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10 CFR 50, Appendix E

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
PROPOSED CHANGES TO EMERGENCY ACTION LEVEL CLASSIFICATIONS

Gentlemen:

In accordance with 10 CFR 50, Appendix E, Carolina Power & Light (CP&L) Company requests approval of the enclosed revisions to Emergency Action Levels (EALs) for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. The proposed changes have been discussed with and agreed to by the State of North Carolina and local governmental authorities as required by 10 CFR 50, Appendix E, IV.B.

The Enclosure to this letter provides a summary of the 10 CFR 50.54(q) evaluation of the proposed changes, a comparison of the currently approved EALs with the proposed revisions, and the bases for the determination that the proposed changes do not decrease the effectiveness of the BSEP Emergency Plan. The BSEP Emergency Plan EALs have been developed based upon the guidance of Regulatory Guide 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors," Revision 3, dated August 1, 1992.

To support implementation of procedure changes and training associated with these changes, CP&L requests NRC approval of the proposed revisions by December 31, 2001. This schedule will allow implementation of these EAL revisions prior to the 2002 annual drill cycle.

Please refer any questions regarding this submittal to Mr. Michael Alford, Supervisor - Emergency Preparedness, at (910) 457-2286.

Sincerely,

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Enclosure:
Evaluation of Proposed Emergency Action Levels

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ENCLOSURE

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
PROPOSED CHANGES TO EMERGENCY ACTION LEVEL CLASSIFICATIONS

Evaluation of Proposed Emergency Action Levels

The Brunswick Steam Electric Plant (BSEP) uses the guidance of Regulatory Guide (RG) 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors," Revision 3, dated August 1, 1992, for development of the Emergency Action Level (EAL) classification scheme. Following the guidance of RG 1.101, the criteria and standards contained in Revision 1 of NUREG-0654 are implemented for the BSEP onsite and offsite emergency response plans. However, selected EALs have been enhanced or clarified using the technical bases provided by example EALs contained in NUMARC/NESP-007, "Methodology for Development of Emergency Action Levels." This methodology has been found acceptable by the NRC in "Emergency Preparedness Position on Acceptable Deviations from Appendix I of NUREG-0654 Based Upon the Staff's Regulatory Analysis of NUMARC/NESP-007," (i.e., EPPOS 1) for licensees that continue to use the NUREG-0654 guidance.

The proposed changes to the EAL classifications do not decrease the effectiveness of the BSEP Emergency Plan, which continues to meet the standards of 10 CFR 50.47 for onsite and offsite emergency response plans. The proposed changes are submitted for NRC approval in accordance with 10 CFR 50, Appendix E, IV.B. These changes meet the intent of RG 1.101 and represent either improvement in the EAL classification scheme, by minimizing over-classification of events, or are formatting or editorial changes.

