

ATTACHMENT 4

Marked-up Current  
South Texas Project Technical Specifications  
Reflecting  
Proposed Changes to Permit Fuel Reconstitution

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**NOTE:**

The following proposed change to Technical Specification 5.3.1 is a complete substitution of the existing specification. As such, it supersedes the change to this specification proposed in the submittal package cited below:

"South Texas Project Units 1 and 2 Docket Nos. STN 50-498; 50-499 Proposed Licensing Amendment Concerning Technical Specifications Based Upon Nuclear Fuel Upgrade, Plant Safety Evaluation, and Revised Thermal Design Procedure," Letter from S.L. Rosen, Houston Lighting & Power, to USNRC, dated May 27, 1993, ST-HL-AE-4364.

INSERT 5.3-1

The reactor core shall contain 193 fuel assemblies. Each fuel assembly shall consist of a matrix of zircaloy clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with NRC-approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff-approved codes and methods, and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in non-limiting core regions.

## DESIGN FEATURES

### 5.3 REACTOR CORE

#### FUEL ASSEMBLIES

*INSERT 5.3-1*

5.3.1 ~~The core shall contain 193 fuel assemblies with each fuel assembly containing 264 fuel rods clad with Zircaloy-4. Each fuel rod shall have a nominal active fuel length of 168 inches. The initial core loading shall have a maximum enrichment of 3.5 weight percent U-235. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum enrichment of 4.5 weight percent U-235.~~

#### CONTROL ROD ASSEMBLIES

5.3.2 The core shall contain 57 full-length control rod assemblies. The full-length control rod assemblies shall contain a nominal 158.9 inches of absorber material. The absorber material within each assembly shall be silver-indium-cadmium or hafnium. Mixtures of hafnium and silver-indium-cadmium are not permitted within a bank. All control rods shall be clad with stainless steel tubing.

### 5.4 REACTOR COOLANT SYSTEM

#### DESIGN PRESSURE AND TEMPERATURE

5.4.1 The Reactor Coolant System is designed and shall be maintained:

- a. In accordance with the Code requirements specified in Section 5.2 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,
- b. For a pressure of 2485 psig, and
- c. For a temperature of 650°F, except for the pressurizer which is 680°F.

#### VOLUME

5.4.2 The total water and steam volume of the Reactor Coolant System is 13,814 ± 100 cubic feet at a nominal  $T_{avg}$  of 561°F.

### 5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological towers shall be located as shown on Figure 5.1-1.

### 5.6 FUEL STORAGE

#### 5.6.1 CRITICALITY

5.6.1.1 The spent fuel storage racks are designed and shall be maintained with: