safety

TLR/pjr

cc: B. L. Siegel, NRC Clinton Licensing Project Manager
NRC Resident Office
Regional Administrator, Region III Office
Illinois Department of Nuclear Safety