

ILLINOIS POWER COMPANY



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

April 11, 1985

Docket No. 50-461

Director of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Clinton Power Station Unit #1
Safety Parameter Display System
Response/Evaluations to NRC Pre-Implementation
Audit Concerns

Dear Mr. Schwencer:

On December 12 and 13, 1984, the NRC Staff audited the verification phase of the Safety Parameter Display System (SPDS) design for the Clinton Power Station (CPS). The results of this audit were discussed at the Staff's exit meeting and were subsequently provided to Illinois Power Company (IP) via letter from A. Schwencer to F. A. Spangenberg, dated February 8, 1985. Following the Staff's pre-implementation audit, an SPDS Action Plan was developed by IP to resolve the NRC Staff's concerns. This SPDS Action Plan was submitted to the NRC via IP Letter U-0771, dated December 21, 1984. Following completion of this Action Plan (in late January), the results were presented to the Staff and your contractor (Science Applications International Corporation - SAIC) by IP Personnel in a meeting held at NRC Bethesda Offices on February 20, 1985. At this meeting, IP committed to submit a formal evaluation/response to the Staff's SPDS Design Verification Audit Report. This letter fulfills that commitment by providing the Attachment #1 report, entitled "Safety Parameter Display System (SPDS) NRC Pre-implementation Audit Results/CPS Response". These responses are thorough and reference applicable portions of the 2/20/85 IP SPDS presentation material.

In addition to the line-by-line responses to the Staff's audit concerns, IP also committed to submit revised information related to the SPDS functional design. The current SPDS functional design basis was presented in detail to the Staff during the 2/20/85 meeting. The "Briefing Books" provided at this meeting contained the following documents related to the SPDS functional design:

1. SPDS Presentation Material;
2. SPDS Primary and Secondary Display Formats (8X10 color photographs);

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3. Preliminary CPS responses to the NRC Pre-implementation Audit results;
4. SPDS Recommended Parameter Set - Report of the SPDS Parameter Selection Task Force;
5. CPS SPDS Display Formats Design & Task Force Evaluation Results; and
6. Human Factors evaluation reports of the SPDS Display Formats and color use.

Provided herein, as Attachments #2, #3, and #4 are the Item #4, #5, and #6 documents, respectively, identified above. Since the areas of concern identified in the NRC audit primarily relate to the SPDS Parameters, the associated Critical Safety Functions, data validation techniques, display format and human factors design criteria, these attachments provide the basis for the SPDS functional design. As such, these documents will fulfill this latter submittal commitment.

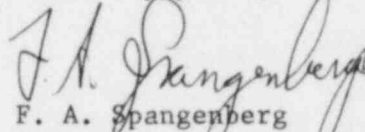
The Staff provided IP with a summary of the 2/20/85 meeting via letter, from B. Siegel (Clinton Licensing Project Manager), dated February 21, 1985. In this letter it was stated that the results of the SPDS Action Plan appeared to address all the Staff concerns identified during the SPDS Pre-implementation Audit. Telephone discussions with the lead NRC reviewer, Mr. George Lapinsky of the Human Factors Engineering Branch, during the week ending March 15, 1985, provided additional information in response to questions related to the 2/20/85 presentation material. Attachment #5 provides a list of these questions and the corresponding responses. Mr. Lapinsky indicated verbally that these responses should be acceptable. Finally, Attachment #6 is a list of the current SPDS Parameters and identifies the number of sensor signals and the associated data validation techniques for each of these parameters. This list was requested by Mr. Lapinsky during the referenced telephone conversations.

With the information contained herein, IP considers the concerns identified by the Staff during the CPS SPDS Design Verification Audit to be resolved. As such, IP is proceeding with the implementation of the current SPDS design to fulfill the requirements of NUREG-0737, Supplement #1 (per Generic Letter 82-22). Our basic schedule for SPDS implementation was provided during the 2/20/85 meeting. A detailed integrated schedule is currently being developed to meet these needs.

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Should the NRC Staff have any comments regarding the implementation of SPDS at Clinton, please contact me at (217) 935-8351, extension 324.

Sincerely yours,



F. A. Spangenberg
Director - Nuclear Licensing
and Configuration
Nuclear Station Engineering

TLR/lab

Attachments (6)

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