

SIEMENS

January 30, 1997
LB/JBE:97:018

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Gentlemen:

Subject: Reply to a Notice of Violation

Ref: Letter, P. Ting to B. N. Femreite, "NRC Inspection Report 70-1257/96-206 and Notice of Violation" dated January 3, 1997.

Below is Siemens Power Corporation's (SPC's) reply to the notice of violation accompanying the referenced letter:

Violation

Safety Condition S-1 of SNM License 1227 authorizes the use of licensed materials in accordance with the statements, representations, and conditions contained in Part I of the licensee's application dated October 28, 1996, and revised pages submitted with letter dated November 11, 1996.

Section 4.1.4.1, Criticality Safety Specifications, of Part I of the application, requires that Criticality Safety Limit Cards contain a concise statement of CSS (Criticality Safety Specification) or CSA (Criticality Safety Analysis) limits applicable to an operation or area.

Contrary to the above, on April 17, 1996, the licensee failed to update the posted Criticality Safety Limit Card for the UF₆ cylinder wash operation to reflect a change in the CSS limit from a "safe batch operation" to "one thirty-inch UF₆ cylinder containing less than 15 kgs UF₆."

SPC Reply

Reason for the Violation

The sole responsibility for having the correct revision of Criticality Safety Limit Cards (CSLCs) posted at workstations lies with the Criticality Safety Component. In this instance, the criticality safety analyst responsible for the CSLC program failed to post an updated UF₆

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cylinder wash operation CSLC at that workstation, even though the correct CSLC was placed in the "mini-libraries" located throughout the plant.

The responsible analyst had scheduled a block of time to post several limit cards throughout the plant, including P90,034 Revision 2 which is applicable to the cylinder wash station. Since one of the other limit cards, not related to the cylinder wash station, was to be posted at a number of different areas, the analyst made about a dozen copies of that card. After laminating all of the cards, they were gathered up with P90,034 on the bottom of the stack. Posting the limit cards required him to visit many areas of the plant, and when those postings were completed, the analyst still had a few copies left. By that time, the analyst had forgotten that at the bottom of the stack lay P90,034 Revision 2 which still required posting. He returned to his office and filed the cards away as if all of them were the same as the top card. There the copy of P90,034 Revision 2 remained until SPC began investigating the improper revision posting of P90,034 during the NRC visit.

CSLCs are placed at workstations as an operator aid. CSLCs are prepared and approved by SPC's Safety, Security and Licensing Department (SS&L), Safety Section, Criticality Safety Component and accepted by the operating group. The SS&L approval indicates that the posted limits are consistent with the requirements of the applicable Criticality Safety Analysis (CSA) and/or Criticality Safety Specification (CSS). The acceptance by the operating group indicates that the limits are understood by supervision/management, understandable by users, and that revised Standard Operating Procedures (SOPs) and training will be provided (as required) to assure compliance with the CSLC postings. All of these supporting actions were completed as required by the SPC Criticality Safety Program.

The cause of this violation was the result of personal error by the analyst responsible for posting limit cards.

Immediate Corrective Action

The correct CSLC revision was immediately posted when the out-of-date CSLC was discovered by the NRC inspection team accompanied by the SPC Lead Criticality Safety Specialist.

Corrective Actions to Avoid Future Violations

In investigating the cause of this violation it became evident that the inspectors did not correctly understand the distinction in the criticality safety program between the requirements for posting limit cards and reviewing and approving the CSAs. Therefore, the following background information is provided:

Background Information

The cause of this violation was not a failure of "multiple administrative checks involving independent organization elements" as stated in the referenced NRC inspection report.

The SPC Criticality Safety Program requires that, when a plant modification requires a change to the Criticality Safety Analysis, the analyst and second party reviewer each

determine that the equipment installed reflects the conditions described in the analysis. Such configuration control of fissile material-handling operations is managed through SPC's Engineering Change Notice (ECN) process. As part of the ECN process, a Criticality Safety Review Team (CSRT) consisting of the responsible engineer, operating group supervisor/manager, and criticality safety analyst reviews and inspects the installation. This review is completed before fissile material is used in the new or modified equipment.