The following is a comparison of the current and proposed EALs and the bases for the proposed changes.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 1.3 - Abnormal Leak Rate - Site Area Emergency Loss of coolant accident requiring the initiation of Low Pressure Coolant Injection, Core Spray, or the Automatic Depressurization System, **AND REQUIRED FOR ADEQUATE CORE COOLING.** **-OR-** Loss of two-out-of-three fission product barriers listed in Step 2.4.1 of this Attachment.	**EAL 01.03.01 - Abnormal Leak Rate - Site Area Emergency** Loss of coolant accident requiring the initiation of Low Pressure Coolant Injection, Core Spray, or the Automatic Depressurization System, **AND REQUIRED FOR ADEQUATE CORE COOLING.**	The second part of the EAL (i.e., loss of two-out-of-three fission product barriers) references current EAL 2.4.1 which is being administratively relocated to new Section 12.0, "Fission Product Barriers and Specific LCOs," to improve assessment evaluation and is deleted here. This is an editorial change that does not modify the conditions for which this type of event would be classified. The basic EAL is retained, and the duplicate part is found in Section 12.0 of the EAL matrix. This change continues to meet the intent of the EAL guidance provided by RG 1.101.
EAL 1.4 - Abnormal Primary Leak Rate - General Emergency Site Area Emergency indicated above **AND** inability to provide makeup water to the Reactor Coolant System (i.e., failure of HPCI, Core Spray A and B, RHR Loops A and B, RCIC, condensate, and feedwater) as indicated by falling or low reactor vessel level with attempts to inject water not successful. **-OR-** Loss of two-out-of-three fission product barriers listed in Step 2.4.1 of this Attachment with a potential to lose the third barrier.	**EAL 01.04.01 - Abnormal Primary Leak Rate - General Emergency** Loss of coolant accident requiring the initiation of Low Pressure Coolant Injection, Core Spray, or Automatic Depressurization System, **AND REQUIRED FOR ADEQUATE CORE COOLING;** **-AND-** Inability to provide makeup water to the Reactor Coolant System (i.e., failure of HPCI, Core Spray A and B, RHR Loops A and B, RCIC, condensate, and feedwater) as indicated by falling or low reactor vessel level with attempts to inject water not successful.	The revised wording restates the Site Area Emergency (SAE) for clarity when providing a notification to offsite emergency management organization authorities. The second part of the EAL (i.e., loss of two-out-of-three fission product barriers with a potential to lose the third barrier) references current EAL 2.4.1, which is being administratively relocated to new Section 12.0, "Fission Product Barriers and Specific LCOs," to improve assessment evaluation and is deleted here. This is an editorial change that does not modify the conditions for which this type of event would be classified. This change continues to meet the EAL guidance provided by RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 2.2 - Steam Line Break or Safety/Relief Valve Failure - Alert Steam line break downstream of MSIVs or upstream of feedwater isolation valves as indicated by: A. Reactor trip with: 1. Low RCS pressure (C32-R608 or B21-PI-R605A or B21-PI-R605B) **-OR-** 2. Low steam pressure (C32-R609) **-OR-** 3. Low reactor vessel water level (C32-R609) **-OR-** 4. High steam flow (C32-R603) **-AND-** Shift Superintendent/Site Emergency Coordinator's opinion or evidence on P601 and P603 of continuing steam flow with steam line break outside of primary containment.	**EAL 02.02.01 - Steam Line Break or Safety/Relief Valve Failure - Alert** Main Steam, HPCI or RCIC steam line break inside the primary containment without (full) line isolation valve closure.	The existing EAL locates the break downstream of the Main Steam Isolation Valves (MSIVs), outside of primary containment. This condition is consistent with "loss of two-out-of-three fission product barriers" and should be declared an SAE. The revised EAL is based on NUREG/BR-0150, "Response Technical Manual Workbook," (RTM-96) which describes the condition that MSIVs fail to completely isolate the containment. However, the steam leaking past the MSIVs is contained within the piping system boundary. The condition outside the containment in this situation is similar to plant normal operation with steam passing through the piping to various components. This condition is more consistent with the loss of fission product barrier - Reactor Coolant System - inside primary containment. Additionally, the revised EAL includes significant steam lines that penetrate the containment