Puget Sound Power & Light Company Puget Power Building Bellevue, Washington 98009 (206) 454-6363

November 28, 1978
PLN-204

-Misc. Notice
Reg. Guide

Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Docketing and Service Branch

Subject: Regulatory Guide 1.120, Rev. 1, Fire Protection Guidelines for Nuclear Power Plants

Gentlemen:

In accordance with the Nuclear Regulatory Commission's request for generic comments on the subject document, Puget Sound Power & Light Company hereby submits the attached comments with the expectation that they will be given serious consideration prior to future revision of the subject Regulatory Guide.

Sincerely,

J. E. Mecca, Manager
Nuclear Licensing & Safety

Attach.

12/13.....

PLN-204
November 28, 1978

COMMENTS ON REGULATORY GUIDE 1.120, REV. 1

1. RG Section B.2

The staff's position on the use of water on electrical cable fires does not allow for cost-effective, yet equally reliable, design of cable fire protection systems. In confirmed areas the use of gaseous suppressants provides reliable and economical extinguishing. Also, the potential damaging effects of free flowing ionized water are avoided and cleanup is facilitiated. The use of gas as a primary suppressant with a complete fixed water spray system as a backup is unreasonable and would generally result in the singular use of water. A primary gaseous system backed up by manual water hose capability provides overall area protection with the convenience to identify and combat an isolated fire by hand.

2. RG Section C.1.a

The person designated to have management control over the organizations involved in fire protection should be able to delegate the various activities in this section to qualified groups or organizations rather than a separate utility staff of experts.

3. RG Section C.1.b.3

Fire hazard analysis should be conducted by experienced nuclear power plant engineers but reviewed and approved by an experienced engineer with a background in fire protection and nuclear plant design.

4. RG Section C.4.a.1

The exclusive use of 3-hour barriers may result in impractical and unsafe plant arrangements. Separation of safety and non-safety related equipment and redundant safety related equipment should preclude common mode failure by any single incident, whether this is achieved via physical distance separation, 3-hour fire walls or other barriers should be determined by analysis of all potential hazards.

5. RG Section C.4.a.2

The use of fire barriers to separate equipment in one division from other equipment or electrical cables in the same division is not generally warranted and may result in additional hazards due to increased piping and cabling lengths. If division reliability or availability can be enhanced by fire barriers within that division such barriers should be included in the design.

6. RG Section C.4.a.10

Fire doors should be clearly marked as fire doors. Often doors are propped open for various reasons. Alarmed fire doors should be limited to those dividing safety related divisions from each other and from non-safety related areas.

7. RG Section C.4.a.11

Stairwells should be enclosed in 2-hour rated towers, in some areas concrete or masonry is not compatible with existing or practical plant design.

8. RG Section C.4.b.1

Automatic fire suppression should be employed where required as determined by the fire hazards analysis. The mere presence of combustible materials should not be the only criteria.

9. RG Section C.4.c.2

Cable division separation outside the cable spreading room by 3-hour fire barriers is not always practical. Physical separation in compliance with Regulatory Guide 1.75 provides conservative separation and protection against any credible postulated hazard. The use of line type cable tray fire detectors has been abandoned by telephone companies according to Marsh & McLennan. Maintenance and reliability are cited as reasons for abandoning them.

10. RG Section C.4.c.4

Fire stops in horizontal cable tray runs are not practical unless fire walls are used.

11. RG Section C.7.c.1

NFPA generally recommends the use of ductile iron pipe for fire water piping systems. With respect to tuberculation the recommendation to use steel pipe in this paragraph is conflicting to NFPA and paragraph C.5.b.1 suggestions.

12. RG Section C.6.c.5

Line type detectors do not increase protection reliability and may result in inadvertent operation of the suppression systems.