

## 15.9 STATION BLACKOUT (SBO)

### 15.9.0 COPING ASSESSMENT FOR THE SUSQUEHANNA STEAM ELECTRIC STATION DURING A STATION BLACKOUT

10CFR50.63, "Loss of All Alternating Current Power," requires all licensees to assess the capability of their plants to maintain adequate core cooling and appropriate containment integrity during a station blackout (SBO) and to have procedures to cope with such an event. In order to comply with this Nuclear Regulatory Commission rule, a detailed coping assessment for the Susquehanna Steam Electric Station (SSES) was undertaken, based on Regulatory Guide 1.155 (Reference 15.9-1), utilizing the methodology provided by the Nuclear Management and Resources Council (NUMARC) in NUMARC 87-00, Revision 1 (Reference 15.9-2). This assessment concluded that the required SSES SBO coping time was four (4) hours and this coping assessment received NRC review and approval (Reference 15.9-3). Plant specific analysis was used in areas where necessary to more accurately represent SSES and a detailed evaluation of SSES response to an SBO event was performed. The results demonstrate that SSES can successfully cope with an SBO event, using current plant procedures, for the required four (4) hour period.

The preferred method of coping with SBO at SSES is based upon the following criteria as identified by PPL's approach to accident management:

- Extending the time to Reactor Vessel and Primary Containment challenge; and
- Maximizing the availability of plant equipment necessary to cope with and recover from SBO.

Using these criteria will assure that the required four (4) hour SBO coping time (before fuel integrity, or any other acceptance criterion in either 10CFR50.63 or NUMARC 87-00, is challenged) continues to be met.

All Plant equipment (i.e., systems and instrumentation) necessary to cope with SBO, recover from SBO, and ensure Primary Containment isolations were identified and investigated to assure that all items necessary for the equipment to function would be available for at least 4 hours. Instrumentation required for the 4 hour station blackout commitment is listed in Table 15.9-1 for Unit 1 and Table 15.9-2 for Unit 2. In addition, coping beyond 4 hours was analyzed with respect to equipment necessary to cope with and recover from SBO.

15.9.1 REFERENCES

- |        |  |  |
|--------|--|--|
| 15.9-1 | U. S. Nuclear Regulatory Commission, Regulatory Guide 1.155, 'Station Blackout, 'August 1988.  |  |
| 15.9-2 | NUMARC 87-00, Revision 1, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout in Light Water Reactors, Nuclear Management and Resource Council, August, 1991.                             |  |
| 15.9-3 | Letter, George F. Maxwell (NRC) to Harold W. Keiser, "Supplement Safety Evaluation (SSE) on the Station Blackout Rule for Susquehanna Steam Electric Station, Units 1 and 2 (TAC Nos. M68613 and M68614), June 16, 1992. |  |

Table 15.9-1 – Unit 1 Station Blackout Instrumentation List

| Instrument | Loop Devices | Parameter                               | Location | Area/Elev. | Room  | Power Supply | Bat. | Div. | Drwg.   |
|------------|--------------|---|----------|------------|-------|--------------|------|------|---------|
| LI-14201A  | LI-14201A    | Reactor Vessel Level<br>(Wide Range)    | 1C601    | 12/729     | CR    | 1Y11501      | Y    | I    | J-803-4 |
|            | LT-14201A    |   | 1C225    | 27/749     | I-513 | 1Y11505      | Y    | I    | M-142-1 |
|            | LT-14203A    | (Extended Range)                        | 1C224    | 27/749     | I-513 | 1Y11505      | Y    | I    | J-442-1 |
| LI-14201A1 | LI-14201A1   | (Extended Range)                        | 1C651    | 12/729     | CR    | 1Y11501      | Y    | I    | J-803-4 |
|            | LT-14201A    | (Extended Range)                        | 1C225    | 27/749     | I-513 | 1Y11505      | Y    | I    | M-142-1 |
|            | LT-14203A    | (Extended Range)                        | 1C224    | 27/749     | I-513 | 1Y11505      | Y    | I    | J-442-1 |
| LI-14203A  | LI-14203A    | (Extended Range)                        | 1C601    | 12/729     | CR    | 1Y11501      | Y    | I    | J-802-6 |
|            | LT-14203A    | (Extended Range)                        | 1C224    | 27/749     | I-513 | 1Y11505      | Y    | I    | M-142-1 |
|            | LT-14201A    | (Extended Range)                        | 1C225    | 27/749     | I-513 | 1Y11505      | Y    | I    | J-442-1 |
| UR-14201A  | UR-14201A    | Reactor Vessel Level/Press.             | 1C601    | 12/729     | CR    | 1Y11501      | Y    | I    | J-802-4 |
|            | LT-14202A    | (Fuel Zone Range)                       | Local    | 29/719     | I-401 | 1Y11505      | Y    | I    | M-142-1 |
|            | LT-14201A    | (Wide Range)                            | 1C225    | 27/749     | I-513 | 1Y11505      | Y    | I    | J-442-3 |
|            | PT-14201A    | (Wide Range)                            | 1C225    | 27/749     | I-513 | 1Y11505      | Y    | I    | J-442-3 |
| LI-14201B  | LI-14201B    | Reactor Vessel Level<br>(Wide Range)    | 1C601    | 12/729     | CR    | 1Y12501      | Y    | II   | J-802-3 |
|            | LT-14201B    | (Extended Range)                        | 1C225    | 27/749     | I-513 | 1Y12505      | Y    | II   | M-142-1 |
|            | LT-14203B    | (Extended Range)                        | 1C224    | 27/749     | I-513 | 1Y12505      | Y    | II   |         |
| LI-14201B1 | LI-14201B1   | (Extended Range)                        | 1C651    | 12/729     | CR    | 1Y12501      | Y    | II   | J-803-4 |
|            | LT-14201B    | (Extended Range)                        | 1C225    | 27/749     | I-513 | 1Y12505      | Y    | II   | M-142-1 |
|            | LT-14203B    | (Extended Range)                        | 1C224    | 27/749     | I-513 | 1Y12505      | Y    | II   |         |
| LI-14203B  | LI-14203B    | (Extended Range)                        | 1C601    | 12/729     | CR    | 1Y12501      | Y    | II   | J-802-6 |
|            | LT-14203B    | (Extended Range)                        | 1C224    | 27/749     | I-513 | 1Y12505      | Y    | II   | M-142-1 |
|            | LT-14201B    | (Extended Range)                        | 1C225    | 27/749     | I-513 | 1Y12505      | Y    | II   |         |
| UR-14201B  | UR-14201B    | Reactor Vessel Level/Press.             | 1C601    | 12/729     | CR    | 1Y12501      | Y    | II   | J-802-7 |
|            | LT-14202B    | (Fuel Zone Range)                       | Local    | 29/719     | I-401 | 1Y12505      | Y    | II   | M-142-1 |
|            | LT-14201B    | (Wide Range)                            | 1C225    | 27/749     | I-513 | 1Y12505      | Y    | II   | M-142-1 |
|            | PT-14201B    | (Wide Range)                            | 1C225    | 27/749     | I-513 | 1Y12505      | Y    | II   | M-142-1 |
| PI-14202A  | PI-14202A    | Reactor Vessel Pressure<br>(Wide Range) | 1C601    | 12/729     | CR    | 1Y11501      | Y    | I    | J-802-3 |
|            | PT-14201A    | (Wide Range)                            | 1C225    | 27/749     | I-513 | 1Y11505      | Y    | I    | J-442-3 |
| PI-14202A1 | PI-14202A1   | Reactor Vessel Pressure<br>(Wide Range) | 1C651    | 12/729     | CR    | 1Y11501      | Y    | I    | J-803-4 |
|            | PT-14201A    | (Wide Range)                            | 1C225    | 27/749     | I-513 | 1Y11505      | Y    | I    | J-442-3 |
| PI-14204A  | PI-14204A    | Reactor Vessel Pressure<br>(Wide Range) | 1C601    | 12/729     | CR    | 1Y11501      | Y    | I    | J-806-6 |
|            | PT-14201A    | (Wide Range)                            | 1C225    | 27/729     | I-513 | 1Y11505      | Y    | I    | J-442-3 |
| PI-14202B  | PI-14202B    | Reactor Vessel Pressure<br>(Wide Range) | 1C601    | 12/729     | CR    | 1Y12501      | Y    | II   | J-802-3 |
|            | PT-14201B    | (Wide Range)                            | 1C224    | 27/749     | I-513 | 1Y12505      | Y    | II   | M-142-1 |
|            | PT-14203B    |   | 1C225    | 27/749     | I-513 | 1Y12505      | Y    | II   |         |