boundary - Main Steam, Reactor Core Isolation Cooling (RCIC), and High Pressure Coolant Injection (HPCI) systems. Since there is no immediate direct release of radioactive material to the environment, as would be the case with a break downstream of the MSIVs, a declaration of an Alert is appropriate for the revised EAL. The initiating condition (IC) presented in NUREG-0654 does not address feedwater line breaks. Similarly, RTM-96 only addresses steamline breaks. Therefore, the feedwater line break is deleted. These changes meet the guidance provided by RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 2.3 - Steam Line Break or Safety/Relief Valve Failure - Site Area Emergency Alert indicated above and inability to isolate the leak. **-OR-** Loss of two-out-of-three fission product barriers listed in Step 2.4.1 of this Attachment.	**EAL 02.03.01 - Steam Line Break or Safety/Relief Valve Failure - Site Area Emergency** Main Steam, HPCI or RCIC steam line break outside primary containment and line isolation valve(s) fail to close indicated by valid area radiation and/or temperature alarms.	The revised EAL clarifies that the break is outside primary containment, which represents a loss of two of the three fission product barriers (i.e., Reactor Coolant System (RCS) and primary containment). This condition results in an immediate release of steam (i.e., radioactive material) into the turbine building affecting personnel access and leads to an unfiltered ground level release from the turbine building ventilation system directly to the environment. In the case of a HPCI or RCIC line break, the release will be into the reactor building (i.e., secondary containment), which also represents a loss of two fission product barriers. In this case, the reactor building ventilation is designed to initiate the Standby Gas Treatment system, which will provide a filtered elevated release. RTM-96, Table B-1, "NUREG-0654 Quick Assessment Chart," provides that the distinction between the Alert and SAE classifications is defined by the location of the steam line break (i.e., inside or outside of the primary containment). The second part of this EAL (i.e., following the "**OR**") is being relocated to new Section 12.0. This EAL includes all significant steam lines (i.e., Main Steam, HPCI, and RCIC systems). Revising this EAL makes it consistent with the guidance provided by RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 2.4.1 - Steam Line Break or Safety/Relief Valve Failure - General Emergency Loss of any two of the three fission product barriers below with a potential loss of the third barrier: A. Failed fuel causing RCS activity greater than 40 µCi/ml I-131 dose equivalent. B. Loss of primary coolant boundary. 1. Loss of coolant accident (Step 1.2 of this Attachment - Alert). 2. Major steam line break (Step 2.2 of this Attachment - Alert). C. Loss of primary containment operability. A release path has been established.	**EAL 02.04.01 - Steam Line Break or Safety/Relief Valve Failure - General Emergency** Relocated to Section 12.0.	This EAL is being administratively relocated to new Section 12.0, "Fission Product Barriers and Specific LCOs," to improve assessment evaluation and is deleted here. This is an editorial change that does not modify the conditions for which this type of event would be classified. This change continues to meet the EAL guidance provided by RG 1.101.
EAL 3.2.1 - Abnormal Core Conditions and Core Damage - Alert Failed fuel as indicated by: Liquid: Reactor coolant activity greater than 40 µCi/ml I-131 dose equivalent.	**EAL 03.02.01 - Abnormal Core Conditions and Core Damage - Alert** Liquid: Reactor coolant activity greater than 400 µCi/gm I-131 dose equivalent.	The descriptor "Failed fuel as indicated by:" is being relocated to the procedure's Definition section in order to provide a single location from which to obtain this information. In addition, the criteria for determination of the EAL declaration have been modified, and the units of measure are changed from µCi/ml to µCi/gm for consistency with the units presented as part of the chemical analysis results. The IC that this EAL should address uses 300 µCi/cc equivalent of I-131 as the example to follow. Under the current EAL structure an Alert would be declared much earlier, at approximately 13% (40 µCi/gm) of the example condition. This declaration results in unnecessary actions being implemented including those of offsite agencies. The existing action level is not consistent with the expectations of the Alert class in that 40 µCi/ml is not indicative of "very high coolant activity."

