# SURVEILLANCE REQUIREMENTS (Continued)

- 2. The pilot cell specific gravity, corrected to  $77^{\circ}$ F and full electrolyte level (fluid at the bottom of the maximum level indication mark), is  $\geq 1.200$ ,
- 3. The pilot cell voltage is  $\geq 2.10$  volts, and
- 4. The overall battery voltage is  $\geq$  250 volts.
- b. At least once per 92 days by verifying that:
  - 1. The voltage of each connected cell is  $\geq 2.10$  volts under float charge and has not decreased more than 0.05 volts from the value observed during the original acceptance test, and
  - 2. The specific gravity, corrected to  $77^{\circ}F$  and full electrolyte level (fluid at the bottom of the maximum level indication mark), of each connected cell is  $\geq 1.200$  and has not decreased more than 0.03 from the value observed during the previous test, and
  - 3. The electrolyte level of each connected cell is between the top of the minimum level indication mark and the bottom of the maximum level indication mark.
- c. At least once per 18 months by verifying that:
  - The cells, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration.
  - 2. The cell-to-cell and terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material.
  - 3. The battery charger will supply at least 140 amperes at  $\geq$  250 volts for at least 4 hours.
- d. At least once per 18 months, during shutdown (MODES 5 or 6), by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status the actual or simulated emergency loads for the times specified in Table 4.8-1A with the battery charger disconnected. The battery terminal voltage shall be maintained ≥210 volts throughout the battery service test.\*
- e. At least once per 60 months, during shutdown (MODES 5 or 6), by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed in place of the battery service test.

\*The provisions of Specification 4.0.6 are applicable.

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# SURVEILLANCE REQUIREMENTS (Continued)

# TABLE 4.8-1A BATTERY EMERGENCY LOADS

AB Battery Loads		Minimum Time	
1.	Channel III static inverter	3 hrs	
2.	Channel IV static inverter	3 hrs	
3.	Computer static inverter*	3 hrs	
4.	Feed pump turbine 1E oil pump	1 hr	
5.	Control room emergency lighting	8 hrs	
6.	Main turbine backup oil pump	3 hrs	
7.	Isolation valve control	8 hrs	
8.	All control circuits	8 hrs	
CD Battery Loads			
1.	Channel I static inverter	3 hrs	
2.	Channel II static inverter	3 hrs	
3.	BOP static inverter*	3 hrs	
4.	Feed pump turbine 1W oil pump `	1 hr	
5.	Generator seal oil pump	8 hrs	
6.	Turbine emergency oil pump	3 hrs '	
7.	Isolation valves	8 hrs	
8.	Annunciators	8 hrs	
9.	All control circuits	8 hrs	

<sup>\*</sup> AC power sources to the inverters shall be turned off at the start of the test and may be turned on at the end of the specific time interval. Inverters may be left in this operating mode for the duration of the discharge test.

D. C. COOK - UNIT 1 .

## SURVEILLANCE REQUIREMENTS (Continued)

- 2. The pilot cell specific gravity, corrected to  $77^{\circ}F$  and full electrolyte level (fluid at the bottom of the maximum level indication mark), is  $\geq 1.200$ ,
- 3. The pilot cell voltage is  $\geq 2.10$  volts, and
- 4. The overall battery voltage is  $\geq$  250 volts.
- b. At least once per 92 days by verifying that:
  - 1. The voltage of each connected cell is  $\geq 2.10$  volts under float charge and has not decreased more than 0.05 volts from the value observed during the original acceptance test, and
  - 2. The specific gravity, corrected to  $77^{\circ}$ F and full electrolyte level (fluid at the bottom of the maximum level indication mark), of each connected cell is  $\geq 1.200$  and has not decreased more than 0.03 from the value observed during the previous test, and
  - 3. The electrolyte level of each connected cell is between the top of the minimum level indication mark and the bottom of the maximum level indication mark.
- c. At least once per 18 months by verifying that:
  - The cells, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration.
  - 2. The cell-to-cell and terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material.
  - 3. The battery charger will supply at least 10 amperes at  $\geq$  250 volts for at least 4 hours.
- d. At least once per 18 months, during shutdown (MODES 5 or 6), by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status the actual or simulated emergency loads for the times specified in Table 4.8-2 with the battery charger disconnected. The battery terminal voltage shall be maintained \$\geq 210\$ volts throughout the battery service test.\*
- e. At least once per 60 months, during shutdown (MODES 5 or 6), by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed in place of the battery service test.

\*The provisions of Specification 4.0.6 are applicable.