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| Instrument   | Loop Devices | Parameter                               | Location | Area/Elev. | Room  | Power Supply | Bat. | Div. | Drwg.    |
|--------------|--------------|---|----------|------------|-------|--------------|------|------|----------|
| PI-14202B1   | PI-14202B1   | Reactor Vessel Pressure<br>(Wide Range) | 1C651    | 12/729     | CR    | 1Y12501      | Y    | II   | J-803-4  |
|              | PT-14201B    |   | 1C224    | 27/749     | I-513 | 1Y12505      | Y    | II   | M-142-1  |
|              | PT-14203B    |   | 1C225    | 27/740     | I-513 | 1Y12505      | Y    | II   |          |
| PI-14204B    | PI-14204B    | Reactor Vessel Pressure<br>(Wide Range) | 1C601    | 12/729     | CR    | 1Y12501      | Y    | II   | J-802-6  |
|              | PI-14201B    |   | 1C224    | 27/749     | I-513 | 1Y12505      | Y    | II   | M-142-1  |
|              | PI-14203B    |   | 1C225    | 27/749     | I-513 | 1Y12505      | Y    | II   |          |
| PI-E51-1R602 | PI-E51-1R602 | Reactor Pressure                        | 1C601    | 12/729     | CR    | 1D61407      | Y    | II   | J-449    |
|              | PT-E51-1N007 | (RCIC Turbine Steam Supply)             | 1C017    | 28/645     | I-012 | 1D64107      | Y    | II   | M-149    |
| PI-E41-1R602 | PI-E41-1R602 | Reactor Pressure                        | 1C601    | 12/729     | CR    | 1D62406      | Y    | II   |          |
|              | PT-E41-1N013 | (HPCI Turbine Steam Supply)             | 1C014    | 25/645     | I-010 | 1D62406      | Y    | II   | M-155    |
| TIAH-15751   | TIAH-15751   | Supp. Pool Temp. Monitoring             | 1C601    | 12/729     | CR    | 1Y11501      | Y    | I    | J-802-5  |
|              | TX-15751     | Supp. Pool Temp. Monitoring             | 1C690A   | 12/729     | CR    | 1Y11502      | Y    | I    | J-457-9  |
|              | TE-15753     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y11502      | Y    | I    | E-64-15  |
|              | TE-15755     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y11502      | Y    | I    | E-25-1   |
|              | TE-15757     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y11502      | Y    | I    | M-157-3  |
|              | TE-15759     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y11502      | Y    | I    |          |
|              | TE-15763     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y11502      | Y    | I    |          |
|              | TE-15765     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y11502      | Y    | I    |          |
|              | TE-15767     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y11502      | Y    | I    |          |
|              | TE-15769     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y11502      | Y    | I    |          |
|              | TE-15751     | Supp. Pool Temp. Monitoring             | Local    | 26/683     | I-206 | 1Y11502      | Y    | I    |          |
|              | TE-15756     | Supp. Pool Temp. Monitoring             | Local    | 26/683     | I-206 | 1Y11502      | Y    | I    |          |
|              | TE-15761     | Supp. Pool Temp. Monitoring             | Local    | 26/683     | I-206 | 1Y11502      | Y    | I    |          |
|              | TE-15764     | Supp. Pool Temp. Monitoring             | Local    | 26/683     | I-206 | 1Y11502      | Y    | I    |          |
| TIAH-15752   | TIAH-15752   | Supp. Pool Temp. Monitoring             | 1C601    | 12/729     | CR    | 1Y12501      | Y    | II   | J-802-5  |
|              | TX-15752     | Supp. Pool Temp. Monitoring             | 1C609B   | 12/729     | CR    | 1Y12502      | Y    | II   | M-157-3  |
|              | TE-15752     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y12502      | Y    | II   | J-457-10 |
|              | TE-15754     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y12502      | Y    | II   | E-64-15  |
|              | TE-15758     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y12502      | Y    | II   | E-25-1   |
|              | TE-15760     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y12502      | Y    | II   |          |
|              | TE-15762     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y12502      | Y    | II   |          |
|              | TE-15766     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y12502      | Y    | II   |          |
|              | TE-15768     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y12502      | Y    | II   |          |
|              | TE-15770     | Supp. Pool Temp. Monitoring             | Local    | 26/692     | I-206 | 1Y12502      | Y    | II   |          |
| UR-15776A    | UR-15776A    | Suppression Pool Level                  | 1C601    | 12/729     | CR    | 1Y11501      | Y    | I    | J-802-5  |
|              | LT-15766A    | (Wide Range)                            | Local    | 27/645     | I-17  | 1Y11505      | Y    | I    | M-157-3  |

