February 12, 2001

MEMORANDUM TO: Herbert N. Berkow, Director
Project Directorate II-2
Division of Licensing and Project Management
Office of Nuclear Reactor Regulation

FROM: William D. Beckner, Chief ***/RA/***
Technical Specifications Branch
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

SUBJECT: H. B. ROBINSON UNIT NO. 2 - REQUEST FOR TECHNICAL SPECIFICATION CHANGE FOR OPERATIONS INVOLVING POSITIVE REACTIVITY ADDITIONS (TAC NO. MA9729)

Plant Name:	H. B. Robinson, Unit 2
Utility:	Carolina Power & Light Company
TAC No(s).:	MA9729
Docket No(s).:	50-261
Operating License:	DPR-23
Project Directorate:	Project Directorate II-2
Project Manager:	R. Subbaram
Review Branch:	RTSB/DRIP (w/ input from SRXB/DSSA)
Review Status:	Complete

By letter dated August 10, 2000, Carolina Power & Light Company (CP&L) submitted an application to amend the H. B. Robinson Steam Electric Plant, Unit 2 (HBR-2) Technical Specifications. The proposed change would revise Required Actions suspending operations involving reactivity additions and would also revise various Limiting Condition for Operation Notes precluding reduction in boron concentration. These revisions would clarify limits on the introduction of reactivity such that the required SHUTDOWN MARGIN or refueling boron concentration will be satisfied. These changes are consistent with the approved Industry Technical Specification Task Force (TSTF) Technical Specification Change Traveler TSTF-286, Revision 2. The Technical Specifications Branch (with input from Reactor Systems Branch) has reviewed the licensee's application and has prepared the attached safety evaluation report (SER). We find that the proposed technical specification change is acceptable, as discussed in the SER. This completes our efforts on TAC No. MA9729.

Attachment: Safety Evaluation

Contact: Tommy Le, RTSB/DRIP
415-1458

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

TECHNICAL SPECIFICATION CHANGE
REGARDING OPERATIONS INVOLVING POSITIVE REACTIVITY ADDITIONS
CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON UNIT NO. 2
DOCKET NO. 50-261

1.0 INTRODUCTION AND BACKGROUND

By letter dated August 10, 2000 (Reference 1,) Carolina Power & Light Company (CP&L, the licensee) submitted an application to amend the H. B. Robinson Steam Electric Plant, Unit 2 (HBR-2) Technical Specifications (TS). The proposed change would revise various Required Actions suspending operations involving reactivity additions and would also revise various Limiting Conditions for Operation (LCO) Notes precluding reduction in boron concentration.

HBR-2 adopted the Standard Technical Specifications (STS) in 1997 under Amendment 176, and since then the Industry and the NRC staff have been working to improve the improved STS NUREGs and as a result, generic changes have been developed. The proposed changes adopt NRC approved generic changes in Industry Technical Specification Task Force (TSTF) Technical Specification Change Traveler TSTF-286, Revision 2, which was approved by the staff on July 6, 2000 (Reference 2). This TSTF revises most Actions requiring "Suspend operations involving positive reactivity additions" to limit the introduction, into the reactor coolant system (RCS), of reactivity more positive than that required to meet the required shutdown margin (SDM) or refueling boron concentration, as applicable. TSTF-286, Revision 2, allows applicable licensees to revise their plant TS and clarify limits on the introduction of reactivity such that the required SDM or refueling boron concentration will be satisfied. The licensee also provided plant specific differences between their proposed changes and TSTF-286, Revision 2, wherever the proposed changes are not consistent with the approved TSTF-286, Revision 2.

HBR-2 employs two independent reactivity control systems: one uses the movable control and shutdown Rod Cluster Control Assemblies (RCCAs), and the other uses the Chemical and Volume Control System (CVCS) to adjust the soluble boron concentration. In MODES 1 and 2, both systems are used to compensate for the reactivity effects from the fuel and coolant temperature changes in the Reactor Coolant System (RCS) during power operation from full load to no load condition. In MODES 3, 4, and 5, the CVCS is used to compensate for the reactivity effects from temperature and xenon changes. In MODE 6, the CVCS is used to maintain the boron concentration within the required limits.