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#### SURVEILLANCE REQUIREMENTS (Continued)

- 2. The pilot cell specific gravity, corrected to  $77^{\circ}$ F and full electrolyte level (fluid at the bottom of the maximum level indication mark), is  $\geq 1.200$ ,
- 3. The pilot cell voltage is  $\geq 2.10$  volts, and
- 4. The overall battery voltage is  $\geq$  250 volts.
- b. At least once per 92 days by verifying that:
  - 1. The voltage of each connected cell is ≥2.10 volts under float charge and has not decreased more than 0.05 volts from the value observed during the original acceptance test, and
  - 2. The specific gravity, corrected to 77°F and full electrolyte level (fluid at the bottom of the maximum level indication mark), of each connected cell is ≥1.200 and has not decreased more than 0.03 from the value observed during the previous test, and
  - 3. The electrolyte level of each connected cell is between the top of the minimum level indication mark and the bottom of the maximum level indication mark.
- c. At least once per 18 months by verifying that:
  - 1. The cells, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration.
  - 2. The cell-to-cell and terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material.
  - 3. The battery charger will supply at least 140 amperes at  $\geq$  250 volts for at least 4 hours.
- d. At least once per 18 months, during shutdown (MODES 5 or 6), by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status the actual or simulated emergency loads for the times specified in Table 4.8-1A with the battery charger disconnected. The battery terminal voltage shall be maintained >210 volts throughout the battery service test.
- e. At least once per 60 months, during shutdown (MODES 5 or 6), by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed in place of the battery service test.

# SURVEILLANCE REQUIREMENTS (Continued)

# TABLE 4.8-1A BATTERY EMERGENCY LOADS

AB Battery Loads		Minimum Time	
1.	Channel III static inverter	3 hrs	
2.	Channel IV static inverter	3 hrs	
3.	Computer static inverter*	3 hrs	
4.	BOP Static Inverter*	3 hrs	
5.	Feed pump turbine 2E oil pump	1 hr	
6.	Control room emergency lighting	8 hrs	
7.	Main turbine oil pump "E"	3 hrs	
8.	Isolation valve control	8 hrs	
9.	All control circuits	8 hrs	
CD Battery Loads			
1.	Channel I static inverter	3 hrs	
2.	Channel II static inverter	3 hrs	
3.	Feed pump turbine 2W oil pump	1 hr	
4.	Generator seal oil pump	5 hrs	
5.	Main turbine oil pump "W"	3 hrs	
6.	Isolation valves	8 hrs	
7.	Annunciators	8 hrs	
8.	All control circuits	8 hrs	

<sup>\*</sup> AC power sources to the inverters shall be turned off at the start of the test and may be turned on at the end of the specific time interval. Inverters may be left in this operating mode for the duration of the discharge test.

D. C. COOK - UNIT 2

### SURVEILLANCE REQUIREMENTS (Continued)

- 2. The pilot cell specific gravity, corrected to  $77^{\circ}F$  and full electrolyte level (fluid at the bottom of the maximum level indication mark), is  $\geq 1.200$ .
- 3. The pilot cell voltage is  $\geq 2.10$  volts, and
- 4. The overall battery voltage is  $\geq$  250 volts.
- b. At least once per 92 days by verifying that:
  - 1. The voltage of each connected cell is  $\geq 2.10$  volts under float charge and has not decreased more than 0.05 volts from the value observed during the original acceptance test, and
  - 2. The specific gravity, corrected to 77°F and full electrolyte level (fluid at the bottom of the maximum level indication mark), of each connected cell is ≥1.200 and has not decreased more than 0.03 from the value observed during the previous test, and
  - 3. The electrolyte level of each connected cell is between the top of the minimum level indication mark and the bottom of the maximum level indication mark.
- c. At least once per 18 months by verifying that:
  - The cells, cell plates and battery racks show no visual indication of physical damage or abnormal deterioration.
  - 2. The cell-to-cell and terminal connections are clean, tight, free of corrosion and coated with anti-corrosion material,
  - 3. The battery charger will supply at least 10 amperes at  $\geq$  250 volts for at least 4 hours.
- d. At least once per 18 months, during shutdown (MODES 5 or 6), by verifying that the battery capacity is adequate to supply and maintain in OPERABLE status the actual or simulated emergency loads for the times specified in Table 4.8-2 with the battery charger disconnected. The battery terminal voltage shall be maintained ≥210 volts throughout the battery service test.
- e. At least once per 60 months, during shutdown (MODES 5 or 6), by verifying that the battery capacity is at least 80% of the manufacturer's rating when subjected to a performance discharge test. This performance discharge test shall be performed in place of the battery service test.