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
		A review of RTM-96 (NUREG/BR-0150) Table A-4, "BWR Baseline Coolant Concentration," shows iodine concentrations after gap release. The iodine concentrations on Table A-4 relate to "very high coolant activity" presented in NUREG-0654. Converting those quantities to I-131 Dose Equivalent for BSEP yields 2.135E+3 μCi/gm. Using 400 μCi/gm is approximately 20% of this value and is more consistent with the Alert criteria than the existing 2% (40 μCi/ml). Utilizing the higher value does not decrease the effectiveness of the EAL scheme because it prevents over classifying the event and taking actions not consistent with the event conditions as described in NUREG-0654. Use of the higher action level value is more consistent with the intent of the guidance and therefore improves the overall classification scheme. This change, in conjunction with the appropriate change at the SAE level, maintains the threshold distinction between the classifications at an appropriate level to ensure the response is consistent with event needs. This revised EAL is also more consistent with the guidance provided in RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 3.3.1 - Abnormal Core Conditions and Core Damage - Site Area Emergency Reactor Coolant System activity is greater than 400 µCi/ml I-131 dose equivalent. **-OR-** Loss of two-out-of-three fission product barriers listed in Step 2.4.1 of this Attachment.	**EAL 03.03.01 - Abnormal Core Conditions and Core Damage - Site Area Emergency** Reactor Coolant System activity is greater than 4000 µCi/gm I-131 dose equivalent.	The current EAL does not represent the SAE class since the level of activity is only slightly higher than that of the Alert IC. This value does not provide a sufficient "step" change in conditions commensurate with the response measures required for the EAL classification level. The condition the SAE's IC is describing is more consistent with RTM-96, "In-Vessel Melt." The RCS activity level provided in RTM-96, Table A-4, presents iodine concentration after in-vessel melt. Converting this value to dose equivalent I-131 for BSEP yields 1.71E+4 µCi/gm. The value of 4000 µCi/gm is approximately 25% of the converted iodine dose equivalent value. Raising the threshold value for the SAE recognizes the coolant concentration "step" increase beyond the levels associated with clad damage at the Alert level and maintains an appropriate margin to the level that indicates a General Emergency (i.e., any core melt). This represents a significant increase that warrants raising the EAL threshold value. This change will avoid over-classifying this type of event, which would result in unnecessary actions being taken by offsite emergency management organizations. Additionally, as a formatting change, the second part of this EAL is being relocated to Category 12.0 in order to consolidate the fission product barrier EALs into one category. The change in the value is appropriate in order to meet the guidance provided in RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 3.4.1, 3.4.2, and 3.4.3 - Abnormal Core Conditions and Core Damage - General Emergency **3.4.1** - Any two functional high range drywell radiation monitors (D22-RI-4195, 4196, 4197, and 4198) reading greater than 5000 R/hr. **-OR-** **3.4.2** - Reactor Coolant System activity is greater than 4000 μCi/ml I-131 dose equivalent. **-OR-** **3.4.3** - Loss of two-out-of-three fission product barriers listed in Step 2.4.1 of this Attachment with a potential for loss of the third barrier.	**EAL 03.04.01 - Abnormal Core Conditions and Core Damage – General Emergency** Any two functional high range drywell radiation monitors (D22-RI-4195, 4196, 4197, and 4198) reading greater than 5000 R/hr.	Current EAL 3.4.2 does not have a corresponding IC. NUREG-0654 does not provide guidance for coolant activity level. However, RTM-96, Table A-4, presents an I-131 concentration of 10,000 μCi/gm for in-vessel melt conditions, which would be more consistent with the GE classification. Due to the elevated radiation dose to plant workers, it is unlikely that a sample would be retrieved during this condition. Therefore, it is unlikely that this condition would provide an early predictor of this classification. EAL 3.4.2 is therefore being deleted in order to maintain the classification scheme more consistent with the guidance of RG 1.101. EAL 3.4.3, loss of two-out-of-three fission product barriers with a potential for loss of the third barrier, references current EAL 2.4.1 which is being administratively relocated to new Section 12.0, "Fission Product Barriers and Specific LCOs," to improve assessment evaluation and is deleted here. This is an editorial change that does not modify the conditions for which this type of event would be classified. This is a formatting change and remains consistent with the guidance in RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 4.2.3 - Abnormal Radiological Effluent or Radiation Levels - Alert In plant leak or spill A. Any radiation monitor or continuous air monitor off-scale high and radiological conditions are confirmed. B. Any site evacuation based on confirmed radiological conditions. C. Reactor Building closed cooling monitor (D12-RM-K606) off-scale high and high activity is confirmed by sampling.	