The HBR-2 SDM limit provides sufficient subcritical reactivity margin to ensure that the specified acceptable fuel design limits (SAFDLs) will not be exceeded for normal shutdown and Anticipated Operational Occurrences (AOOs). In MODES 1 and 2, the required SDM specifies

the amount of subcriticality that would immediately occur following the scram or insertion of both control and shutdown RCCAs that had been withdrawn, assuming the fuel and moderator temperatures are at nominal hot zero power values. Small reactivity changes due to RCS coolant inventory management and temperature control are also considered, including moderator temperature coefficient effects. In MODES 3, 4, and 5, the required SDM specifies the reactivity margin by which the reactor will remain subcritical with the RCCAs fully inserted. In all these MODES of operation, the required SDM specification also assumes that the single RCCA with the highest reactivity worth remains fully withdrawn.

In MODE 6, reactor subcriticality margin is ensured by the limit on the boron concentration for the RCS, the refueling canal, and the refueling cavity during refueling. The refueling boron concentration limit is specified for each cycle in the Core Operating Limits Report (COLR).

2.0 EVALUATION

2.1 Summary and Licensee Justification of Proposed Changes

In their letter dated August 10, 2000, the licensee requested a change to the TS for HBR-2, in accordance with 10 CFR 50.90, to revise TS ACTIONS that currently require suspending all operations involving any positive reactivity additions and also to revise TS LCO Notes that preclude any reduction in boron concentration. The proposed changes would allow the introduction of reactivity while maintaining RCS coolant inventory and temperature as long as the required SDM or refueling boron concentration is properly maintained. These necessary operations may involve additions to the RCS of cooler borated water or require makeup from borated sources that have lower boron concentration than the existing RCS boron concentration. These changes would be allowed if the overall effect on core reactivity still assures that the required SDM is maintained.

The proposed amendment would revise 12 specific Technical Specifications relating to HBR-2 positive reactivity additions while in shutdown modes. The proposed changes relax technical specifications involving positive reactivity additions to the shutdown reactor. The proposed changes will allow small, controlled, safe insertions of positive reactivity while in shutdown modes.

The proposed changes conform closely to TSTF-286, Revision 2, and revise most HBR-2 TS Actions requiring “Suspend operations involving positive reactivity additions” to allow positive reactivity addition, but limit the introduction, into the reactor coolant system, of reactivity more positive than that required to meet the required shutdown margin SDM or refueling boron concentration, as applicable. The licensee also provided plant specific differences between the proposed changes and TSTF-286 Revision 2 as part of their August 10, 2000 submittal. A correlation of the proposed changes to the complete list of approved TSTF-286 changes was provided to the staff during a follow-up phone call with the licensee on October 19, 2000. The correlation is summarized in the Appendix to this Safety Evaluation.

2.2 Safety Evaluation

The staff-approved changes in TSTF-286, Revision 2, revise the following: 1) Actions that require “Suspend operations involving positive reactivity additions”, and 2) various Notes precluding reduction in boron concentration. The revision limits the introduction into the RCS of

reactivity more positive than that required to meet the required SDM or refueling boron concentrations, as applicable. Additionally, the remaining Actions that require suspension of positive reactivity changes have a Bases addition to clarify that the intent is a “net” positive reactivity operation.

The justification given in the staff-approved TSTF is that the change provides the flexibility necessary to provide for continued safe reactor operations, while also limiting any potential for excess positive reactivity addition. The Actions that preclude positive reactivity changes and/or reduction in boron concentration ensure either no power increases, or continued margin to core criticality operations. During conditions in which these Actions may be required, the following various activities for unit operation must be continued: RCS inventory must be maintained, and RCS temperature must be controlled. These activities necessarily involve addition to the RCS of cooler water and may involve inventory makeup from sources that are at boron concentrations less than the current RCS concentration. These activities should not be precluded to ensure that for the worst-case overall effect on the core, there would still assurance that the required SDM is maintained.

The required SDM at HBR-2 is determined during the reload core design and is ensured during plant operation by the positioning of the RCCA control and shutdown rod banks and through adjustments of the soluble boron concentration in the reactor coolant.
In MODES 1 through 4, the minimum required SDM is assumed as an initial condition for the reload safety analyses to ensure that the SAFDLs will not be exceeded for normal shutdown and AOOs, assuming that the highest worth RCCA remains stuck out following a reactor scram. Currently for HBR-2, the Main Steam Line Break (MSLB) is the most limiting event to establish the minimum SDM value for LCO 3.1.1, and this ensures that the DNBR safety limit is not exceeded.