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| Instrument | Loop Devices  | Parameter                    | Location | Area/Elev. | Room  | Power Supply | Bat. | Div. | Drwg.    |
|------------|---------------|------------------------------|----------|------------|-------|--------------|------|------|----------|
|            | LT-15775A     | (Narrow Range)               | Local    | 27/645     | I-17  | M            | Y    | I    | J-457-2  |
| LI-15775A  | LI-15775A     | Suppression Pool Level       | 1C601    | 12/729     | CR    | 1Y11505      | Y    | I    | J-802-2  |
|            | LT-15775A     | (Narrow Range)               | Local    | 27/645     | I-17  | 1Y11505      | Y    | I    | M-157-3  |
|            |               |                              |          |            |       |              |      |      | J-457-2  |
| UR-15776B  | UR-15776B     | Suppression Pool Level       | 1C601    | 12/729     | CR    | 1Y21501      | Y    | II   | J-802-6  |
|            | LT-15766B     | (Wide Range)                 | Local    | 25/645     | I-10  | 1Y21505      | Y    | II   | M-157-3  |
|            | LT-15775B     | (Narrow Range)               | Local    | 25/645     | I-10  | 1Y21505      | Y    | II   | J-457-2A |
|            | LY-15776B     |                              | 1C661    | 12/698     | C-203 | 1Y12505      | Y    | I    | J-457-2A |
| LI-15775B  | LI-15775B     | Suppression Pool Level       | 1C601    | 12/729     | CR    | 1Y12505      | Y    | II   | J-802-8  |
|            | LT-15775B     | (Narrow Range)               | Local    | 25/645     | I-10  | 1Y12505      | Y    | II   | M-157-3  |
| LI-15776A2 | LI-15776A2    | Suppression Pool Level       | Local    | 27/645     | I-17  | N/R          | -    | -    | M-157    |
| UR-15701A  | UR-15701A     | Drywell Pressure             | 1C601    | 12/729     | CR    | 1Y11505      | Y    | I    | J-802-5  |
|            | PT-15710A     | (LOCA Range)                 | Local    | 27/719     | I-401 | 1Y11505      | Y    | I    | M-157-3  |
|            | PT-15709A     | (Hi Accident Range)          | Local    | 27/719     | I-401 | 1Y11505      | Y    | I    | J-457-3  |
| UR-15701B  | UR-15701B     | Drywell Pressure             | 1C601    | 12/729     | CR    | 1Y12505      | Y    | II   | J-802-6  |
|            | PT-15710B     | (LOCA Range)                 | Local    | 28/719     | I-401 | 1Y12505      | Y    | II   | M-157-3  |
|            | PT-15709B     | (Hi Accident Range)          | Local    | 28/719     | I-401 | 1Y12505      | Y    | II   | J-457-3A |
| PI-15702   | PI-15702      | Drywell Pressure             | 1C601    | 12/729     | CR    | 1Y62925      | Y    | N    | M-157-3  |
|            | PT-15728A     | (Containment/Supp Chamber)   | Local    | 27/683     | I-203 | 1Y62925      | Y    | N    | J-457-3  |
| UR-15701A  | UR-15701A     | Drywell Temperature          | 1C601    | 12/729     | CR    | 1Y11505      | Y    | I    | J-802-5  |
|            | TT-15790A     | Drywell Temperature          | 1C661A   | 12/754     | URR   | 1Y11505      | Y    | I    | M-157-1  |
|            | TE-15790A     | Drywell Temperature          | Local    | 26/752     | I-516 | 1Y11505      | Y    | I    | J-457-7  |
| UR-15701B  | UR-15701B     | Drywell Temperature          | 1C601    | 12/729     | CR    | 1Y12505      | Y    | II   | J-802-6  |
|            | TT-15790B     | Drywell Temperature          | 1C661B   | 12/698     | LRR   | 1Y12505      | Y    | II   | M-157-3  |
|            | TE-15790B     | Drywell Temperature          | Local    | 26/752     | I-516 | 1Y12505      | Y    | II   | J-457-7A |
| TI-15727A  | TI-15727A     | RHR Heat Ex. Disch. Temp.    | 1C601    | 12/729     | CR    | 1Y11501      | Y    | I    | M-151-1  |
|            | TT-15727A     | RHR Heat Ex. Disch. Temp.    | 1C661A   | 12/754     | URR   | 1Y11505      | Y    | I    | J-451-15 |
|            | TE-E11-1N027A | RHR Heat Ex. Disch. Temp.    | Pipe     | 29/683     | I-201 | 1Y11505      | Y    | I    |          |
| TI-15727B  | TI-15727B     | RHR Heat Ex. Disch. Temp.    | 1C601    | 12/729     | CR    | 1Y12501      | Y    | II   | J-802-7  |
|            | TT-15727B     | RHR Heat Ex. Disch. Temp.    | 1C661B   | 12/683     | LRR   | 1Y12505      | Y    | II   | M-151-3  |
|            | TE-E11-1N027B | RHR Heat Ex. Disch. Temp.    | Pipe     | 29/683     | I-201 | 1Y12505      | Y    | II   | M-151-2  |
| FI-15120A  | FI-15120A     | Drywell & Wetwell Spray Flow | 1C601    | 12/729     | CR    | 1Y11501      | Y    | I    | J-802-4  |
|            | FY-15120A     | Drywell Spray                | 1C661A   | 12/754     | URR   | 1Y11505      | Y    | I    | M-151-3  |
|            | FT-15120A     | Drywell Spray                | Local    | 29/749     | I-513 | 1Y11505      | Y    | I    | J-470-2  |
|            | FY-15121A     | Suppression Pool Spray       | 1C661A   | 12/754     | URR   | 1Y11505      | Y    | I    | E-64-15  |
|            | FT-15121A     | Suppression Pool Spray       | Local    | 27/683     | I-203 | 1Y11505      | Y    | I    |          |