The CSRT inspection is focused on plant configuration vis-a-vis bounding assumptions of the CSA. During the review it is the criticality safety analyst's responsibility to assure that: 1) the installation is conservatively covered by a CSA; and 2) the CSS, postings, procedures, preventive maintenances (PMs), etc. are adequate to assure compliance with all the limits and controls in the applicable CSA.

The operating group's involvement in the CSRT inspection ensures the operations group understands the major assumptions made by the criticality safety analyst, and helps to identify any potential difficulties in meeting the required limits and controls.

The responsible engineer's involvement in the review team inspection assures direct communication in the event of any concerns with the modification as installed.

Acceptance of the installation by the CSRT is documented on the ECN form. The responsible operating group manager also signs the ECN indicating that the installation has been accepted by the CSRT and that training and procedures are adequate.

When CSAs and/or CSSs are modified without any related plant configuration change, the approval signoff of the CSS includes SS&L, the operating group, and the engineering group, but a plant inspection is not required. The SS&L approval indicates that the CSS has been reviewed by the Criticality Safety Component and is consistent with the CSA. The operating and engineering group acceptances indicate a commitment to comply with the CSS, and to assure that training, procedures, and PMs or surveillances are in place to adequately meet this commitment.

When a CSLC is revised, the approval signoff includes SS&L and the operating group. The SS&L approval indicates that the CSLC is consistent with the applicable CSA and/or CSS. The acceptance by the operating group indicates that the limits are understood by supervision/management and understandable by users, and that procedures and training will be provided as required to assure compliance with the posting.

In the case of the cylinder wash station, CSLC P90,034 Rev. 2 was issued in April of 1996. The limit card was changed to simplify instructions to operators by selecting one specific mass limit for the workstation, rather than having the operator select a mass limit from a table, based on the enrichment. This is acceptable without a modification to the CSA or CSS as long as the CSLC limits are at least as conservative as those in the CSA/CSS. The CSLC limits on CSLC P90,034 Rev. 2 were at least as conservative as those in the CSA/CSS. All of the required reviews and approvals of this CSLC were also completed.

As indicated in the inspection report, the most recent revision of the CSA and CSS for the cylinder wash station were issued in November of 1996. These revisions were primarily format changes but also included a change to a single mass limit that was acceptable for all enrichments processed at the cylinder wash station. This change was consistent with the criticality safety practices for the cylinder wash station that were in place procedurally since April of 1996. Therefore, an additional revision of the CSLC was not immediately required for this revision because CSLC P90,034 Rev. 2 implemented the limits of the reformatted CSA/CSS.

It is important to understand that CSLCs are used in conjunction with SOPs and that operators are trained to and follow SOPs and not only the posted CSLCs.

While the inspectors are correct that the current revision of the CSLC was not posted at the workstation, it is not completely true that "the latest criticality safety controls were not in place at the UF₆ cylinder wash station". The SOPs for this workstation implemented all the required limits and controls and all the operators who work at the workstation were trained to these requirements. SPC records show that the limits of CSLC P90,034 Rev. 2 were not exceeded at the workstation.

Rather than indicating a major breakdown of an administrative system, the problem was the personal error of a single individual and only involves a portion of the administrative system used to ensure correct limits and controls are followed.

Because SPC considers such errors to be serious, we have re-emphasized to the criticality safety analysts the importance of following all required tasks to completion. The analyst responsible for posting limit cards recognizes the importance of having the latest revision of the limit card posted at each workstation, and therefore, has developed a self checklist to help make certain CSLCs are approved, distributed, and posted as required. This checklist has been reviewed by the Lead Criticality Safety Specialist. In addition, each operating group has been instructed to include a check that the correct CSLC revision is, in fact, posted as part of their quarterly inspection for criticality safety activities.

Date of Full Compliance

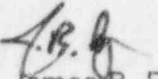
The actions described above have been completed.

USNRC,
January 30, 1997

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If you have any questions regarding these actions or require more information, please contact me at 509-375-8663.

Very truly yours,



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