

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8312130187 DOC. DATE: 83/12/06 NOTARIZED: NO DOCKET #
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
 AUTH. NAME: SØRENSEN, G. C. AUTHOR AFFILIATION: Washington Public Power Supply System
 RECIP. NAME: SCHWENCER, A. RECIPIENT AFFILIATION: Licensing Branch 2

SUBJECT: Forwards marked-up Page 9.5-55 from FSAR Section 9.5.6.2, reflecting change in design rating of HPCS diesel generator starting air sys, per Reg Guide 1.9. Sys designed for three starts on two air receivers.

DISTRIBUTION CODE: B001S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 2
 TITLE: Licensing Submittal: PSAR/FSAR Amdts & Related Correspondence

NOTES:

RECIPIENT		COPIES		RECIPIENT		COPIES	
ID	CODE/NAME	LTTR	ENCL	ID	CODE/NAME	LTTR	ENCL
NRR	DL/ADL	1	0	NRR	LB2 BC	1	0
NRR	LB2 LA	1	0	AULUCK, R.	01	1	1
INTERNAL:	ELD/HDS2	1	0	IE	FILE	1	1
	IE/DEPER/EPB 36	3	3	IE/DEPER/IRB 35		1	1
	IE/DEQA/QAB 21	1	1	NRR/DE/AEAB		1	0
	NRR/DE/CEB 11	1	1	NRR/DE/EHEB		1	1
	NRR/DE/eqB 13	2	2	NRR/DE/GB 28		2	2
	NRR/DE/MEB 18	1	1	NRR/DE/MTEB 17		1	1
	NRR/DE/SAB 24	1	1	NRR/DE/SGEB 25		1	1
	NRR/DHFS/HFEB40	1	1	NRR/DHFS/LQB 32		1	1
	NRR/DHFS/PSRB	1	1	NRR/DL/SSPB		1	0
	NRR/DSI/AEB 26	1	1	NRR/DSI/ASB		1	1
	NRR/DSI/CPB 10	1	1	NRR/DSI/CSB 09		1	1
	NRR/DSI/ICSB 16	1	1	NRR/DSI/METB 12		1	1
	NRR/DSI/PSB 19	1	1	NRR/DSI/RAB 22		1	1
	NRR/DSI/RSB 23	1	1	REG FILE 04		1	1
	RGNS	3	3	RM/DDAMI/MIB		1	0
EXTERNAL:	ACRS 41	6	6	BNL (AMDTS ONLY)		1	1
	DMB/DSS (AMDTS)	1	1	FEMA-REP DIV 39		1	1
	LPDR 03	1	1	NRC PDR 02		1	1
	NSIC 05	1	1	NTIS		1	1

Washington Public Power Supply System

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

December 6, 1983
G02-83-1120

Docket No. 50-397

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

Dear Mr. Schwencer:

Subject: NUCLEAR PROJECT NO. 2
HPCS DIESEL GENERATOR STARTING AIR SYSTEM

FSAR Section 9.5.6.2 will be changed to reflect the design rating of the HPCS Diesel Generator Starting Air System as stated in the WNP-2 compliance with Regulatory Guide 1.9, in FSAR Appendix C.2. The HPCS Diesel Generator Starting Air System is designed for three (3) starts on two air receivers as documented by test results in NEDO 10905, Revision 3. Attached is a copy of the FSAR change reflecting the design rating.

If there are any further questions, please contact Mr. P. L. Powell, Manager, WNP-2 Licensing.

Very truly yours,



G. C. Sorensen, Manager
Regulatory Program

JCM/tmh
Attachment

cc: R Auluck - NRC
WS Chin - BPA
AD Toth - NRC Site

8312130187 831206
PDR ADOCK 05000397
A PDR

Boo /
11

1. The first part of the report

2. The second part of the report

3. The third part of the report

4. The fourth part of the report

5. The fifth part of the report

6. The sixth part of the report

7. The seventh part of the report

8. The eighth part of the report

9. The ninth part of the report

10. The tenth part of the report

11. The eleventh part of the report

12. The twelfth part of the report

13. The thirteenth part of the report

14. The fourteenth part of the report

15. The fifteenth part of the report

16. The sixteenth part of the report

17. The seventeenth part of the report

18. The eighteenth part of the report



The tandem electric motor-diesel engine driven air compressor includes a battery for starting the diesel engines driven compressor which is actuated from a local panel.

The starting air system is designed to provide a reliable method for automatically starting each diesel generator unit. The system design is such as to preclude fouling of its components. The volume of the air receivers allows sufficient time for moisture and any contaminants to settle at the bottom of the air receivers where drain valves have been provided. The air receivers are drained once a day to remove oil, moisture, and rust. Compressed air piping from the compressor and air dryer is connected to the lower region of the air receivers, whereas the starting air system headers are connected to the top region of the air receivers. The starting air supply headers are periodically blown down. In addition, "Y" type strainers are provided upstream of the starting air valves and motors. These strainers are blown down periodically to assure that they are kept free from contaminants.

The start system of the ^{each} HPCS diesel generator is identical to that described above except: the number of air receivers (two ~~redundant~~ 36 ft³); the number of engine starts ~~(2)~~ (3) available from the air receivers ~~as demonstrated by test~~; all four air motors are activated on a start (only two are required to start the engine); the redundant starting air compressor is only diesel driven; the starting air equipment is redundant, but the systems are not completely redundant since there is a common line from the air receivers to the engine ~~room~~. *Tests at the site have demonstrated the capability of 5 engine starts per air receiver.*
See 8.3.1.1.8.2.5 for additional discussion of the HPCS diesel engine air starting system.

9.5.6.3 Safety Evaluation

Each diesel generator air starting system is capable of supplying a sufficient quantity of air from its associated air receivers to ensure a successful starting operation of the diesel generator independent of normal plant power sources.

The air starting systems for each diesel generator unit are physically and electrically separated to ensure that no single failure can cause malfunction of both division of standby AC power. The single failure criterion is satisfied and significantly enhanced by having a dual-equipment air starting system for each diesel generator.

with the compressors locked out which was demonstrated by Prototype Qualification Tests described in NEDO-10905
Rev. 3



10-11-68

10-11-68