WCAP 8587

"Equipment Qualification Data Packages"

Supplement 1

EQDP-ESE-15

Recorders: Post Accident Monitoring

Revision 4

Instruction Sheet

The following instructional information and checklist is being furnished to help insert the following into WCAP-8587 Supplement 1 EQDP-ESE-15 Class 3 (Non-Proprietary). Discard the old cover sheet and insert the new cover sheet as listed below.

Remove (Front/Back) Insert
(Front/Back)

Cover sheet/--

Cover sheet/--

Page 2/3

Page 2/3

EQUIPMENT QUALIFICATION DATA PACKAGE

This document contains information, relative to the qualification of the equipment identified below in accordance with the methodology of WCAP-8587. The Specification section (Section 1) defines the assumed limits for the equipment qualification and constitute interface requirements to the user.

Recorders: Post Accident Monitoring

APPROVED:

E. P. Rahe, Manager Nuclear Safety Department

WESTINGHOUSE ELECTRIC CORPORATION
NUCLEAR ENERGY SYSTEMS
P.O. BOX 355
PITTSBURGH, PENNSYLVANIA 15230

WESTINGHOUSE CLASS 3

SECTION 1 - SPECIFICATIONS

- 1.0 PERFORMANCE SPECIFICATIONS
- 1.1 Electrical Requirements
 - 1.1.1 Voltage: 118 +2% VAC (Power), 0-10 VDC (signal)
 - 1.1.2 Frequency: 60 or 0.5 Hz
 - 1.1.3 Load: N/A
 - 1.1.4 Electromagnetic Interference: N/A
 - 1.1.5 Other: N/A
- 1.2 Installation Requirements: Installed in seismically qualified structure, in a controlled environment per Reference 1. (See Westinghouse drawing 6630D94 Revision 1)
- 1.3 Auxiliary Devices: None
- 1.4 Preventative Maintenance Schedule: As a result of the completion of the Westinghouse Aging Evaluation Program (Phase 1, Short Term Aging described in WCAP-8587 and discussed in WCAP-8687 Supplement 2, Appendix Al (Component Aging) Reference 3 and Appendix A2 (Materials Aging) Reference 4 Proprietary, no preventive maintenance is required to support the equipment qualified life. This does not preclude development of a preventive maintenance program designed to enhance equipment performance and identify unanticipated equipment degradation as long as this program does not compromise the qualification status of the equipment. Surveillance activities may also be considered to support the basis for/and a possible extension of the qualified life.
- 1.5 Design Life: 40 years
- 1.6 Operating Cycles (Expected number of cylces during design life including test): Continuous Duty

3

3

4

| 1.7 | Parformance | Requirements | for(b). | PAMS | Recording | and | RVLIS | Recording |
|-----|-------------|----------------|---------|----------|-------------|------|---------|-----------|
| 1.1 | refrormance | Redutt emetter | 101 | 1.541.17 | necessaring | arru | Like In | necording |

| | | | | | DBE Conditions(a) | | | Post DBE Conditions(a) | | |
|--------|-------------------------------|----------------------|-------------------------|-----------------------------------|-----------------------|-----------------------|-------------------|------------------------|-----------------------|-----------------------|
| | Parameter | Normal Conditions | Abnorma i Conditions | Containment Test Conditions | FLB/SLB | LOCA | SEISMIC | FLB/SLB | LOCA | SEISMIC |
| 1.7.1 | Time requirement | Cont inuous | 12 hours | N/A | event duration | event duration | event duration | continuous | continuous | continuous |
| 1.7.2 | Performance requirement | ± 0.5% span | + 4.5% span accuracy | | as normal | as normal | Note c | as normal | as normal | + 4.5% span |
| B Envi | ronmental Condition | ns for Same Fi | unction ⁽⁴⁾ | | | | | | | |
| 1.8.1 | Temperature (^O F) | 60 - 80 | Note d | | ambient conditions | ambient conditions | ambient | ambient conditions | ambient conditions | ambient conditions |
| 1.8.2 | Pressure (psig) | 0 | 0 | | | | 0 | | | |
| 1.8.3 | Humidity (% RH) | 30 - 50 | Note d | | | | ambient | | | |
| 1.8.4 | Radiation (R) | < 400 | None | | | | None | | | |
| 1.8.5 | Chemicals | None | None | | | | None | | | |
| 1.8.6 | Vibration | None | None | | | | Mone | | | |
| 1.8.7 | Acceleration(g) | None | None | | | | Fig 2. | | | |
| | DRE to the Decien | Racis Event | | | | | | | | |

Note a: DBE is the Design Basis Event.

b: Margin is not included in the parameters of this section.

c: Continued operation required, no specified accuracy.

d: Figure 1, Envelope 3. However, for plants having a Class IE HVAC for the area in which the Recorders are located, the abnormal extremes are the same as the normal specified above.