SURVEILLANCE REQUIREMENTS (continued)

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| SURVEILLANCE |                                                                                                                                                                                                                                                                                                                                  | FREQUENCY   |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| SR 3.8 1.9   | <ul> <li>NOTE</li></ul>                                                                                                                                                                                                                                                                                                          |             |
|              | Verify each DG rejects a load greater than or equal to<br>its associated single largest post accident load and<br>following load rejection, the engine speed is<br>maintained less than nominal plus 75% of the<br>difference between nominal speed and the overspeed<br>trip setpoint or 15% above nominal, whichever is lower. | 18 months   |
| SR 3.8.1.10  |                                                                                                                                                                                                                                                                                                                                  | 18 months   |
| <u> </u>     |                                                                                                                                                                                                                                                                                                                                  | (continued) |

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SURVEILLANCE REQUIREMENTS (continued)

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|             |                           | SURVEILLANCE                                                                                                                                                                                                                             | FREQUENCY |
|-------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| SR 3.8.1.11 | <br>1.<br>2.              | All DG starts may be preceded by an engine<br>prelube period.<br>This Surveillance shall not be performed in<br>MODE 1, 2, or 3. (Not applicable to DG 1C)<br>However, credit may be taken for unplanned<br>events that satisfy this SR. |           |
|             | Verii<br>sign<br>a.<br>b. | fy on an actual or simulated loss of offsite power<br>al:<br>De-energization of emergency buses;<br>Load shedding from emergency buses for                                                                                               | 18 months |
|             | C.                        | <ul> <li>Divisions I and II; and</li> <li>DG auto-starts from standby condition and:</li> <li>1. energizes permanently connected loads in ≤ 10 seconds for DG 1A and DG 1B and ≤ 13 seconds for DG 1C,</li> </ul>                        |           |
|             |                           | <ol> <li>energizes auto-connected shutdown loads,</li> <li>maintains steady state voltage         ≥ 3740 V and ≤ 4580 V,     </li> <li>maintains steady state frequency ≥ 58.8 Hz</li> </ol>                                             |           |
|             |                           | <ul> <li>and ≤ 61.2 Hz, and</li> <li>5. supplies permanently connected and auto-connected shutdown loads for ≥ 5 minutes.</li> </ul>                                                                                                     |           |

(continued)

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## SURVEILLANCE REQUIREMENTS (continued)

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|                                        | FREQUENCY                 |             |
|----------------------------------------|---------------------------|-------------|
| SR 3.8.1.12                            | <ul> <li>NOTES—</li></ul> | 18 months   |
| ······································ |                           | (continued) |

AC Sources-Operating 3.8.1

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## SURVEILLANCE REQUIREMENTS (continued)

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|             |                            | SURVEILLANCE FREQUENCY                                                                         |   |
|-------------|----------------------------|------------------------------------------------------------------------------------------------|---|
| SR 3.8.1.13 | This<br>MOI<br>How<br>even | NOTE                                                                                           |   |
|             | Verif<br>an a<br>exce      | y each DG's automatic trips are bypassed on<br>ctual or simulated ECCS initiation signal<br>pt |   |
|             | a.                         | Engine overspeed; and                                                                          |   |
|             | b.                         | Generator differential current.                                                                |   |
| SR 3.8.1.14 | <br>1.                     | Momentary transients outside the load and power factor ranges do not invalidate this test.     | _ |
|             | 2.                         | Credit may be taken for unplanned events that satisfy this SR.                                 |   |
|             | Verif<br>oper              | y each DG operating at a power factor $\leq$ 0.9, 18 months ates for $\geq$ 24 hours:          |   |
|             | а.                         | For DG 1A and DG 1B loaded $\geq$ 3030 kW and $\leq$ 3130 kW, and                              |   |
|             | b.                         | For DG 1C:                                                                                     |   |
|             |                            | 1. For ≥ 2 hours loaded ≥ 2750 kW and $\leq$ 2850 kW, and                                      |   |
|             |                            | <ol> <li>For the remaining hours of the test<br/>loaded ≥ 2500 kW and ≤ 2600 kW.</li> </ol>    |   |

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SURVEILLANCE REQUIREMENTS (continued)

