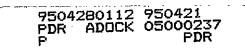




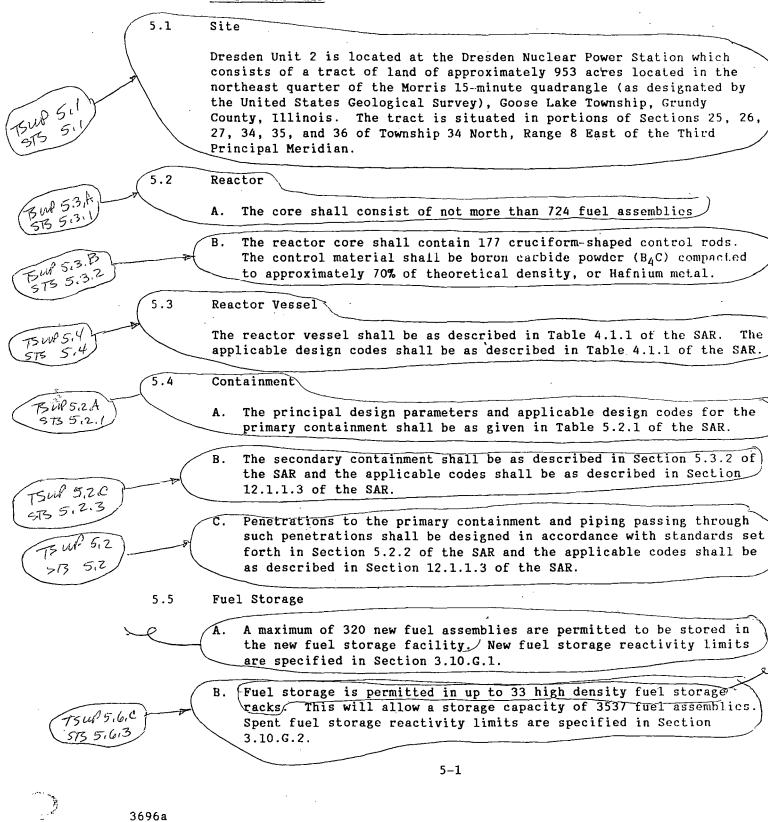
Marked-Up Current Dresden Unit 2 and Quad Cities Unit 2 Technical Specifications





DRESDEN II DPR-19 Amendment No. 8/2, 8/4, 91

5.0 DESIGN FEATURES



3124A



DRESDEN II DPR-19 Amendment No. 8/2, 94

DESIGN FEATURES (Cont'd.)

5.6 Seismic Design

The reactor building and all contained engineered safeguards are designed for the maximum credible earthquake ground motion with an acceleration of 20 per cent of gravity. Dynamic analysis was used to determine the earthquake acceleration, applicable to the various elevations in the reactor building.



