Proposed Change RTS-156
to the
Duane Arnold Energy Center
Technical Specifications

The holders of license DPR-49 for the Duane Arnold Energy Center propose to amend Appendix A (Technical Specifications) to said license by deleting current pages and replacing them with attached, new pages. A List of the Affected Pages is given below.

The following list of proposed changes is only administrative. The changes being made can be divided into three categories: Changes made to clarify existing wording, Changes made to update old references, and Changes made to correct typos.

Changes being made to clarify existing wording:

(1) Section 3.2.C.2 is changed to clarify the time limit during which the minimum number of Rod Block Monitor channels can be reduced. The change does not constitute a change in the substance of the Specification.

(2) Table 3.2-A is changed to clarify entries. High Flow Main Steam Line trip setting is listed as "less than or equal to 140% of rated steam flow." Since steam flow is measured as a pressure drop, the proposed change will add, in parenthesis, the pressure drop equivalent to 140% rated steam, flow, i.e., "(less than or equal to 110 psid)."

(3) A title ("Instrumentation that Initiates Control Rod Blocks") has been added to Table 3.2-C to clarify what it contains.

(4) Section 3.7.A.5.b is changed to clarify what is implied but not specifically stated. The specification states that the oxygen concentration is to be reduced to less than 4% by volume, and maintained in that condition, within 24 hours of placing the reactor in the run mode. If this requirement is not met it is implied that the reactor will be taken out of the run mode. This change will ensure that the plant is returned to a conservative safe configuration. Section 3.7.A.5.b is also changed to add "with the intent of commencing power operation" so in the event the reactor is put in the run mode to complete startup testing, a LCO does not have to be entered.

(5) Sections 3.7.A.6.a and 3.7.A.6.b are changed to clarify the action statements. The current specifications simply state that "the reactor must be taken out of power operation". The proposed change will require a hot shutdown within 24 hours if the operability requirements cannot be met within the grace period.

(6) Section 3.8 bases is changed to include requirements for operation with inoperable 24V batteries. A new paragraph is added to address what happens with these batteries inoperable.

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(7) Sections 3.9.A.3 and 3.9.A.4 are changed to clarify the meaning of the 400 lb load limit for the fuel grapple hoist. The proposed change clarifies the Specification by noting that the 400 lb limit applies to the external load, not including the hoist, grapple, and hook.

(8) Section 3.3.A.2.a is changed to clarify what is meant by "shutdown". "At least a hot" will be added to clarify this point.

(9) Section 1.1 is changed to clarify "less than" and "less than or equal to" for core thermal power limit and core flow. Signs were inconsistent and this has been changed.

(10) Tables 3.2-A and 3.2-B have been changed to allow several of the setpoints to be more easily set with either (1) an increase in protection, or (2) no change in protection. Current setpoints are listed as one number, and the proposed change will add "less than or equal to", or "greater than or equal to" to each setting.

(11) Section 3.3.B.3.e is changed to prohibit rod movement except by scram in the event that either the Rod Worth Minimizer or the Rod Sequence Control System is not operable. The words "by a scram" is inserted to clarify this.

(12) Section 3.12.C is changed to delete the phrase "during reactor power operation" in reference to the action statement for MCPR limits being executed. This is being done to avoid interpretation problems.

(13) Section 3.5.F.3 is changed to replace the wording "orderly shutdown" to provide more specific definition of the action to be taken. This new wording is consistent with the standard tech specs.

(14) Section 3.3.B.3.b is changed to add the words "at power levels greater than or equal to 30%" to clarify the intent of the specification. This will insure that the rods are properly aligned prior to reinsertion below 30% power. This is consistent with the Control Rod Drop Accident Analysis.

(15) Table 3.2-B is changed to add delta (Δ) to the HPCI Room differential temperature set point. Explanation of four instrument channels for HPCI and RCIC room high temperature trips are also being added.

(16) Page vi, reference to Table 3.6-1 is deleted. Table 3.6-1 was deleted by Amendment 56.

