

**Shearon Harris Nuclear Power Plant Units 2 and 3
COL Application
Part 2, Final Safety Analysis Report**

CHAPTER 4

REACTOR

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None

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4.1 SUMMARY DESCRIPTION

This **section** of the referenced DCD is incorporated by reference with no departures or supplements.

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4.2 FUEL SYSTEM DESIGN

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4.3 NUCLEAR DESIGN

This **section** of the referenced DCD is incorporated by reference with no departures or supplements.

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4.4 THERMAL AND HYDRAULIC DESIGN

This **section** of the referenced DCD is incorporated by reference with the following departures and/or supplements.

4.4.7 COMBINED LICENSE INFORMATION

Replace the paragraph in DCD **Subsection 4.4.7.2** with the following:

STD COL 4.4-2

Following selection of the actual plant operating instrumentation and calculation of the instrumentation uncertainties of the operating plant parameters as discussed in DCD **Subsection 7.1.6**, the design limit DNBR values will be calculated. The calculations will be completed using the RTDP with these instrumentation uncertainties and confirm that either the design limit DNBR values as described in DCD **Section 4.4** remain valid or that the safety analysis minimum DNBR bounds the new design limit DNBR values plus DNBR penalties, such as rod bow penalty. This will be completed prior to fuel load.

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4.5 REACTOR MATERIALS

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4.6 FUNCTIONAL DESIGN OF REACTIVITY CONTROL SYSTEMS

This **section** of the referenced DCD is incorporated by reference with no departures or supplements.