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| SURVEILLANCE |                                |                                                                                                                                                                                                                                                                                                                      | FREQUENCY |  |
|--------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--|
| SR 3.8.1.15  | 1.                             | This Surveillance shall be performed within<br>5 minutes of shutting down the DG after the DG<br>has operated $\geq$ 1 hour loaded $\geq$ 3000 kW and<br>$\leq$ 3100 kW for DG 1A and DG 1B, and<br>$\geq$ 2500 kW and $\leq$ 2600 for DG 1C, or operating<br>temperatures have stabilized, which ever is<br>longer. |           |  |
|              |                                | Momentary transients outside of the load range do not invalidate this test.                                                                                                                                                                                                                                          |           |  |
|              | 2.                             | All DG starts may be preceded by an engine prelube period.                                                                                                                                                                                                                                                           |           |  |
|              | Veri<br>for E<br>volta<br>≥ 58 | fy each DG starts and achieves, in ≤ 10 seconds<br>DG 1A and DG 1B and ≤ 13 seconds for DG 1C,<br>age ≥ 3740 V and ≤ 4580 V and frequency<br>3.8 Hz and ≤ 61.2 Hz.                                                                                                                                                   | 18 months |  |
| SR 3.8.1.16  | This<br>or 3<br>be ta          | NOTE                                                                                                                                                                                                                                                                                                                 |           |  |
|              | Veri                           | fy each DG:                                                                                                                                                                                                                                                                                                          | 18 months |  |
|              | а.                             | Synchronizes with offsite power source while<br>loaded with emergency loads upon a simulated<br>restoration of offsite power;                                                                                                                                                                                        |           |  |
|              | b.                             | Transfers loads to offsite power source; and                                                                                                                                                                                                                                                                         |           |  |
|              | С.                             | Returns to ready-to-load operation.                                                                                                                                                                                                                                                                                  |           |  |

(continued)

AC Sources-Operating 3.8.1

SURVEILLANCE REQUIREMENTS (continued)

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|             | SURVEILLANCE                                                                                                                                       | FREQUENCY   |   |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---|
| SR 3.8.1.17 | NOTE                                                                                                                                               |             | ļ |
|             | Verify, with a DG operating in test mode and connected<br>to its bus, an actual or simulated ECCS initiation signal<br>overrides the test mode by: | 18 months   |   |
|             | a. Returning DG to ready-to-load operation; and                                                                                                    |             |   |
|             | b. Automatically energizing the emergency loads from offsite power.                                                                                |             |   |
| SR 3.8.1.18 | NOTE                                                                                                                                               |             | I |
|             | Verify sequence time is within $\pm 10\%$ of design for each load sequencer timer.                                                                 | 18 months   |   |
|             |                                                                                                                                                    | (continued) |   |

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SURVEILLANCE REQUIREMENTS (continued)

|             |                        | SURVEILLANCE                                                                                                                                                                                                                                      | FREQUENCY |
|-------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| SR 3.8.1.19 | <br>1.<br>2.           | NOTES<br>All DG starts may be preceded by an<br>engine prelube period.<br>This Surveillance shall not be performed in<br>MODE 1, 2, or 3. (Not applicable to DG 1C)<br>However, credit may be taken for unplanned<br>events that satisfy this SR. |           |
|             | Veri<br>sign<br>initia | fy, on an actual or simulated loss of offsite power<br>al in conjunction with an actual or simulated ECCS<br>tion signal:                                                                                                                         | 18 months |
|             | a.                     | De-energization of emergency buses;                                                                                                                                                                                                               |           |
|             | b.                     | Load shedding from emergency buses for<br>Divisions I and II; and                                                                                                                                                                                 |           |
|             | C.                     | DG auto-starts from standby condition and:                                                                                                                                                                                                        |           |
|             |                        | <ol> <li>energizes permanently connected loads in<br/>≤ 10 seconds for DG 1A and DG 1B and<br/>≤ 13 seconds for DG 1C,</li> </ol>                                                                                                                 |           |
|             |                        | <ol> <li>energizes auto-connected emergency<br/>loads,</li> </ol>                                                                                                                                                                                 |           |
|             |                        | 3. achieves steady state voltage $\ge$ 3740 V and $\le$ 4580 V,                                                                                                                                                                                   |           |
|             |                        | <ol> <li>achieves steady state frequency ≥ 58.8 Hz<br/>and ≤ 61.2 Hz, and</li> </ol>                                                                                                                                                              |           |
|             |                        | <ol> <li>supplies permanently connected and<br/>auto-connected emergency loads for<br/>≥ 5 minutes.</li> </ol>                                                                                                                                    |           |

(continued)