**EAL 04.02.03 – Abnormal Radiological Effluent or Radiation Levels – Alert** Unplanned, valid direct area radiation (gamma and/or neutron) reading(s) increase by a factor of 1000 over normal levels.	The majority of the installed area radiation monitors have an upper range limit of 100 mr/hr. Under normal operating circumstances, these instruments read well within scale, depending upon location. The scale of these instruments does not provide sufficient range to determine a severe degradation in the control of radioactive material when using an "increase by a factor of 1000" threshold as provided in NUREG-0654, IC Alert 6. This is most apparent during operational periods using increased hydrogen water chemistry which improves plant reliability but has the side-effect of increasing radiation levels throughout the plant, even leading to some ARMs reading high as a normal operating condition. These normal operating conditions do not warrant the declaration of an Alert. The situation does not meet the intent of the IC. In this situation it is expected that radiation level readings will be taken using instrumentation that has adequate range and stand-off capability to determine the actual value without undue radiation exposure to plant workers. This may be done by using installed equipment, if suitable, or obtained by other instruments, as necessary. The current EAL requires the declaration of an unwarranted emergency condition based upon the limited scale of the installed area radiation monitors. Changing the EAL to more accurately reflect the emergency condition based upon significantly elevated radiological conditions is intended to address the appropriate and necessary action.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
		Part B is eliminated since any evacuation due to confirmed radiological conditions should be the protective action taken in response to a condition and not the point at which it is determined that a classification should be made. If the radiological conditions are such that they warrant protective measures for personnel, such as evacuation, then the radiological conditions should determine the EAL, not the action resulting from the conditions. This change will more effectively meet the intent of RG 1.101. Part C of the current EAL is eliminated since there is no IC consistent with the condition described. This condition would indicate the presence of radioactivity in a non-radioactive system. The condition by itself does not warrant the declaration of an Alert. Should the condition impact personnel access to an area due to radiation levels or result from significant leakage from the RCS (indicative of loss of Reactor Coolant barrier), other EALs would provide classification guidance. Eliminating this EAL will preclude making an unnecessary declaration, which would require actions inappropriate to the actual conditions. EAL 4.2.3.C is therefore being deleted in order to maintain the classification scheme more consistent with the guidance of RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 5.3.2 - Loss of Shutdown Functions: Decay Heat and Reactivity - Site Area Emergency NONE	**EAL 05.03.02 - Loss of Shutdown Functions: Decay Heat and Reactivity - Site Area Emergency** Complete loss of reactor heat removal capability indicated by inability to maintain Suppression Pool below Heat Capacity Temperature Limit curve.	This is a new EAL to address IC SAE-8 of NUREG-0654. This EAL is derived from NEI-99-01, "Methodology For Development of Emergency Action Levels," System Malfunction "SS-4," which is consistent with NUREG-0654, Appendix I. This EAL addresses the impact of long term loss of decay heat removal (DHR) capability after the reactor has shutdown. During a Station Blackout or other unlikely event that results in severe impairment of DHR capability, core melt conditions can occur which can ultimately lead to containment failure. This EAL is anticipating these conditions when it is apparent that restoration of the DHR function is not imminent, thereby severely limiting the ability of the containment to absorb additional heat energy. This change is consistent with the guidance in RG 1.101.