In MODES 5 and 6, the reactivity of the core must be consistent with the initial conditions assumed for the boron dilution accident analysis to ensure the minimum time required for operator action to terminate dilution is met. This requirement is met by the requirements of LCO 3.1.1 for the minimum SDM and LCO 3.9.1 for the minimum boron concentration. Additionally, for MODE 6, the required boron concentration ensures the required subcriticality during refueling operations.

The intent of the approved TSTF-286, Revision 2 is to ensure that, under the specified plant conditions for each operating mode, unplanned power increases or reductions in the margin to core criticality are precluded. The proposed revision to existing TS Notes and the addition of wording [notes] to the TS ACTIONS allow a small reactivity variation that will result from temperature or boron concentration fluctuations that associated with normal RCS inventory management or temperature control to be performed while maintaining the minimum SDM of LCO 3.1.1 and the minimum boron concentration of LCO 3.9.1. The HBR-2 plant specific clarifications provide the staff the assurance that the initial assumptions of the most limiting accident safety analyses are still maintained, while acknowledging that necessary compensatory activities may still be taken by adding cooler water to the RCS for lower the current temperature; and makeup sources are of borated water at boron concentrations less than the current RCS boron concentration. The licensee has stated that these compensatory activities are part of plant procedures, and this would assure that the overall effect on core reactivity is properly monitored and the required SDM or the required refueling boron concentration maintained.

In its application, the licensee provided the same justification for HBR-2 as that provided by the staff for approving the approved TSTF; however, whereas plant-specific design would dictate differences, the licensee proposed the same changes to the TSs as that are given in the TSTF but provided the staff with plant specific justification for any differences or exceptions, as discussed below.

a) The proposed revisions include adding notes to

- TS 3.3.1, “RPS Instrumentation,” Required Actions G.1, and I.1.

Currently, at HBR-2, Required Actions G.1 and I.1 simply state:

“Suspend operations involving positive reactivity additions.”

The approved TSTF-286, Rev. 2 equivalent notes would state that:

“Limited plant cooldown or boron dilution is allowed provided the change is accounted for in the calculated SDM.”

However, in initiating shutting down the reactor from MODES 1 and 2, the required SDM at HBR-2 is not normally a calculated value. Instead, the required SDM is ensured by plant operation that is consistent with the rod insertion limits of LCO 3.1.4, “Rod Group Alignment Limits,” and LCO 3.1.5, “Shutdown Bank Insertion Limits,” and with the temperature limits of LCO 3.4.2, “RCS Minimum Temperature for Criticality.”

Therefore, the proposed HBR-2 changes are revised to state that:

“Limited boron concentration changes associated with RCS inventory control or limited plant temperature changes are allowed.”

As stated previously, the intent of the approved TSTF-286, Revision 2 is to ensure that, under the specified plant conditions for each operating mode, unplanned power increases or reductions in the margin to core criticality are precluded. The proposed revision to existing TS Notes and the addition of wording [notes] to the TS ACTIONS allow a small reactivity variation that will result from temperature or boron concentration fluctuations that associated with normal RCS inventory management or temperature control to be performed while maintaining the minimum SDM of LCO 3.1.1 and the minimum boron concentration of LCO 3.9.1. The HBR-2 plant specific clarification provides the staff the assurance that the initial assumptions of the most limiting accident safety analyses are still maintained, while acknowledging that necessary compensatory activities may still be taken by adding cooler water to the RCS for lower the current temperature; and makeup sources are of borated water at boron concentrations less than the exiting RCS boron concentration. The licensee has stated that these compensatory activities are part of plant procedures, and thus allows the proposed TS change “limited boron concentration changes ... or limited plant temperature changes” to meet the intent of TSTF-286, Revision 2, and thus is acceptable because the overall effect on core reactivity is being monitored and the required refueling boron concentration is being maintained.