(17) Page vii, Figure 4.8.C-1 reference is added to List of Figures and reference to "deleted" figures is dropped.

(18) Section 4.6.B.1.h is changed to replace incorrect Title.

(19) Page 3.1-21, Section 3.1 bases is revised to add "<" before the ARM reading of "5" for insertion of the IRMs. The "less than" sign was originally included in the bases, but was inadvertently deleted by Amendment 14.

(20) Page 3.3-6, Section 4.3.C.1, is revised to add "to 50% rod density" in order to provide the proper range to indicate which rods are to be scram time tested. The Technical Specifications originally included this statement, but it was inadvertently deleted by Amendment 54.

(21) Section 4.8.1.b and Bases 3.8-12 are changed to delete the shutting and restarting of the diesel generators to test for emergency load transfer. This isn't consistent with GDC 17, Reg. Guide 1.108 and the NRC Standard Review Plans. (See GL 83-30)

(22) Table 3.2-B, HPCI Turbine Steam Line High Flow trip settings are being changed. Amendment 26 originally contained this change, but Amendment 28 inadvertently deleted it.

(23) Page 3.6-2, Section 4.6.A.2 is revised to delete reference to Neutron flux wires. The wires were removed during the second refueling outage.

(24) Bases Section 3.5.E is changed to explain maximum allowable repair time for RCIC.

Changes being made to update old references:

(1) Section 3.6.B.2.a is changed to delete reference to the Limits on Conductivity during the first occasion on which reactor coolant water temperature, as a result of nuclear heatup, reached 375°F. This occasion has already passed so that portion of the Specification is no longer applicable.

(2) Sections 3.8.B.4 and 6.11 are changed to replace references to the "AEC" with "NRC".

(3) Sections 6.8.1 and 6.8.4 are changed to replace "Preparedness Plan" with "Emergency Plan". "Quarterly" is taken out of Section 6.8.4 because the Emergency Plan does not require quarterly drills.

(4) Section 6.11.1.b is changed to replace "prior to March 1" with "within 60 days of January 1" to make consistent with the rest of the reporting procedures.

(5) Page vi of the Table of Contents is changed to remove the reference to Table 6.9-1. This table no longer exists.

(6) Section 4.3.C.2 and 4.3.C.3 are now deleted. These sections were only valid prior to Cycle 6.

The Bases for Section 3.3 and 4.3 is revised to delete the reference to the tests described in Sections 4.3.C.2 and 4.3.C.3.

(7) Section 3.3.B.5 has been changed to delete the phrase "designated qualified personnel". The responsibilities of the personnel are adequately defined elsewhere (p. 3.3-17).

(8) Tables 3.2-H and 4.2-H are added to the Table of Contents and List of Tables.

(9) Section 3.3.2.e is changed to replace reference to DAEC Chief Engineer with Plant Superintendent - Nuclear.

(10) Page 1.0-1, definition 1. is changed to include the reference to Nuclear Regulatory Commission rather than Atomic Energy Commission.

(11) Table 3.2-B is changed to reference Reactor Low Level to current Top of Active Fuel.

(12) The following pages are changed to update references to the FSAR.

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3.2-36	3.6-2	3.7-49
3.2-37	3.6-16	5.1-1
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3.2-39	3.6-33	5.4-1
3.3-8	3.6-37	

Changes being made to correct typographical errors:

(1) Surveillance requirement 4.1.A.3 is changed to replace reference 2.1.B to 2.1.A.3. Currently it references the wrong table.

(2) Table 3.1-1 is changed to read "$\leq$ 120/125 of Full Scale" instead of "$\leq$ 120/125 of Fuel Scale".

(3) Section 6.8.2 is changed to replace 6.3.1 with 6.8.1.

(4) Sections 6.7.3 and 6.7.2 are changed to replace reference to 6.12 with 6.11, the correct reference.

(5) Bases Section 3.2 is changed to replace "6 times normal background" to "3 times normal background", the correct value.

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