EAL 5.4.2 - Loss of Shutdown Functions: Decay Heat and Reactivity - General Emergency NONE	**EAL 05.04.02 - Loss of Shutdown Functions: Decay Heat and Reactivity - General Emergency** Containment pressure approaching Primary Containment Pressure Limit (PCPL), and containment venting will be required within the next six (6) hours.	This new EAL recognizes the effects of a long-term loss of DHR capability. With the existing EALs, the "loss of fission product barriers" is the primary condition for declaration of a General Emergency (GE) classification level. The GE declaration, in turn, would initiate protective measures for the public by offsite emergency management organization officials. The new EAL addresses NUREG-0654, IC GE.6.d, by early recognition of the impact from extended loss of DHR and initiation of the appropriate response to ensure public protective measures can be effective. This EAL is consistent with the guidance provided by RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 7.1 - Fire - Notification of Unusual Event Fire within the protected area lasting longer than ten minutes.	**EAL 07.01.01 - Fire - Notification of Unusual Event** Fire located in or adjacent to the areas listed below **NOT** extinguished within 15 minutes of alarm verification or Control Room notification. Areas: Emergency Diesel Generator Bldg. Control Bldg. Central Alarm Station/Secondary Alarm Station Reactor Bldg. Turbine Bldg. Unit Intake Structures Service Water Bldg.	This EAL is revised consistent with the guidance provided in NUMARC/NESP-007, Revision 2, and NRC EPPOS 1. This will allow additional time to assess a fire situation without unduly delaying request for offsite assistance when such assistance is appropriate. The intent of the 15-minute fire duration is to "size" the fire and to discriminate against small fires that are readily extinguished (e.g., smoldering waste paper basket). The areas included in the EAL are buildings or locations that house plant vital equipment. Buildings or locations that do not house vital equipment are not included. This is intended to exclude fires in administration buildings or small fires of no safety consequence. This change modifies the existing EAL by increasing the time for evaluation of a fire event. Improving the evaluation and decision-making process in the event of fire enhances the proper level of response. Specific areas affected have been provided in order to further ensure the proper differentiation between abnormal events and emergency declarations. This change is consistent with the guidance of RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 9.1.1 - Loss of Monitors or Alarms or Communication Capability - Notification of Unusual Event Loss of communication capability as determined by the Communication Failures Decision Matrix (Section 9.5).	**EAL 09.01.01 - Loss of Monitors or Alarms or Communication Capability - Notification of Unusual Event** Site communications capability impaired as determined by loss of all of the following occurring for greater than 12 hours. 1. Loss of both site Private Branch Exchanges (PBXs). 2. Loss of all private phone lines (not routed through Plant Branch Exchange; Control Room, Security, Site Vice President Office). 3. Loss of Selective Signaling. 4. Loss of the Decision Line. 5. Loss of State and Local emergency management radio system. 6. Loss of the cellular phone system access.	The revised listing describes the communication systems that are required to be unavailable in order to meet the threshold for declaring an Unusual Event. The existing listing predominately identifies those conditions that do not warrant a declaration. The two conditions that are identified do not credit the existing radio systems, the company microwave, or other existing alternatives prior to declaring an Unusual Event. Additionally, with the January 26, 2001, revision of 10 CFR 50.72, immediate notification of a "Loss of Emergency Communications" was extended to eight hours. Therefore, the threshold for declaring an Unusual Event when there is a loss of communications is revised to account for the extended 10 CFR 50.72 notification requirements and the guidance in RG 1.101.
EAL 9.1.2 - Loss of Monitors or Alarms or Communication Capability - Notification of Unusual Event Unplanned loss of most or all annunciators on Panels P601, P603, XU-1, XU-2, XU-3, XU-51, and XU-80 with the affected unit in Operational Condition 1, 2, or 3 for > 15 minutes; **-AND-** Compensatory (non-alarming) indications are available.	**EAL 09.01.02 - Loss of Monitors or Alarms or Communication Capability - Notification of Unusual Event** Unplanned loss of most or all annunciators on Panels P601, P603, XU-1, XU-2, XU-3, XU-51, and XU-80 for > 15 minutes with the affected unit in Mode 1, 2, or 3: **-AND-** Compensatory (non-alarming) indications are available.	This is a formatting change to place the time constraint closer to the beginning of the conditional statement. Also, "Operational Condition" is changed to "Mode." This is an editorial change only, for consistency with the language of the BSEP Improved Technical Specifications.