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| Instrument     | Loop Devices   | Parameter                    | Location | Area/Elev. | Room  | Power Supply | Bat. | Div. | Drwg.   |
|----------------|----------------|------------------------------|----------|------------|-------|--------------|------|------|---------|
| FI-15120B      | FI-15120B      | Drywell & Wetwell Spray Flow | 1C601    | 12/729     | CR    | 1Y12501      | Y    | II   | J-802-7 |
|                | FY-15120B      | Drywell Spray                | 1C661B   | 12/698     | LRR   | 1Y12505      | Y    | II   | M-151-1 |
|                | FT-15120B      | Drywell Spray                | Local    | 25/749     | I-509 | 1Y12505      | Y    | II   | J-470-2 |
|                | FY-15121B      | Suppression Pool Spray       | 1C661B   | 12/698     | LRR   | 1Y12505      | Y    | II   | E-64-15 |
|                | FT-15121B      | Suppression Pool Spray       | Local    | 25/683     | I-200 | 1Y12505      | Y    | II   |         |
|                | PI-15702       | Suppression Chamber Press.   | 1C601    | 12/729     | CR    | 1Y62925      | Y    | N    | M-157-3 |
|                | PT-15702       |                              | Local    | 27/683     | I-203 | 1Y62925      | Y    | N    | J-457-3 |
| PI-E41-1R606   | PI-E41-1R606   | HPCI Pump Suction Pressure   | 1C601    | 12/729     | CR    | 1D62406      | Y    | II   | J-456-3 |
|                | PT-E41-1N019   |                              | 1C014    | 25/645     | I-010 | 1D62406      | Y    | II   | M-156-1 |
| PI-E41-1R602   | PI-E41-1R602   | HPCI Steam Supply Pressure   | 1C601    | 12/729     | CR    | 1D62406      | Y    | II   | J-455-1 |
|                | PT-E41-1N013   |                              | 1C014    | 25/645     | I-010 | 1D62406      | Y    | II   | M-155   |
| PI-E41-1R603   | PI-E41-1R603   | HPCI Turbine Exhaust Press.  | 1C601    | 12/729     | CR    | 1D62406      | Y    | II   | J-456-3 |
|                | PT-E41-1N016   |                              | 1C014    | 25/645     | I-010 | 1D62406      | Y    | II   | M-156-1 |
| PI-E41-1R601   | PI-E41-1R601   | HPCI Pump Discharge Press.   | 1C601    | 12/729     | CR    | 1D62406      | Y    | II   | J-455-1 |
|                | PT-E41-1N009   |                              | 1C014    | 25/645     | I-010 | 1D62406      | Y    | II   | M-155   |
| FI-E41-1R600-1 | FI-E41-1R600-1 | HPCI Flow                    | 1C601    | 12/729     | CR    | 1D62406      | Y    | II   | J-455-2 |
|                | FY-E41-1K601   |                              | 1C601    | 12/729     | CR    | 1D62406      | Y    | II   | M-155   |
|                | FT-E41-1N008   |                              | 1C014    | 25/645     | I-010 | 1D62406      | Y    | II   |         |
| SI-E41-1R604   | SI-E41-1R604   | HPCI Turbine Speed           | 1C601    | 12/729     | CR    | 1D62406      | Y    | II   | J-455-2 |
|                | SY-15683       |                              | TB0078   | 28/645     | I-011 | 1D62406      | Y    | II   |         |
|                | SE-15661       |                              | 15211    | 28/645     | I-011 | 1D62406      | Y    | II   |         |
| LI-00812A      | LI-00812A      | CST 'A' Level                | OCB518A  | 36/670     | I-130 | 1Y62927      | Y    | N    | J-408-2 |
|                | LT-00812A      |                              | OCB518A  | 36/670     | I-130 | 1Y62927      | Y    | N    | M-108   |
| LI-00812B      | LI-00812B      | CST 'B' Level                | OCB518B  | 45/670     | -     | 1Y62927      | Y    | N    | J-408-2 |
|                | LT-00812B      |                              | OCB518B  | 45/670     | -     | 1Y62927      | Y    | N    | M-108   |
| LI-00802       | LI-00802       | RWST Level                   | OCB517   | 35/670     | I-130 | 1Y62927      | Y    | N    | J-408-2 |
|                | LT-00802       |                              | OCB517   | 35/670     | I-130 | 1Y62927      | Y    | N    | M-108   |
| PI-12649       | PI-12649       | Containment Instrument Gas   | 1C601    | 12/729     | CR    | 1Y12501      | Y    | I    | J-426-3 |
|                | PT-12649       | Bottle Pressure              | Local    | 25/719     | I-408 | 1Y12501      | Y    | I    |         |
| PI-E51-1R603   | PI-E51-1R603   | RCIC Turbine Exhaust Press.  | 1C601    | 12/729     | CR    | 1D61407      | Y    | I    | J-450-1 |
|                | PT-E51-1N008   |                              | 1C017    | 28/645     | I-012 | 1D61407      | Y    | I    | M-150   |
| PI-E51-1R602   | PI-E51-1R602   | RCIC Turbine Inlet Pressure  | 1C601    | 12/729     | CR    | 1D61407      | Y    | I    | J-449-1 |
|                | PT-E51-1N007   |                              | 1C017    | 28/645     | I-012 | 1D61407      | Y    | I    | M-149   |
| PI-E51-1R604   | PI-E51-1R604   | RCIC Pump Suction Pressure   | 1C601    | 12/729     | CR    | 1D61407      | Y    | I    | J-450-1 |
|                | PT-E51-1N005   |                              | 1C017    | 28/645     | I-012 | 1D61407      | Y    | I    | M-150   |
| PI-E51-1R601   | PI-E51-1R601   | RCIC Pump Discharge Press.   | 1C601    | 12/729     | CR    | 1D61407      | Y    | I    | J-449-1 |