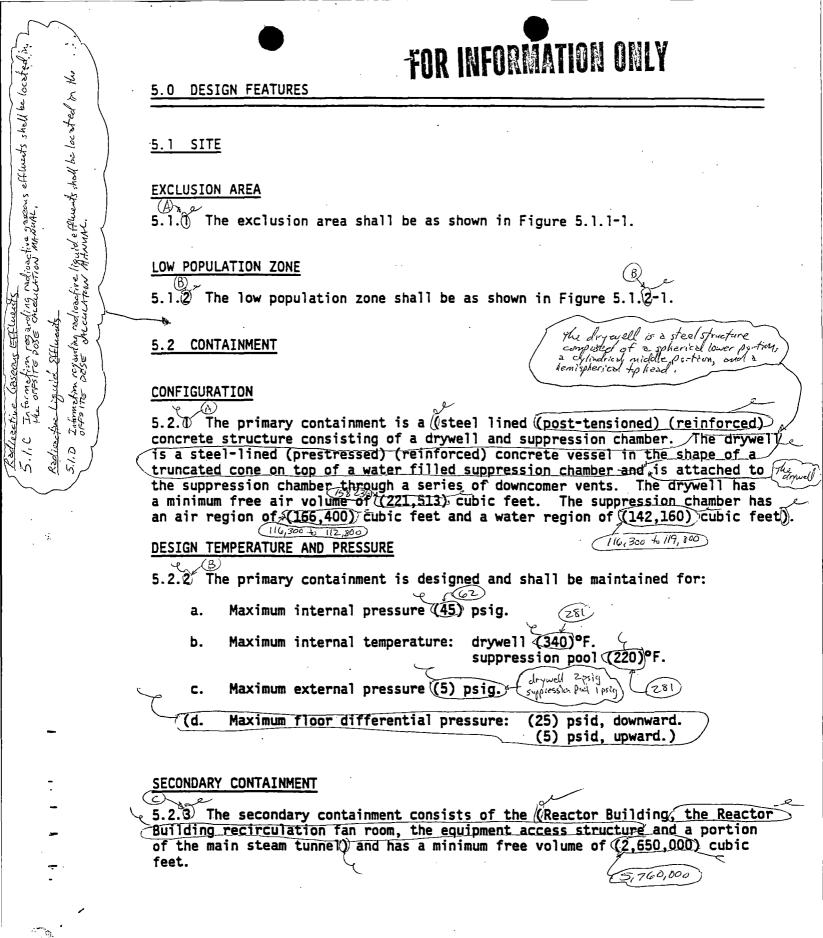
FOR INFORMATION ONLY

QUAD CITIES DPR-30

-sul 5. 5.0 DESIGN FEATURES 515 5. 5.1 Sitè The Quad Cities Station, which consists of a tract of land of approximately 404 acres, is located about 3 miles north of Cordova, Illinois, Rock Island County, Illinois. The tract is situated in portions of Sections 7, 8, 17, and 18 of Township 20 North, Range 2 East. TSLAP 5.3,A 5.2 Reactor 575 5.3.1 The core shall consist of not more than 724 fuel assemblies. Α. TS W 5,3, B STS 5, 3, Z The reactor core shall contain 177 cruciform-shaped control rods. The control material shall be boron carbide powder $(B_{4}C)$ compacted to approximately 70% of theoretical density or hafnium metal. 5.3 Reactor Vessel TSLUP 5.4 575 5,4 The reactor vessel shall be as described in Table 4.1.1 of the SAR. The applicable design codes shall be as described in Table 4.1.1 of the SAR. 5.4 Containment BUP 5.2A 573 5.2. Α. The principal design parameters and applicable design codes for the primary containment shall be as given in Table 5.2.1 of the SAR. Buil 5.2.4 Β. The secondary containment shall be as described in Section 5.3.2 of the : 513 5.2.3 SAR, and the applicable codes shall be as described in Section 12.1.1.3 of the SAR. TSCH 5.2 с. Penetrations to the primary containment and piping passing through such STS 5.2 penetrations shall be designed in accordance with standards set forth in Section 5.2.2 of the SAR. 5.5 Fuel Storage The new fuel storage facility shall be such that the K_{eff} dry is less than 0.90 and flooded is less than 0.95. TSUND 5.6A The Keff of the spent fuel storage pool shall be less than or equal to Β. 515 5.61 0.95. Seismic Design 5.6 The reactor building and all contained engineered safeguards are designed for the maximum credible earthquake ground motion with an acceleration of 24% of gravity. Dynamic analysis was used to determine the earthquake acceleration application to the various elevations in the reactor building. 5.0-1 Amendment No. 87

ATTACHMENT D

Marked-Up Draft Revision 4 of the BWR/4 Standard Technical Specifications



GE-STS (BWR/4)

FOR INFORMATION ONLY

This figure shall consist of a map of the site area and provide at a minimum, the information described in Section (2.1.2) of the FSAR and meteorolgical tower location.

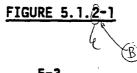
EXCLUSION AREA

FIGURE 5.1./1-1

GE-STS (BWR/4)

FOR INFORMATION ONLY

This figure shall consist of a map of the . site area showing the Low Population Zone boundary. Features such as towns, roads and recreational areas shall be indicated in sufficient detail to allow identification of significant shifts in population distribution within the LPZ.



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GE-STS (BWR/4)



DESIGN FEATURES

5.3 REACTOR CORE

FUEL ASSEMBLIES

(ach assumbly consists of a matrix of zircalor cled fuel rods with an initial composition of natural or slightly enriched Uvenium divide as fuel material and water vods, Limited substitutions of zirronium allor or stanless speel filler rods for fuel rods, in a accord ance with UPCC approved applications of the wall rods, in a coord ance used huelessentile shall be united to funge fuel descent that and mathematics and water application of the UPCC statt-approved of and methods, and shall be united to funge fuel descent that and methods, and shall be united to the stat applications of the fact start draw bases. A limited number of read for secondly have not engine bases. A limited row way to produce the form placed in non-limiting that Ð 5.3. The reactor core shall contain (764) fuel assemblies with each fuel assembly containing (62) fuel rods and (two) water rods clad with (Zircaloy -2). Each fuel rod shall have a nominal active fuel length of (150) inches. The initial core loading shall have a maximum average enrichment of (1.90) weight percent U-235. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum average enrichment of () weight percent U-235.

carciforn shaped

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CONTROL ROD ASSEMBLIES

Ŷ B 5.3.2 The reactor core shall contain (185) control rod assemblies, each consisting of a cruciform array of stainless steel tubes containing (143), inches of boron carbide, B_AC , powder surrounded by a cruciform shaped stainless steel sheath. The control material shall be boron carbide powder. (B4C) and/or hatnium metal. The control rod "assembly shell have a nominal axial absorber bength of 143 inclus.