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 9.2.1 - Loss of Monitors or Alarms or Communication Capability - Alert Unplanned loss of most or all annunciators on Panels P601, P603, XU-1, XU-2, XU-3, XU-51, and XU-80 with the affected unit in Operational Condition 1, 2, or 3 for >15 minutes; **-AND-** Either: • Compensatory (non-alarming) indications are **NOT** available. **-OR-** • A plant transient is in progress.	**EAL 09.02.01 - Loss of Monitors or Alarms or Communication Capability - Alert** Unplanned loss of most or all annunciators on Panels P601, P603, XU-1, XU-2, XU-3, XU-51, and XU-80 for >15 minutes with the affected unit in Mode 1, 2, or 3; **-AND-** Either: • Compensatory (non-alarming) indications are **NOT** available. **-OR-** • A plant transient is in progress.	This is a formatting change to place the time constraint closer to the beginning of the conditional statement. Also, "Operational Condition" is changed to "Mode." This is an editorial change only, for consistency with the language of the BSEP Improved Technical Specifications.
EAL 11.3.1 - Security Threats - Site Area Emergency Physical attack on the plant involving imminent occupancy of the Control Room, auxiliary shutdown panels, and other vital areas.	**EAL 11.03.01 - Security Threats - Site Area Emergency** Physical attack on the plant involving imminent occupancy of the Control Room, auxiliary shutdown panels, or other vital areas.	This revision changed "and" to "or" for the purpose of clarifying the appropriate conditions. This change clarifies that if **ANY** one of the locations, versus **ALL** of the locations, is affected by the security threat, the SAE should be declared.
EAL 11.4.1 - Security Threats - General Emergency Physical attack on the plant has resulted in unauthorized personnel occupying the Control Room and other vital areas.	**EAL 11.04.01 - Security Threats - General Emergency** Physical attack on the plant has resulted in unauthorized personnel occupying the Control Room or other vital areas.	This revision changed "and" to "or" for the purpose of clarifying the appropriate conditions. This change clarifies that if **ANY** one of the locations, versus **ALL** of the locations, is affected by the security threat, the GE should be declared.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 12.2.1 - Specific LCOs - Alert NONE	**EAL 12.02.01 - Fission Product Barriers and Specific LCOs - Alert** Loss of either Fuel Clad or the Reactor Coolant Boundary.	This is a new EAL used to bridge the Alert classification for the existing fission product barrier EALs in the other classes. This is based on NUMARC/NESP-007, Revision 2, Category F, consistent with the existing BSEP EALs which address the loss of fission product barriers. The descriptor for "loss of the fission product barrier" is provided in the Definitions section of BSEP procedure 0PEP-02.1, "Initial Emergency Actions." The definition states: "Fission Product Barrier Loss - Fission product barrier loss is indicated by one of the following conditions: A. Failed fuel causing RCS activity greater than 400 μCi/g I-131 dose equivalent. B. Loss of primary coolant boundary; 1. Loss of coolant accident (Step 1.2 of this Attachment - Alert), 2. Major steam line break (Step 2.2 of this Attachment - Alert) C. Loss of primary containment operability. A release path has been established." This definition is also applicable to proposed EALs 12.03.01 and 12.04.01. This change is consistent with the guidance provided in RG 1.101.
EAL 12.3.1 - Specific LCOs - Site Area Emergency NONE	**EAL 12.03.01 - Fission Product Barriers and Specific LCOs - Site Area Emergency** Loss of two-out-of-three fission product barriers.	This EAL is not a change in the terminology or criteria. This is a format change that places the fission product barrier EALs in one location for ease of identification and access. The criteria for each barrier are maintained in the Definition section of BSEP procedure 0PEP-02.1, "Initial Emergency Actions." This change is consistent with the guidance provided in RG 1.101.

Proposed Changes to BSEP Emergency Action Level Classifications		
Current Criteria	**Proposed Criteria**	**Bases**
EAL 12.4.1 - Specific LCOs - General Emergency NONE	**EAL 12.04.01 - Fission Product Barriers and Specific LCOs - General Emergency** Loss of any two-out-of-three fission product barriers with a potential loss of the third barrier.	This EAL is also being relocated from Category 2.0 to Category 12.0 as a formatting change in order to include all the fission product barrier EALs in one Category for ease of access and identification. The descriptor for each of the failed barriers is provided in the Definition section of BSEP procedure 0PEP-02.1, "Initial Emergency Actions." This change is consistent with the guidance provided in RG 1.101.