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Table Rev. 1

Table 15.9-1 – Unit 1 Station Blackout Instrumentation List

| Instrument     | Loop Devices   | Parameter                   | Location | Area/Elev. | Room  | Power Supply | Bat. | Div. | Drwg.   |
|----------------|----------------|-----------------------------|----------|------------|-------|--------------|------|------|---------|
|                | PT-E51-1N004   |                             | 1C017    | 28/645     | I-012 | 1D61407      | Y    | I    | M-149   |
| FI-E51-1R600-1 | FI-E51-1R600-1 | RCIC Flow                   | 1C601    | 12/729     | CR    | 1D61407      | Y    | I    | J-449-2 |
|                | FY-E51-1K601   |                             | 1C601    | 12/729     | CR    | 1D61407      | Y    | I    | M-149   |
|                | FT-E51-1N003   |                             | 1C017    | 28/645     | I-012 | 1D61407      | Y    | I    |         |
| SI-15001A      | SI-15001A      | RCIC Turbine Speed          | 1C601    | 12/729     | CR    | 1D61407      | Y    | I    | J-449-2 |
|                | EGM            |                             | TB0145   | 28/645     | I-012 | 1D61407      | Y    | I    | M-149   |
|                | SE(Not Shown)  |                             | 1C212    | 28/645     | I-012 | 1D61407      | Y    | I    |         |
| TI-14185       | TI-14185       | RCIC Area Temperature       | 1C614    | 12/729     | CR    | 1D63401      | Y    | I    | J-450-2 |
|                | TY-14185       |                             | 1C614    | 12/729     | CR    | 1D63401      | Y    | I    |         |
|                | TSH-E51-1N600A | Ambient Temperature         | 1C614    | 12/729     | CR    | 1D63401      | Y    | I    |         |
|                | TE-E51-1N011A  | Ambient Temperature         | Local    | 28/645     | I-012 | 1D63401      | Y    | I    |         |
|                | TSH-E51-1N602A | Emerg. Area Cir. Amb. Temp. | 1C614    | 12/729     | CR    | 1D63401      | Y    | I    |         |
|                | TSH-E51-1N023A | Emerg. Area Cir. Amb. Temp. | Duct     | 28/645     | I-012 | 1D63401      | Y    | I    |         |

Table 15.9-2 – Unit 2 Station Blackout Instrumentation List

| Instrument | Loop Devices | Parameter                   | Location | Area/Elev. | Room   | Power Supply | Bat. | Div. | Drwg.    |
|------------|--------------|-----------------------------|----------|------------|--------|--------------|------|------|----------|
| LI-24201A  | LI-24201A    | Reactor Vessel Level        | 2C601    | 21/729     | CR     | 2Y11501      | Y    | I    | J-2802-3 |
|            | LT-24201A    | (Wide Range)                | 2C225    | 30/749     | II-513 | 2Y11505      | Y    | I    | M-2142-1 |
|            | LT-24203A    | (Extended Range)            | 2C224    | 33/749     | II-513 | 2Y11505      | Y    | I    | J-2802-3 |
| LI-24201A1 | LI-24201A1   | (Extended Range)            | 2C652    | 21/729     | CR     | 2Y11501      | Y    | I    | J-2803-4 |
|            | LT-24201A    | (Extended Range)            | 2C225    | 30/749     | II-513 | 2Y11505      | Y    | I    | M-2142-1 |
|            | LT-24203A    | (Extended Range)            | 2C224    | 33/749     | II-513 | 2Y11505      | Y    | I    | J-2442-2 |
| LI-24203A  | LI-24203A    | (Extended Range)            | 2C601    | 21/729     | CR     | 2Y11501      | Y    | I    | J-2802-6 |
|            | LT-24203A    | (Extended Range)            | 2C224    | 33/749     | II-513 | 2Y11505      | Y    | I    | M-2142-1 |
|            | LT-24201A    | (Extended Range)            | 2C225    | 30/749     | II-513 | 2Y11505      | Y    | I    | J-2802-6 |
| UR-24201A  | UR-24201A    | Reactor Vessel Level/Press. | 2C601    | 21/729     | CR     | 2Y11501      | Y    | I    | J-2802-4 |
|            | LT-24202A    | (Fuel Zone Range)           | Local    | 34/719     | II-401 | 2Y11505      | Y    | I    | M-2142-1 |
|            | LT-24201A    | (Wide Range)                | 2C225    | 30/749     | II-513 | 2Y11505      | Y    | I    | M-2142   |
|            | PT-24201A    | (Wide Range)                | 2C225    | 30/749     | II-513 | 2Y11505      | Y    | I    | M-2142   |
| LI-24201B  | LI-24201B    | Reactor Vessel Level        | 2C601    | 21/729     | CR     | 2Y12501      | Y    | II   | J-2802-3 |
|            | LT-24201B    | (Wide Range)                | 2C224    | 33/749     | II-513 | 2Y12505      | Y    | II   | M-2142   |
|            | LT-24203B    | (Extended Range)            | 2C225    | 30/749     | II-513 | 2Y12505      | Y    | II   |          |
| LI-24201B1 | LI-24201B1   | (Extended Range)            | 2C651    | 21/729     | CR     | 2Y12501      | Y    | II   | J-2803-4 |
|            | LT-24201B    | (Extended Range)            | 2C224    | 33/749     | II-513 | 2Y12505      | Y    | II   | M-2142   |
|            | LT-24203B    | (Extended Range)            | 2C225    | 33/749     | II-513 | 2Y12505      | Y    | II   |          |
| LI-24203B  | LI-24203B    | (Extended Range)            | 2C601    | 21/729     | CR     | 2Y12501      | Y    | II   | J-2802-6 |
|            | LT-24203B    | (Extended Range)            | 2C225    | 30/749     | II-513 | 2Y12505      | Y    | II   | M-2142   |
|            | LT-24201B    | (Extended Range)            | 2C224    | 33/749     | II-513 | 2Y12505      | Y    | II   |          |
| UR-24201B  | UR-24201B    | Reactor Vessel Level/Press. | 2C601    | 21/729     | CR     | 2Y12501      | Y    | II   | J-2802-7 |
|            | LT-24202B    | (Fuel Zone Range)           | Local    | 30/719     | II-401 | 2Y12505      | Y    | II   | M-2142   |
|            | LT-14201B    | (Wide Range)                | 2C224    | 33/749     | II-513 | 2Y12505      | Y    | II   | M-2142   |
|            | PT-14201B    | (Wide Range)                | 2C224    | 33/749     | II-513 | 2Y12505      | Y    | II   | J-2802-4 |
| PI-24202A  | PI-24202A    | Reactor Vessel Pressure     | 2C601    | 21/729     | CR     | 2Y11501      | Y    | II   | J-2802-3 |
|            | PT-24201A    | (Wide Range)                | 2C225    | 30/749     | II-513 | 2Y11505      | Y    | II   | M-2142   |
| PI-24202A1 | PI-24202A1   | Reactor Vessel Pressure     | 2C651    | 21/729     | CR     | 2Y11501      | Y    | I    | J-2803-4 |
|            | PT-24201A    | (Wide Range)                | 2C225    | 30/749     | II-513 | 2Y11505      | Y    | I    | M-2142   |
| PI-24204A  | PI-24204A    | Reactor Vessel Pressure     | 2C601    | 21/729     | CR     | 2Y11501      | Y    | I    | J-2802-6 |
|            | PT-24201A    | (Wide Range)                | 2C225    | 30/729     | II-513 | 2Y11505      | Y    | I    | M-2142   |
| PI-24202B  | PI-24202B    | Reactor Vessel Pressure     | 2C601    | 21/729     | CR     | 2Y12501      | Y    | II   | J-2802-3 |
|            | PT-24201B    | (Wide Range)                | 2C224    | 33/749     | II-513 | 2Y12505      | Y    | II   | M-2142   |



