



Carolina Power & Light Company

JUL 19 1985

SERIAL: NLS-85-253

Director of Nuclear Reactor Regulation
Attention: Mr. D. B. Vassallo, Chief
Operating Reactors Branch No. 2
Division of Licensing
United States Nuclear Regulatory Commission
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62
SPDS - REQUEST FOR ADDITIONAL INFORMATION

Dear Mr. Vassallo:

On May 16, 1985, you issued a Safety Evaluation Report on our proposed Safety Parameter Display System. Although the SER concluded that our proposed SPDS was acceptable, your staff requested some additional information. Each request for information, and CP&L's response, is provided below.

NRC Request

The licensee should provide a list of variables that provides input to the radiation box.

CP&L Response

The variables input to the radiation box will be consistent with the Radioactivity Release Control Guideline as it is implemented within the Brunswick Emergency Operating Procedures. These variables currently are: the mainstack radiation monitors, the Reactor Building ventilation radiation monitors, the Turbine Building ventilation radiation monitors, and the service water main effluent radiation monitors. The availability of necessary Emergency Operating Procedure radiation variables on the SPDS will be verified by the Control Room Design Review task analysis as stated in the Company's December 27, 1984 emergency response capability submittal.

NRC Request

The licensee should assure that the SPDS developed for Brunswick by GE has taken into account plant-specific aspects.

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CP&L Response

The plant-specific aspects discussed in Section III.D of the SER, including color-coding conventions, abbreviations, acronyms, equipment terminology, and symbology will be taken into more detailed account during the reviews of the preliminary color displays. In addition, such plant-specific aspects as ranges, units, and setpoints will be verified and corrected where necessary.

The plant-specific Control Room Design Review task analysis will also be used for the verification and, if necessary, the revision of the displays and their supporting parameters as recommended in Section 5.1.b(ii) of Supplement 1 to NUREG-0737.

NRC Request

The licensee should consider drawing the display formats to identify the unit for which data is being reviewed or indicate why it is not desirable.

CP&L Response

The indication of the Brunswick unit for which data is being provided will be on the final SPDS displays. This distinction was not included in the original Safety Analysis submittal only because of the generic nature (i.e., covering both units) of the submittal.

NRC Request

Some of the displays seem crowded and other options should be considered before deletion of system status information.

CP&L Response

The system status information to be deleted from the GE generic displays is adequately presented in the existing plant control room. Deletion of the system status information is not detrimental to the SPDS when compared to display readability and overall usefulness to the plant operators. Certain system status is not deemed as important as maintaining a concise display of critical plant variables.

Inclusion of excessive system status information can also introduce difficulty in determining exactly what each status block means without a detailed knowledge of the software driving the block. Each block may have several variables as input (e.g., flows, valve positions, pump statuses); therefore, the plant operator would be forced under many conditions to look at other displays or instrumentation to determine what caused a block to change. A significant amount of additional training would be required to familiarize operators with the necessary status inputs. The operator must be able to operate the plant without SPDS; therefore, relying on SPDS to decide what instrumentation is needed to determine system status (e.g., if drywell cooling is available) may be deleterious to plant operation without SPDS.

A data link to the existing plant process computer will be part of the Emergency Response Facility Information System. The variables transferred by this data link, such as various system alarms, will be available for display.

NRC Request

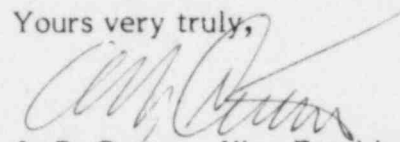
Consideration should be given to other methods of simplifying the display.

CP&L Response

In addition to certain system status deletion as referenced in the preceeding response, methods such as regrouping and color coding will be considered for improving display format.

Should you have further questions regarding this submittal, please contact Mr. S. R. Zimmerman at (919) 836-6242.

Yours very truly,



A. B. Cutter - Vice President
Nuclear Engineering & Licensing

RWS/crs (1704RWS)

cc: Mr. W. H. Ruland (NRC-BNP)
Dr. J. Nelson Grace (NRC-RII)
Mr. M. Grotenhuis (NRC)