Furthermore, the staff finds the wording “temperature changes” refers to the fact that the moderator temperature coefficient must be considered both during cooldown and heatup operations. Similarly, the staff finds the wording “boron concentration changes associated with RCS inventory control” is more descriptive of operations at HBR-2 than “boron dilution.” These wording changes are both more accurate with regard to the existing HBR-2's design of employing two independent reactivity control systems: one uses the movable control and shutdown Rod Cluster Control Assemblies (RCCAs), and the other uses the Chemical and Volume Control System (CVCS) TS, and this additional clarification allows the adoption of TSTF-286, Revision 2.

These changes are consistent with the intent of TSTF-286, Rev. 2, but are clarified by additional compensatory activities during operation to more accurately define their plant specific application at HBR-2. Therefore, the staff finds the proposed changes, with plant specific exception, is acceptable to the staff.

b) The proposed revision also includes a note to

- TS 3.3.1, “RPS Instrumentation,” Required Action L.1,

Currently at HBR-2, Required Action L.1 simply states:

“Suspend operations involving positive reactivity additions.”

The proposed HBR-2 TS revision would add a note to state that:

“Plant temperature changes are allowed provided the temperature change is accounted for in the calculated SDM.”

The licensee provided the same justification for HBR-2 as that provided by the staff for approving the approved TSTF, this change is consistent with the approved TSTF-286, Rev. 2 and is applicable to HBR-2, and is therefore acceptable to the staff.

c) Required Actions would also be revised for the following TSs

- TS 3.4.5, “RCS Loops - MODE 3,” Required Action D.2,
- TS 3.4.6, “RCS Loops - MODE4,” Required Action C.1,
- TS 3.4.7, “RCS Loops - MODE 5, Loops Filled,” Required Action B.1,
- TS 3.4.8, “RCS Loops - MODE 5, Loops Not Filled,” Required Action B.1,

to “suspend operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet SDM of LCO 3.1.1.”

The licensee provided the same justification for HBR-2 as that provided by the staff for approving the approved TSTF, these changes are consistent with the approved TSTF-286, Rev. 2, are directly applicable to HBR-2, and are therefore acceptable to the staff.

d) Notes would also be revised for the following LCOs

- LCO 3.4.5, “RCS Loops - MODE 3,” Note a,

- LCO 3.4.6, “RCS Loops - MODE4,” Note 1a,
- LCO 3.4.7, “RCS Loops - MODE 5, Loops Filled,” Note 1a,
- LCO 3.4.8, “RCS Loops - MODE 5, Loops Not Filled,” Note 1b,

to state that “no operations are permitted that would cause introduction into the RCS, coolant with boron concentration less than required to meet the SDM of LCO 3.1.1."

The licensee provided the same justifications for HBR-2 as that provided by the staff for approving the approved TSTF, these changes are consistent with the approved TSTF-286, Rev. 2 and are applicable to HBR-2, and are therefore acceptable to the staff.

e) Required Actions would also be revised for:

- TS 3.8.2, “AC Sources - Shutdown,” Required Actions A.2.3 and B.3,
- TS 3.8.5, “DC Sources - Shutdown,” Required Action A.2.3,
- TS 3.8.8, “AC Instrument Buses - Shutdown,” Required Action A.2.3,
- TS 3.8.10, “Distribution Systems - Shutdown,” Required Action A.2.3,

to state “suspend operations involving positive reactivity additions that could result in loss of required SDM or boron concentration.”

The licensee provided the same justification for HBR-2 as that provided by the staff for approving the approved TSTF, these changes are consistent with the approved TSTF-286, Rev. 2, are directly applicable to HBR-2, and are therefore acceptable to the staff.

f) One Required Action would be revised for

- TS 3.9.2, “Nuclear Instrumentation,” Required Action B.2,

to state “suspend operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet boron concentration of LCO 3.9.1.”

The licensee provided the same justification for HBR-2 as that provided by the staff for approving the approved TSTF, this change is consistent with the approved TSTF-286, Rev. 2, is also applicable to HBR-2 with minor editorial changes, and is therefore acceptable to the staff.

g) The LCO note would be revised for

- LCO 3.9.4, “Residual Heat removal (RHR) and Coolant Circulation - High Water Level,”

to state “the required RHR train may be removed from operation for $\leq$1 hour in any 8 hour period, provided no operations are permitted that would cause introduction into the Reactor Coolant System, coolant with boron concentration less than that required to meet the minimum required boron concentration of LCO3.9.1.”