Table 15.9-2 – Unit 2 Station Blackout Instrumentation List

| Instrument   | Loop Devices | Parameter                   | Location | Area/Elev. | Room   | Power Supply | Bat. | Div. | Drwg.     |
|--------------|--------------|-----------------------------|----------|------------|--------|--------------|------|------|-----------|
|              | PT-24203B    |                             | 2C225    | 30/749     | II-513 | 2Y12505      | Y    | II   | J-2802-4  |
| PI-24202B1   | PI-24202B1   | Reactor Vessel Pressure     | 2C651    | 21/729     | CR     | 2Y12501      | Y    | II   |           |
|              | PT-24201B    | (Wide Range)                | 2C224    | 33/749     | II-513 | 2Y12505      | Y    | II   | M-2142    |
|              | PT-24203B    |                             | 2C225    | 30/740     | II-513 | 2Y12505      | Y    | II   |           |
| PI-24204B    | PI-24204B    | Reactor Vessel Pressure     | 2C601    | 21/729     | CR     | 2Y12501      | Y    | II   | J-2802-6  |
|              | PI-24201B    | (Wide Range)                | 2C224    | 33/749     | II-513 | 2Y12505      | Y    | II   | M-2142    |
|              | PI-24203B    |                             | 2C225    | 30/749     | II-513 | 2Y12505      | Y    | II   |           |
| PI-E51-2R602 | PI-E51-2R602 | Reactor Pressure            | 2C601    | 21/729     | CR     | 2D61407      | Y    | I    | J-2449-1  |
|              | PT-E51-2N007 | (RCIC Turbine Steam Supply) | 2C017    | 33/645     | II-012 | 2D64107      | Y    | I    | M-2149    |
| PI-E41-2R602 | PI-E41-2R602 | Reactor Pressure            | 2C601    | 21/729     | CR     | 2D62406      | Y    | II   |           |
|              | PT-E41-2N013 | (HPCI Turbine Steam Supply) | 2C014    | 33/645     | II-010 | 2D62406      | Y    | II   | M-2155    |
| TIAH-25751   | TIAH-25751   | Supp. Pool Temp. Monitoring | 2C601    | 21/729     | CR     | 2Y11501      | Y    | I    | J-2802-5  |
|              | TX-25751     | Supp. Pool Temp. Monitoring | 2C690A   | 21/729     | CR     | 2Y11502      | Y    | I    | M-2157    |
|              | TE-25753     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y11502      | Y    | I    | J-2457-9  |
|              | TE-25755     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25757     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25759     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25763     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25765     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25767     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25769     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25751     | Supp. Pool Temp. Monitoring | Local    | 31/683     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25756     | Supp. Pool Temp. Monitoring | Local    | 31/683     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25761     | Supp. Pool Temp. Monitoring | Local    | 31/683     | II-206 | 2Y11502      | Y    | I    |           |
|              | TE-25764     | Supp. Pool Temp. Monitoring | Local    | 31/683     | II-206 | 2Y11502      | Y    | I    |           |
| TIAH-25752   | TIAH-25752   | Supp. Pool Temp. Monitoring | 2C601    | 21/729     | CR     | 2Y12501      | Y    | II   | J-2802-5  |
|              | TX-25752     | Supp. Pool Temp. Monitoring | 2C609B   | 21/729     | CR     | 2Y12502      | Y    | II   | M-2157    |
|              | TE-25752     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y12502      | Y    | II   | J-2457-10 |
|              | TE-25754     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y12502      | Y    | II   |           |
|              | TE-25758     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y12502      | Y    | II   |           |
|              | TE-25760     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y12502      | Y    | II   |           |
|              | TE-25762     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y12502      | Y    | II   |           |
|              | TE-25766     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y12502      | Y    | II   |           |
|              | TE-25768     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y12502      | Y    | II   |           |
|              | TE-25770     | Supp. Pool Temp. Monitoring | Local    | 31/692     | II-206 | 2Y12502      | Y    | II   |           |

