

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

094

ACCESSION NBR: 8312130134 DOC. DATE: 83/12/02 NOTARIZED: NO DOCKET #
 FACIL: 50-397 WPPSS Nuclear Project, Unit 2, Washington Public Power 05000397
 AUTH. NAME: SORENSEN, G.C. AUTHOR AFFILIATION: Washington Public Power Supply System
 RECIP. NAME: SCHWENCER, A. RECIPIENT AFFILIATION: Licensing Branch 2

SUBJECT: Forwards marked-up Page 8,3-70 to FSAR, Amend 23, deleting ref
 to battery charger output breaker trip & battery charger
 blown fuse indication alarms, as redundant.

DISTRIBUTION CODE: B001S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 3
 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

1. The purpose of this document is to provide a comprehensive overview of the current state of the project and to identify the key areas for improvement. This document is intended for the use of the project team and management.

2. The project has been successful in many respects, but there are several areas that need to be addressed. The first area is the need for better communication between the project team and management. The second area is the need for better documentation of the project progress. The third area is the need for better control of the project budget.

3. The project team has been working hard to complete the project on time and on budget. However, there have been several problems that have caused delays and cost overruns. These problems include poor communication, lack of documentation, and poor budget control.

4. The project team has identified several key areas for improvement. These areas include better communication, better documentation, and better budget control. The project team will be working on these areas to ensure that the project is completed on time and on budget.

5. The project team is confident that it can complete the project successfully. However, it needs the support of management to ensure that the project is completed on time and on budget.

Project Name		Project Manager		Project Status	
1	Project A	John Doe	Completed	100%	On Time
2	Project B	Jane Smith	In Progress	75%	On Budget
3	Project C	Mike Johnson	On Hold	20%	Over Budget
4	Project D	Sarah Brown	Completed	100%	On Time
5	Project E	David White	In Progress	50%	On Budget
6	Project F	Emily Green	On Hold	10%	Over Budget
7	Project G	Chris Black	Completed	100%	On Time
8	Project H	Alexander Grey	In Progress	60%	On Budget
9	Project I	Olivia Blue	On Hold	30%	Over Budget
10	Project J	Benjamin Yellow	Completed	100%	On Time
11	Project K	Sophia Purple	In Progress	40%	On Budget
12	Project L	Lucas Brown	On Hold	15%	Over Budget
13	Project M	Mia Green	Completed	100%	On Time
14	Project N	Noah Black	In Progress	55%	On Budget
15	Project O	Aria Grey	On Hold	25%	Over Budget
16	Project P	Ethan Blue	Completed	100%	On Time
17	Project Q	Isabella Yellow	In Progress	65%	On Budget
18	Project R	Jack Purple	On Hold	35%	Over Budget
19	Project S	Karen Brown	Completed	100%	On Time
20	Project T	Liam Green	In Progress	45%	On Budget

Washington Public Power Supply System

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

December 2, 1983
G02-83-1110

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
BATTERY CHARGER ANNUNCIATION CHANGES

In a telephone conversation on November 30, 1983, with Mr. Sang Rhaw (NRC) and Mr. P. Powell and Mr. W. Gilles (SS), Mr. Rhaw agreed that the "Battery Charger Output Breaker Tripped" and "Battery Charger Blown Fuse Indication" alarms are redundant and therefore could be deleted. The following formally documents the reason for the deletion.

In the Control Room, we presently alarm as "Battery Charger Trouble" for:

AC Failure - internal AC failure within the charger
Charger High Voltage - charger output above 139v or 282v
Charger Low Voltage - charger output below 124v or 235v

We alarm as "Battery Failure" for:

Battery Fuse Blown
Battery Bus Undervoltage - battery bus below 120v or 240v

In the Control Room, meters indicate battery bus voltage, battery charger current and battery charge/discharge current.

Under normal conditions, the battery is in the "float" mode at 130.5v or 261.0v (for 125v and 250v battery, respectively). In the event of an output failure of the charger (due to tripped charger output breaker, blown charger fuse or other internal charger failure), the battery bus voltage drops to about 117v or 234v immediately as the battery supplies the load. This causes the charger low voltage relay to alarm and (with the 120v present setting) the bus undervoltage to alarm. Both "Charger Trouble" and "Battery Failure" annunciators alarm in the Control Room. A blown fuse indicator or charger breaker trip indication is redundant since charger low voltage occurs for either of the two.

8312130134 831202
PDR ADOCK 05000397
Q PDR

Boo!
11

A. Schwencer

Page Two

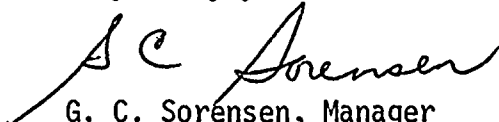
G02-83-1110

BATTERY CHARGER ANNUNCIATION CHANGES

In addition, the panel meters will show no charger current, battery discharge current and the battery below float voltage. From all of this panel and annunciator information, it is clear to the Operator that something in the battery charging circuit has failed and the battery is supplying the load.

The attachment is a markup of the FSAR to reflect deletion of the charger blown fuse indicator and the charger output breaker tripped indication. If you have any further questions, please contact Mr. P. L. Powell, Manager, WNP-2 Licensing.

Very truly yours,


G. C. Sorensen, Manager
Regulatory Programs

WPG/tmh
Attachment

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

[illegible]

The DC power systems are designed to permit periodic inspection and test of important areas such as wiring, insulation, connections, and switchboards, and thus comply with General Design Criterion 18.

Control room instrumentation and alarms are provided for each battery and battery charger to monitor the status of each power supply in accordance with IEEE Standard 308-1974 and Regulatory Guide 1.47. This instrumentation includes indication of the main bus voltage, battery current (charge and discharge), and battery charger discharge current. Alarms through the control room annunciator and computer are provided for the following abnormal conditions: Bus undervoltage, DC system ground fault (for ungrounded systems), battery fuse blown, ~~battery charger fuse blown~~, battery charger over/undervoltage, ~~battery charger output breaker tripped~~, and battery charger AC failure. Charger and battery disconnect switches are provided with position indication and group alarm in the control room.

Battery high discharge rate is not separately alarmed. In the absence of an electrical fault and with battery charger available, all normal and emergency steady state loads are carried by the battery charger. At 125% of its full load rating, the battery charger operates in a current-limiting mode and any overcurrent in excess is supplied by the battery. However, the feeder circuit fuses are sized to trip on overcurrents of this magnitude, thereby preventing battery high discharge current to continue to the point of degrading the system. Annunciation of the isolated Class 1E circuit is made for each connected load. Failure of the battery charger also causes a battery high discharge, but this condition is monitored as discussed above.

8.3.2.2.1.3 HPCS (Division 3) 125 Volt DC System

The 480 V AC feed to the HPCS battery charger is from the HPCS motor control center via the engine generator control panel.

Separation between Division 3 and other independent systems is maintained and the power provided to the chargers can be from either offsite or onsite sources. The HPCS DC system is arranged so that the probability of a system failure resulting in loss of DC power is extremely low. Important system components are either self-alarmed on failure or capable of being tested during service to detect faults. All abnormal conditions of selected system parameters important to surveillance of the system annunciate in the main control room. Cross connections with other independent 125 V DC systems do not exist.