The licensee provided the same justification for HBR-2 as that provided by the staff for approving the approved TSTF, this change is consistent with the approved TSTF-286, Rev. 2,

is also applicable to HBR-2 with minor editorial changes, and is therefore acceptable to the staff.

h) Two Required Actions would be revised for

- TS 3.9.4, “RHR and Coolant Circulation - High Water Level,” Required Action A.1,
- TS 3.9.5, RHR and Coolant Circulation - Low Water Level,” Required Action B.1,

to state “suspend operations that would cause introduction into the RCS, coolant with boron concentration less than required to meet boron concentration of LCO 3.9.1.”

The licensee provided the same justification for HBR-2 as that provided by the staff for approving the approved TSTF, these changes are consistent with the approved TSTF-286, Rev. 2, are also applicable to HBR-2 with minor editorial changes, and are therefore acceptable to the staff.

i) A revision is made to:

- Bases for TS 3.9.1, “Boron Concentration,” Required Action A.2

to clarify that “CORE ALTERATIONS and positive reactivity additions” are both to be immediately suspended.

This is an editorial wording correction and a heading insertion is also made for completeness. The staff finds this change is consistent with the approved TSTF-286, Rev. 2, is also applicable to HBR-2, and is therefore acceptable to the staff.

In addition to the above review, the staff also noted that the associated TS Bases for the above changes are also revised for consistency with the staff-approved TSTF and the proposed changes to the TS Bases were submitted with the submittal.

Based on the above review, the staff finds the proposed TS changes for application to the HBR-2 plant are consistent with TSTF-286, Revision 2, the proposed changes continue to ensure that the required minimum SDM and boron concentration margins are met, and therefore are acceptable.

3.0 CONCLUSIONS

The Technical Specifications Branch, with input from Reactor Systems Branch (SRXB), has reviewed the licensee’s application with the supporting documentation and has prepared the above safety evaluation. Based on our review, the staff concludes that the proposed 12 specific changes to the HBR-2 technical specifications are acceptable for incorporation because these TS changes are consistent with the approved TSTF-286, Revision 2 and also are consistent with the reload safety analyses assumptions and requirements for the HBR-2 plant operation.

The staff has concluded, based on the consideration discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with

the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

4.0 REFERENCES

1. Letter from R. L. Warden (CP&L), to USNRC, "Request for Technical Specification Change for Operations Involving Positive Reactivity Additions," dated August 10, 2000.

2. Letter from W.D. Beckner, USNRC, to J. Davis, Nuclear Energy Institute, July 6, 2000.

Principal Contributors: N. Le
E. Kendrick

APPENDIX

A Correlation of Proposed Changes to Approved TSTF-286, Revision 2 TS Changes

The following TSTF-286 TS changes are applicable to the HBR-2 plant but required some additional justification or clarification before incorporation, as discussed in the evaluations in Section 2.

- Action 3.3.1.G RTS Instrumentation
- Action 3.3.1.G Bases RTS Instrumentation
- Action 3.3.1.I RTS Instrumentation
- Action 3.3.1.I Bases RTS Instrumentation
- Action 3.3.1.L RTS Instrumentation
- Action 3.3.1.L Bases RTS Instrumentation

The following TSTF-286 TS changes are directly applicable to the HBR-2 plant and are therefore incorporated as written:

- LCO 3.4.5 RCS Loops - MODE 3
- LCO 3.4.6 RCS Loops - MODE 4
- Action 3.4.6 RCS Loops - MODE 4
- Action 3.4.7 RCS Loops - MODE 5, Loops Filled
- Action 3.4.7.B RCS Loops - MODE 5, Loops Filled
- LCO 3.4.8 RCS Loops - MODE 5, Loops Not Filled
- LCO 3.4.8 Bases RCS Loops - MODE 5, Loops Not Filled
- LCO 3.4.8B RCS Loops - MODE 5, Loops Not Filled
- Action 3.8.2.A AC Sources - Shutdown
- Action 3.8.2.B AC Sources - Shutdown
- Action 3.8.5.A DC Sources - Shutdown
- LCO 3.8.8.A AC Instrument Buses - Shutdown
- Action 3.8.10 Distribution Systems - Shutdown
- Action 3.4.5.D RCS Loops - MODE 3
- Action 3.4.5.D Bases RCS Loops - MODE 3
- LCO 3.9.4 RHR and Coolant Circulation - High Water Level