Table 15.9-2 – Unit 2 Station Blackout Instrumentation List

| Instrument | Loop Devices  | Parameter                    | Location | Area/Elev. | Room   | Power Supply | Bat. | Div. | Drwg.     |
|------------|---------------|------------------------------|----------|------------|--------|--------------|------|------|-----------|
| LR-25776A  | LR-25776A     | Suppression Pool Level       | 2C601    | 21/729     | CR     | 2Y11501      | Y    | I    | J-2802-5  |
|            | LT-25766A     | (Wide Range)                 | Local    | 32/645     | II-017 | 2Y11505      | Y    | I    | M-2157-3  |
|            | LT-25775A     | (Narrow Range)               | Local    | 32/645     | II-017 | 2Y11505      | Y    | I    | J-2457-2  |
|            | LY-25776A     |                              | 2C661    | 21/754     | C-502  | 2Y11505      | Y    | I    | J-2457-2  |
| LI-25775A  | LI-25775A     | Suppression Pool Level       | 2C601    | 21/729     | CR     | 2Y11505      | Y    | I    | J-2802-3  |
|            | LT-25775A     | (Narrow Range)               | Local    | 32/645     | II-017 | 2Y11505      | Y    | I    | M-2157-3  |
| LR-25776B  | LR-25776B     | Suppression Pool Level       | 2C601    | 21/729     | CR     | 2Y21505      | Y    | II   | J-2802-6  |
|            | LT-25775B     | (Narrow Range)               | Local    | 30/645     | II-10  | 2Y21505      | Y    | II   | M-2157-3  |
|            | LT-25776B     | (Wide Range)                 | Local    | 30/645     | II-10  | 2Y21505      | Y    | II   | J-2457-2  |
| LI-25775B  | LI-25775B     | Suppression Pool Level       | 2C601    | 21/729     | CR     | 2Y12505      | Y    | II   | J-2802-8  |
|            | LT-25775B     | (Narrow Range)               | Local    | 30/645     | II-10  | 2Y12505      | Y    | II   | M-2157-3  |
| LI-25776A2 | LI-25776A2    | Suppression Pool Level       | Local    | 30/645     | II-010 | N/R          | -    | -    | M-2157-3  |
| UR-25701A  | UR-25701A     | Drywell Pressure             | 2C601    | 21/729     | CR     | 2Y11505      | Y    | I    | J-2802-5  |
|            | PT-25710A     | (LOCA Range)                 | Local    | 32/719     | II-401 | 2Y11505      | Y    | I    | M-2157    |
|            | PT-25709A     | (Hi Accident Range)          | Local    | 32/719     | II-401 | 2Y11505      | Y    | I    | J-2457-3  |
| UR-25701B  | UR-25701B     | Drywell Pressure             | 2C601    | 21/729     | CR     | 2Y12505      | Y    | II   | J-2802-6  |
|            | PT-25710B     | (LOCA Range)                 | Local    | 33/719     | II-413 | 2Y12505      | Y    | II   | M-2157    |
|            | PT-25709B     | (Hi Accident Range)          | Local    | 33/719     | II-413 | 2Y12505      | Y    | II   | J-2457-3A |
| PI-25702   | PI-25702      | Drywell Pressure             | 2C601    | 21/729     | CR     | 2Y62925      | Y    | N    | M-2157    |
|            | PT-25728A1    | (Containment/Supp Chamber)   | Local    | 32/719     | II-401 | 2Y62925      | Y    | N    | J-2457-3  |
| UR-25701A  | UR-25701A     | Drywell Temperature          | 2C601    | 21/729     | CR     | 2Y11505      | Y    | I    | J-2802-5  |
|            | TT-25790A     | Drywell Temperature          | 2C661A   | 21/754     | URR    | 2Y11505      | Y    | I    | M-2157    |
|            | TE-25790A     | Drywell Temperature          | Local    | 31/752     | II-516 | 2Y11505      | Y    | I    | J-2457-7  |
| UR-25701B  | UR-25701B     | Drywell Temperature          | 2C601    | 21/729     | CR     | 2Y12505      | Y    | II   | J-2802-6  |
|            | TT-25790B     | Drywell Temperature          | 2C661B   | 21/698     | LRR    | 2Y12505      | Y    | II   | M-2157    |
|            | TE-25790B     | Drywell Temperature          | Local    | 31/752     | II-516 | 2Y12505      | Y    | II   | J-2457-7A |
| TI-25727A  | TI-25727A     | RHR Heat Ex. Disch. Temp.    | 2C601    | 21/729     | CR     | 2Y11501      | Y    | I    | M-2151    |
|            | TT-25727A     | RHR Heat Ex. Disch. Temp.    | 2C661A   | 21/754     | URR    | 2Y11505      | Y    | I    | J-2802-4  |
| TI-25727B  | TI-25727B     | RHR Heat Ex. Disch. Temp.    | 2C601    | 21/729     | CR     | 2Y12501      | Y    | II   | J-2802-7  |
|            | TT-25727B     | RHR Heat Ex. Disch. Temp.    | 2C661B   | 21/683     | LRR    | 2Y12505      | Y    | II   | M-2151    |
|            | TE-E11-2N027B | RHR Heat Ex. Disch. Temp.    | Pipe     | 33/683     | II-202 | 2Y12505      | Y    | II   |           |
| FI-25120A  | FI-25120A     | Drywell & Wetwell Spray Flow | 2C601    | 21/729     | CR     | 2Y11501      | Y    | I    | J-2802-4  |
|            | FY-25120A     | Drywell Spray                | 2C661A   | 21/754     | URR    | 2Y11505      | Y    | I    | M-2151    |
|            | FT-25120A     | Drywell Spray                | Local    | 33/749     | II-513 | 2Y11505      | Y    | I    | J-2452-2  |
|            | FY-25121A     | Suppression Pool Spray       | 2C661A   | 21/754     | URR    | 2Y11505      | Y    | I    |           |

