

5. At least ONE residual heat removal pump shall be in operation, unless T_{avg} is less than 160F.
6. When the reactor vessel head is removed and fuel is in the vessel, the minimum boron concentration of 1950 ppm or higher, sufficient to maintain the reactor subcritical by $10\% \Delta k/k$ in the cold condition with all rods inserted shall be maintained in the reactor coolant system and the concentration shall be verified daily.
7. Direct communication between the control room and the refueling cavity manipulator crane shall be available during refueling operation.
8. The spent fuel cask shall not be moved over spent fuel, and only one spent fuel assembly will be handled at one time over the reactor or the spent fuel pit.
9. Fuel which has been discharged from a reactor will not be moved outside the containment in fewer than 100 hours after shutdown

If any one of the specified limiting conditions for refueling is not met, refueling shall cease until specified limits are met, and there shall be no operations which may increase reactivity.

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PDR

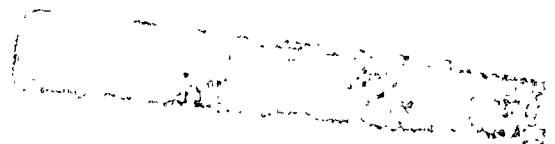


TABLE - 1
RCS BORON CONCENTRATIONS

	FSAR (1ST CYCLE)	CYCLE - 8 (UNIT - 3)	
		<u>0 MTC</u>	<u>+ MTC *</u>
Refueling Shutdown; Rods in (k = .90)	1950	2000	2200
(k = .95)		1520	1700
Shutdown (k = .99) with Rods Inserted, Clean, Cold	780	1180	1350
Shutdown (k = .99) with Rods Inserted, Clean, Hot	510	750	1080
Shutdown (k = .99) with No Rods Inserted, Clean, Cold	1250	1570	1720
Shutdown (k = .99) with No Rods Inserted, Clean, Hot	1210	1610	1890

NOTES:

- * Cycle 8 for Turkey Point Unit 3 is designed with an alternate Positive Moderator Temperature Coefficient (+ MTC) core.



Turkey Point Units 3 & 4
Docket Nos. 50-250 and 50-251
Proposed License Amendment
Raising the Required Refueling Boron
Concentration from 1950 ppm

SAFETY EVALUATION

In the design of the earlier cores, the refueling boron concentration of 1950 ppm provided a 10% subcriticality with all rods inserted in cold condition (reference Table 3.2.1-1 of FSAR). Also, the reactor stayed subcritical with all rods out in the cold condition.

Current cores, such as the Unit 3 Cycle 8 redesign core, are designed for longer (18 month) operation and have more initial reactivity than the earlier cores. A higher boron concentration than 1950 ppm may be required to keep the core subcritical by 10% in cold condition with all rods inserted and will also keep the core subcritical with all rods out (reference Table -1).

The required refueling boron concentration must be calculated for each core design and for each nuclear unit, but shall not be less than 1950 ppm.

Since the refueling boron concentration will keep the core 10% subcritical, plant safety will not be compromised.

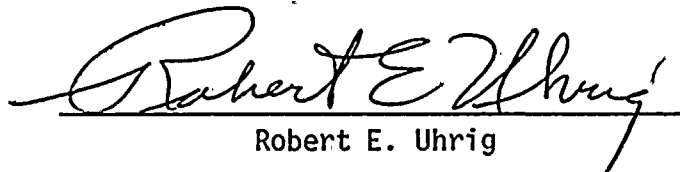


STATE OF FLORIDA)
)
COUNTY OF DADE) ss.

Robert E. Uhrig, being first duly sworn, deposes and says:

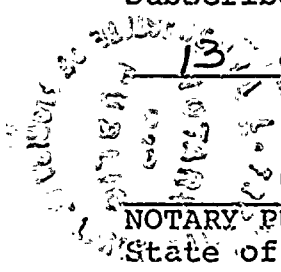
That he is Vice President of Florida Power & Light Company, the herein;

That he has executed the foregoing document; that the statements made in this said document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said


Robert E. Uhrig

Subscribed and sworn to before me this

13 day of January, 1981

 Cheryl L. Fredrick
NOTARY PUBLIC, in and for the County of Dade,
State of Florida

My commission expires: Notary Public, State of Florida at Large
My Commission Expires October 30, 1983
Bonded thru Maynard Bonding Agency