The following TSTF-286 TS changes are also applicable to the HBR-2 plant and are incorporated with minor editorial changes:

- LCO 3.4.5 Bases RCS Loops - MODE 3
- LCO 3.4.6 Bases RCS Loops - MODE 4
- Action 3.4.6.C Bases RCS Loops - MODE 4
- LCO 3.4.7 Bases RCS Loops - MODE 5, Loops Filled
- Action 3.4.7.B Bases RCS Loops - MODE 5, Loops Filled
- LCO 3.4.8.B Bases RCS Loops - MODE 5, Loops Not Filled
- Action 3.8.2.A Bases AC Sources - Shutdown
- Action 3.8.5.A Bases DC Sources - Shutdown
- LCO 3.8.8.A Bases AC Instrument Buses
- Action 3.8.10 Bases Distribution Systems - Shutdown
- Action 3.9.1.A Bases Boron Concentration
- Action 3.9.2.B Nuclear Instrumentation

- Action 3.9.2.B Bases Nuclear Instrumentation
- LCO 3.9.4 Bases RHR and Coolant Circulation - High Water Level
- Action 3.9.4.A RHR and Coolant Circulation - High Water Level
- Action 3.9.4.A Bases RHR and Coolant Circulation - High Water Level
- Action 3.9.5.B RHR and Coolant Circulation - Low Water Level
- Action 3.9.5.B Bases RHR and Coolant Circulation - Low Water Level

The following TSTF-286 TS changes are not applicable to the HBR-2 plant and are therefore not incorporated:

- Action 3.3.9.B BDPS
- Action 3.3.9.B Bases BDPS
- Background 3.4.18 Bases RCS Isolated Loop Startup
- LCO 3.4.18 RCS Isolated Loop Startup
- SR 3.4.18.2 RCS Isolated Loop Startup
- SR 3.4.18.2 Bases RCS Isolated Loop Startup

The following TSTF-286 TS changes are not applicable to NUREG 1431 (Westinghouse plants) and are therefore not incorporated:

- Action 3.4.5.C RCS Loops - MODE 3
- Action 3.4.5.C Bases RCS Loops - MODE 3
- Action 3.9.2.A Nuclear Instrumentation
- Action 3.9.2.A Bases Nuclear Instrumentation
- Action 3.9.2.B Bases Nuclear Instrumentation
- Action 3.3.9.B Source Range Neutron Flux
- Action 3.3.9B Bases Source Range Neutron Flux
- Action 3.3.10.B Intermediate Range Neutron Flux
- Action 3.3.10.B Bases Intermediate Range Neutron Flux
- LCO 3.9.4 DHR and Coolant Circulation - High Water Level
- LCO 3.9.4 Bases DHR and Coolant Circulation - High Water Level
- Action 3.9.4.A DHR and Coolant Circulation - High Water Level
- Action 3.9.4.A Bases DHR and Coolant Circulation - High Water Level
- Action 3.9.5.B DHR and Coolant Circulation - Low Water Level
- Action 3.9.5.B Bases DHR and Coolant Circulation - Low Water Level
- Action 3.3.8.A Bases CRIS (Analog)
- Action 3.3.8.C CRIS (Analog)
- Action 3.3.9.A Bases CRIS (Digital)
- Action 3.3.9.C CRIS (Digital)
- Action 3.3.13.A [Logarithmic] Power Monitoring Channels (Analog)
- Action 3.3.13.A [Logarithmic] Power Monitoring Channels (Digital)
- Action 3.3.13.A Bases [Logarithmic] Power Monitoring Channels (Analog)
- Action 3.3.13.A Bases [Logarithmic] Power Monitoring Channels (Digital)
- LCO 3.9.4 SDC and Coolant Circulation - High Water Level
- LCO 3.9.4 Bases SDC and Coolant Circulation - High Water Level
- Action 3.9.4.A SDC and Coolant Circulation - High Water Level
- Action 3.9.4.A Bases SDC and Coolant Circulation - High Water Level
- Action 3.9.5.B SDC and Coolant Circulation - Low Water Level
- Action 3.9.5.B Bases SDC and Coolant Circulation - Low Water Level