Table 15.9-2 – Unit 2 Station Blackout Instrumentation List

| Instrument     | Loop Devices   | Parameter                    | Location | Area/Elev. | Room   | Power Supply | Bat. | Div. | Drwg.    |
|----------------|----------------|------------------------------|----------|------------|--------|--------------|------|------|----------|
|                | FT-25121A      | Suppression Pool Spray       | Local    | 34/683     | II-203 | 2Y11505      | Y    | I    |          |
| FI-25120B      | FI-25120B      | Drywell & Wetwell Spray Flow | 2C601    | 21/729     | CR     | 2Y12501      | Y    | II   | J-2802-7 |
|                | FY-25120B      | Drywell Spray                | 2C661B   | 21/698     | LRR    | 2Y12505      | Y    | II   | M-2151   |
|                | FT-25120B      | Drywell Spray                | Local    | 33/749     | II-513 | 2Y12505      | Y    | II   | J-2451-2 |
|                | FY-25121B      | Suppression Pool Spray       | 2C661B   | 21/698     | LRR    | 2Y12505      | Y    | II   |          |
|                | FT-25121B      | Suppression Pool Spray       | Local    | 30/683     | II-200 | 2Y12505      | Y    | II   |          |
| PI-22649       | PI-22649       | Containment Instrument Gas   | 1C601    | 21/729     | CR     | 2Y121501     | Y    | II   | J-2426-2 |
|                | PT-22649       | Bottle Pressure              | Local    | 30/719     | II-408 | 2Y12505      | Y    | II   |          |
| PI-25702       | PI-25702       | Suppression Chamber Press.   | 2C601    | 21/729     | CR     | 2Y62925      | Y    | N    | M-2157   |
|                | PT-25702       |                              | Local    | 32/683     | II-203 | 2Y62925      | Y    | N    | J-2457-3 |
| PI-E41-2R606   | PI-E41-2R606   | HPCI Pump Suction Pressure   | 2C601    | 21/729     | CR     | 2D62406      | Y    | II   | J-2456-3 |
|                | PT-E41-2N019   |                              | 2C014    | 30/645     | II-010 | 2D62406      | Y    | II   | M-2156   |
| PI-E41-2R602   | PI-E41-2R602   | HPCI Steam Supply Pressure   | 2C601    | 21/729     | CR     | 2D62406      | Y    | II   | J-2455-1 |
|                | PT-E41-2N013   |                              | 2C014    | 30/645     | II-010 | 2D62406      | Y    | II   | M-2155   |
| PI-E41-2R603   | PI-E41-2R603   | HPCI Turbine Exhaust Press.  | 2C601    | 21/729     | CR     | 2D62406      | Y    | II   | J-2456-3 |
|                | PT-E41-2N016   |                              | 2C014    | 30/645     | II-010 | 2D62406      | Y    | II   | M-2156   |
| PI-E41-2R601   | PI-E41-2R601   | HPCI Pump Discharge Press.   | 2C601    | 21/729     | CR     | 2D62406      | Y    | II   | J-2455-1 |
|                | PT-E41-2N009   |                              | 2C014    | 30/645     | II-010 | 2D62406      | Y    | II   | M-2155   |
| FI-E41-2R600-1 | FI-E41-2R600-1 | HPCI Flow                    | 2C601    | 21/729     | CR     | 2D62406      | Y    | II   | J-2455-2 |
|                | FY-E41-2K601   |                              | 2C601    | 21/729     | CR     | 2D62406      | Y    | II   | M-2155   |
|                | FT-E41-2N008   |                              | 2C014    | 30/645     | II-010 | 2D62406      | Y    | II   |          |
| SI-E41-2R604   | SI-E41-2R604   | HPCI Turbine Speed           | 2C601    | 21/729     | CR     | 2D62406      | Y    | II   | J-2455-2 |
|                | SY-25683       |                              | TB0195   | 33/645     | II-011 | 2D62406      | Y    | II   |          |
|                | SE-25661       |                              | 25211    | 33/645     | II-011 | 2D62406      | Y    | II   |          |
| LI-00812A      | LI-00812A      | CST 'A' Level                | OCB518A  | 36/670     | I-130  | 1Y62927      | Y    | N    | J-408-2  |
|                | LT-00812A      |                              | OCB518A  | 36/670     | I-130  | 1Y62927      | Y    | N    | M-108    |
| LI-00812B      | LI-00812B      | CST 'B' Level                | OCB518B  | 45/670     | -      | 1Y62927      | Y    | N    | J-408-2  |
|                | LT-00812B      |                              | OCB518B  | 45/670     | -      | 1Y62927      | Y    | N    | M-108    |
| LI-00802       | LI-00802       | RWST Level                   | OCB517   | 35/670     | I-130  | 1Y62927      | Y    | N    | J-408-2  |
|                | LT-00802       |                              | OCB517   | 35/670     | I-130  | 1Y62927      | Y    | N    | M-108    |
| PI-E51-2R603   | PI-E51-2R603   | RCIC Turbine Exhaust Press.  | 2C601    | 21/729     | CR     | 2D61407      | Y    | I    | J-2450-1 |
|                | PT-E51-2N008   |                              | 2C017    | 33/645     | II-012 | 2D61407      | Y    | I    |          |
| PI-E51-2R602   | PI-E51-2R602   | RCIC Turbine Inlet Pressure  | 2C601    | 21/729     | CR     | 2D61407      | Y    | I    | J-2449-1 |
|                | PT-E51-2N007   |                              | 2C017    | 33/645     | II-012 | 2D61407      | Y    | I    |          |
| PI-E51-2R604   | PI-E51-2R604   | RCIC Pump Suction Pressure   | 2C601    | 21/729     | CR     | 2D61407      | Y    | I    | J-2450-1 |

SSES-FSAR

Table Rev. 1

Table 15.9-2 – Unit 2 Station Blackout Instrumentation List

| Instrument     | Loop Devices   | Parameter                   | Location | Area/Elev. | Room   | Power Supply | Bat. | Div. | Drwg.    |
|----------------|----------------|-----------------------------|----------|------------|--------|--------------|------|------|----------|
|                | PT-E51-2N005   |                             | 2C017    | 33/645     | II-012 | 2D61407      | Y    | I    |          |
| PI-E51-2R601   | PI-E51-2R601   | RCIC Pump Discharge Press.  | 2C601    | 21/729     | CR     | 2D61407      | Y    | I    | J-2449-1 |
|                | PT-E51-2N004   |                             | 2C017    | 33/645     | II-012 | 2D61407      | Y    | I    |          |
| FI-E51-2R600-1 | FI-E51-2R600-1 | RCIC Flow                   | 2C601    | 21/729     | CR     | 2D61407      | Y    | I    | J-2449-2 |
|                | FY-E51-2K601   |                             | 2C601    | 21/729     | CR     | 2D61407      | Y    | I    |          |
|                | FT-E51-2N003   |                             | 2C017    | 33/645     | II-012 | 2D61407      | Y    | I    |          |
| SI-25001A      | SI-25001A      | RCIC Turbine Speed          | 2C601    | 12/729     | CR     | 2D61407      | Y    | I    | J-2449-2 |
|                | EGM            |                             | TB0520   | 33/645     | II-012 | 2D61407      | Y    | I    |          |
|                | SE(Not Shown)  |                             | 25212    | 33/645     | II-012 | 2D61407      | Y    | I    |          |
| TI-24185       | TI-24185       | RCIC Area Temperature       | 2C614    | 21/729     | CR     | 2D63401      | Y    | I    | J-2450-2 |
|                | TY-24185       |                             | 2C614    | 21/729     | CR     | 2D63401      | Y    | I    |          |
|                | TSH-E51-2N600A | Ambient Temperature         | 2C614    | 21/729     | CR     | 2D63401      | Y    | I    |          |
|                | TE-E51-2N011A  | Ambient Temperature         | Local    | 33/645     | II-012 | 2D63401      | Y    | I    |          |
|                | TSH-E51-2N602A | Emerg. Area Cir. Amb. Temp. | 2C614    | 21/729     | CR     | 2D63401      | Y    | I    |          |
|                | TSH-E51-2N023A | Emerg. Area Cir. Amb. Temp. | Duct     | 33/645     | II-012 | 2D63401      | Y    | I    |          |