5.4 REACTOR COOLANT SYSTEM

DESIGN PRESSURE AND TEMPERATURE

5.4.1 The reactor coolant system is designed and shall be maintained:

4626

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: at 565°F. U175

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(1250) psig on the suction side of the recirculation pump. (1650) psig from the recirculation pump discharge to the outlet (450) side of the discharge shutoff valve.

(1550) psig, from the discharge shutoff valve to the jet pumps. EST 580°E 13:20

For a temperature of (575)°F. ć.

VOLUME

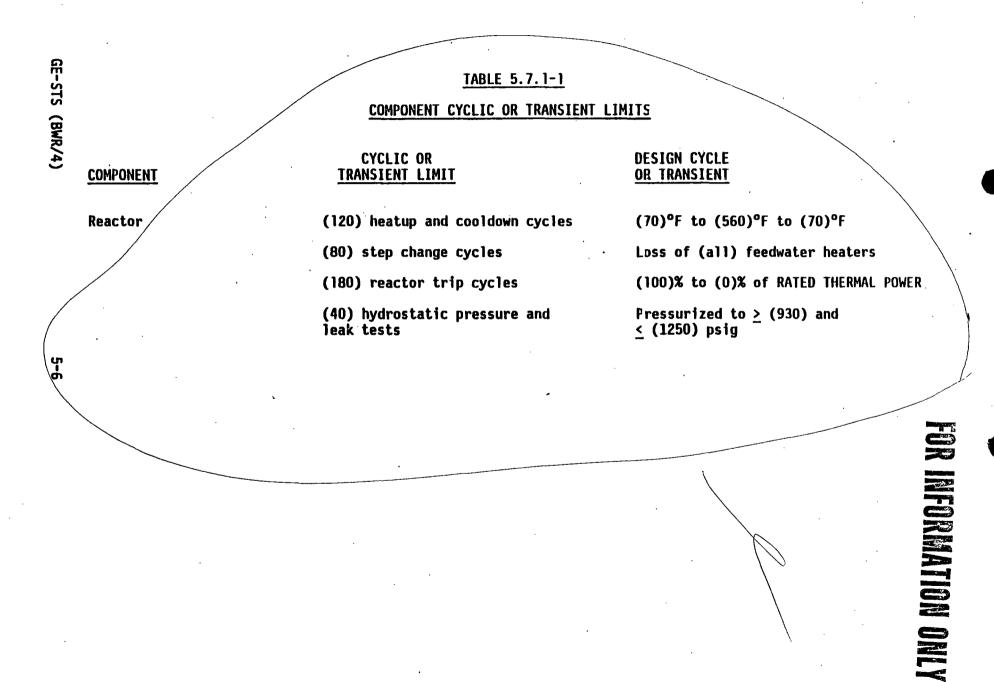
(B) 5.4.(2) The total water and steam volume of the reactor vessel and recirculation system is approximately (22,400) cubic feet at a <u>nominal steam</u> dome saturation ?? temperature of (528)%F.

FOR-INFORMATION ONLY

DESIGN FEATURES				·
		e SINTEN	Troutily BLANK	
5.5 THETEOROLOGI	ICAL TOWER LOCATION	a fin		
5.5. The meteo	orological tower shall	be located as show	n on Figure 5.1	.1-1e
5.6 FUEL STORAG	GE			· .
	_			
CRITICALITY				•
5.6. The spent	t fuel storage racks a	are designed and sha	11 be maintaine	ed with:
2	f equivalent to less t	_		
unbora delta and bi	ated water, (which inc k/k for uncertainties iāses∦ as described in inal (6.625) inch cent	Hudes a conservative A fincluding all ca Section (4.3) of t Marken for the section Section (4.3) of the section (4.3) of the sectio	e allowance of lculational unc he FSAR.	(2.6)% ertaintie:
placed	d in the storage racks	· •		
5.6.1.2 The ket	ff for new fuel for th	e first core loadin	g stored dry in	the
spent fuel stora is assumed.	age racks shall not ex	ceed (0.98) when ⁄(a	queous foam mod	leration)
DRAINAGE				
	t fuel storage pool is ining of the pool belo			to preven
CAPACITY	-	L.S	89' 2.5"	
	t fuel storage pool is y limited to no more t	han (1120) fuel ass		with a
		(3537)		
5.7 COMPONENT C	CYCLIC OR TRANSIENT LI	MIT		
	onents identified in T	able 5.7.1-1 are de	signed and shal	ll be
5.7.1 The compo maintained withi	in the cyclic or trans			
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GE-STS (BWR/4)

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