

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8201040094 DOC. DATE: 81/12/28 NOTARIZED: NO DOCKET #
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397.
 AUTH. NAME AUTHOR AFFILIATION
 BOUCHEY, G.D. Washington Public Power Supply System
 RECIP. NAME RECIPIENT AFFILIATION
 SCHWENCER, A. Licensing Branch 2

SUBJECT: Discusses 811211 telcon between NRC, Burns & Roe, Bechtel & util on question of obtaining 3-h fire barrier for cable sys. tested to meet App R requirements. One-hour barrier w/o sprinklers could be used selectively.

DISTRIBUTION CODE: B002S COPIES RECEIVED: LTR 1 ENCL 0 SIZE: 2
 TITLE: Fire Protection (Prior to Issuance of OL).

NOTES: 2 copies all matl: PM.

05000397

ACTION:	RECIPIENT ID CODE/NAME	COPIES		RECIPIENT ID CODE/NAME	COPIES	
		LT	TR ENCL		LT	TR ENCL
ACTION:	LIC BR #2 BC	1	1	AULUCK, R.	01	1
INTERNAL:	ELD	1	1	IE	07	3
	NRR/DE/ADMQE	1	1	NRR/DE/CEB	06	4
	NRR/DSI/ASB	1	1	REG FILE	04	1
EXTERNAL:	ACRS	10	16	LPDR	03	1
	NRC PDR	02	1	NSIC	05	1
	NTIS		1			

JAN 07 1982

35

TOTAL NUMBER OF COPIES REQUIRED: LTTR 35 ENCL 31

0

31

Handwritten signature

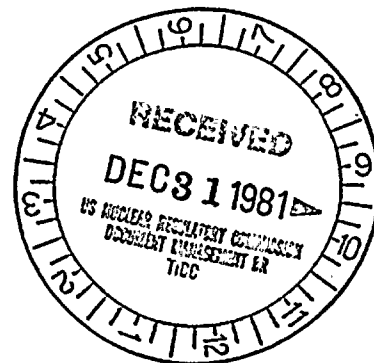
Washington Public Power Supply System

P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

December 28, 1981
G02-81-553

Docket No. 50-397

Mr. A. Schwencer, Director
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555



Dear Mr. Schwencer:

Subject: NUCLEAR PROJECT NO. 2
THREE-HOUR RATED FIRE BARRIER FOR CABLE SYSTEMS

The following is a summation of the telephone call on December 11, 1981, between your Mr. Greg Harrison, the Supply System, Burns and Roe, and Bechtel Engineering, on the question of obtaining a three-hour fire barrier for cable systems tested per ASTM E-119 and accepted by American Nuclear Insurers (ANI) to meet Appendix "R" requirements.

Mr. Harrison replied that a barrier/wrap with an E-119 rating for three hours and acceptable to the ANI would also be acceptable to the NRC.

The NRC would also accept either a three-hour or a one-hour rated barrier/wrap without an automatic suppression system in a low fire load area providing sprinklers are not required by the NRC's Branch Technical Position APCS 9.5-1, Appendix A. For example, the cable spreading room requires an automatic suppression system per BTP 9.5-1 because the cable spreading room is considered a high fire load area. Therefore, installation of a three-hour barrier/wrap would "not buy anything" because Appendix "R" compliance is satisfied with the installation of a one-hour barrier/wrap, with the automatic suppression system required under BTP 9.5-1. Mr. Harrison noted a few situations where the NRC accepted a one-hour barrier without an automatic suppression system, when these areas qualified as low fire load areas. The areas consisted of exposed concrete and steel and all the cables were installed in conduit.

Mr. Harrison clarified "automatic suppression" as water spray discharge devices or sprinklers with fusible elements. He further refined his definition by saying that the NRC is not requiring a complicated or highly engineered sprinkler system--just automatic sprinklers at the ceiling, wet pipe, pre-action, water spray, etc. Sprinklers or spray nozzles do not have to be mounted in or on trays.

3002
1/0

8201040094 811228
PDR ADDCK 05000397
F PDR

850107004

Mr. A. Schwencer
Page Two
December 28, 1981
G02-81- 553

He further clarified that even with a 15-minute fire loading, sprinklers may be omitted and that an A/E might request consideration of a one-hour barrier without sprinklers with a fire loading up to 30 minutes.* Beyond that, a 1 1/2 or 2-hour barrier might be considered (i.e., it does not necessarily escalate from a one-hour to a three-hour barrier). He also stated that this is acceptable in areas of low fire loading, except where a concentration of combustibles exist in one area of a room, e.g., where the fire loading would be low on an average basis, but high in a localized area.

* The Supply System interprets this clarification as follows:

A one-hour cable system barrier or wrap without sprinkler protection could be used in selected areas that do not have a high concentration of combustibles and the equivalent fire severity would be 30-minutes or less per ASTM E-119.

In the event this letter, in your opinion, does not reflect the content of the subject conversation, please inform the Supply System. There are design and construction efforts related to the above understanding.

Very truly yours,



G. D. Bouchey
Deputy Director, Safety and Security

DTE:kjf

cc: R. Auluck - NRC
R. Bahl - B&R Site
EF Beckett - NPI
M. Bursztein - B&R Site
WS Chin - BPA
OK Earle - B&R RO
R. Feil - NRC Site
R. Ferguson - NRC
SA Giusti - BPC Site
G. Harrison - NRC
H. Plagge - BPC Site
J. Plunkett - NUS
NS Reynolds - D&L
J. Rogoza - BPC Site
P. Sears - NRC
RE Snaith - B&R NY
JJ Verderber - B&R NY
WNP-2 Files

