

5. CONTROL ROD POSITION INDICATION

If either the power range channel deviation alarm or the rod deviation monitor alarm are not operable rod positions shall be logged once per shift and after a load change greater than 10% of rated power. If both alarms are inoperable for two hours or more, the nuclear overpower trip shall be reset to 93% of rated power.

6. POWER DISTRIBUTION LIMITS

a. Hot channel factors:

- (1) With steam generator tube plugging $>22\%$ and $\leq 25\%$, the hot channel factors (defined in the basis) must meet the following limits at all times except during low power physics tests:

$$F_q(Z) \leq (2.03/P) \times K(Z), \text{ for } P > .5$$

$$F_q(Z) \leq (4.06) \times K(Z), \text{ for } P \leq .5$$

$$F_H^N \leq 1.55 [1.0 + 0.2 (1-P)]$$

Where P is the fraction of rated power at which the core is operating; K(Z) is the function given in Figure 3.2-3b; Z is the core height location of F_q .

If F_q , as predicted by approved physics calculations, exceeds 2.03, the power will be limited to the rated power multiplied by the ratio of 2.03 divided by the predicted F_q , or augmented surveillance of hot channel factors shall be implemented.

- (2) With steam generator tube plugging $\leq 22\%$, the hot channel factors (defined in the basis) must meet the following limits at all times except during low power physics tests:

$$F_q(Z) \leq (2.10/P) \times K(Z), \text{ for } P > .5$$

$$F_q(Z) \leq (4.20) \times K(Z), \text{ for } P \leq .5$$

$$F_H^N \leq 1.55 [1.0 + 0.2 (1-P)]$$

Where P is the fraction of rated power at which the core is operating; K(Z) is the function given in either Figure 3.2-3 or 3.2-3a; Z is the core height location of F_q .

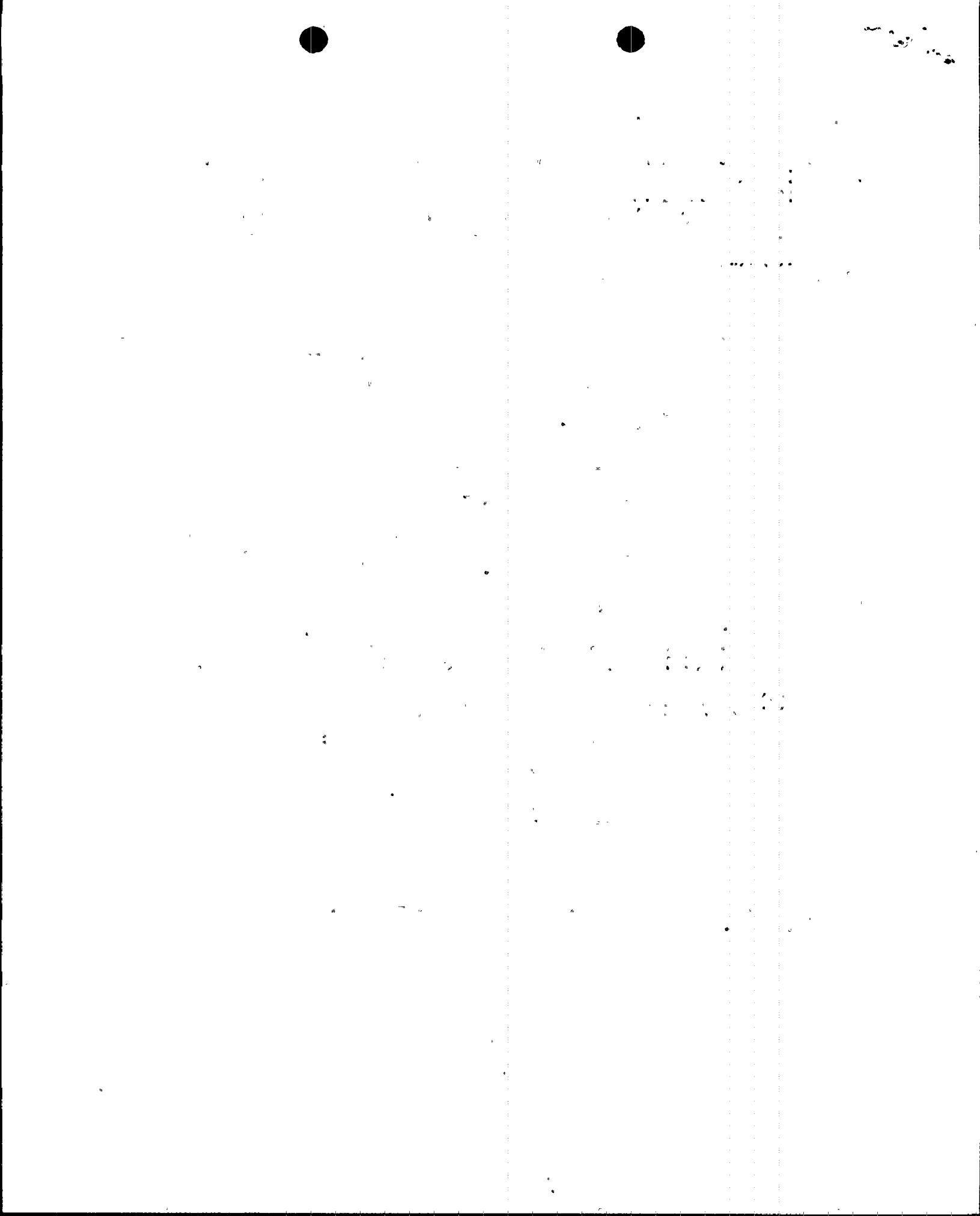


TABLE 4.1-1
MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND
TEST OF INSTRUMENT CHANNELS

<u>Channel Description</u>	<u>Check</u>	<u>Calibrate</u>	<u>Test</u>	<u>Remarks</u>
1. Nuclear Power Range (Check, Calibrate and Test only applicable above 10% of rated power.)	S (1) M*(4)	D (2) Q*(4)	M (3)	1) Load v.s. flux curve 2) Thermal power calculation 3) Signal to T; bistable action (permissive, rod stop, trips) 4) Upper & lower detectors for symmetric offset (+5 to -5%)
2. Nuclear Intermediate Range	S (1) †	N.A.	P (2)	1) Once/shift up to 50% R.P. 2) Log level; bistable action (permissive, rod stop, trip)
3. Nuclear Source Range	S (1)	N.A.	P (2)	1) Once/shift when in service 2) Bistable action (alarm, trip)
4. Reactor Coolant Temperature	S †	R	B/W (1) † (2) †	1) Overtemperature- T 2) Overpower- T
5. Reactor Coolant Flow	S †	R	M †	
6. Pressurizer Water Level	S †	R	M †	
7. Pressurizer Pressure	S †	R	M †	
8. 4 kv Voltage & Frequency	N.A.	R**	R	Reactor protection circuits only
9. Analog Rod Position	S †	R(1)	M †	With step counters 1) Calibrate indicated position to within 12 steps of actual position

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STATE OF FLORIDA)
)
COUNTY OF DADE) ss.

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

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

That he has executed the foregoing document; that the state-
ments 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
Licensee.


Robert E. Uhrig

Subscribed and sworn to before me this

27 day of February, 1980

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 Maryland Bonding Agency

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