

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 230, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. Records

ENO shall keep facility operating records in accordance with the requirements of the Technical Specifications.

D. Equalizer Valve Restriction - DELETED

E. Recirculation Loop Inoperable - DELETED

F. Fire Protection

ENO shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the SER dated December 21, 1978 as supplemented subject to the following provision:

ENO may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

G. Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Pilgrim Nuclear Power Station Physical Security, Training and Qualification, and Safeguards Contingency Plan, Revision 0" submitted by letter dated October 13, 2004, as supplemented by letter dated May 15, 2006.

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## LIMITING CONDITIONS FOR OPERATION

### 3.3 REACTIVITY CONTROL (continued)

#### B. Control Rod Operability

##### LCO 3.3.B.1

Each control rod shall be OPERABLE.

##### APPLICABILITY:

RUN and STARTUP MODES; REFUEL MODE when the reactor vessel head is fully tensioned. (See also 3.10.D)

##### ACTIONS

##### -----NOTE-----

Separate condition entry is allowed for each control rod.

#### A. One withdrawn control rod stuck.

##### -----NOTE-----

Rod Worth Minimizer (RWM) may be bypassed as allowed by LCO 3.3.F.

1. Verify stuck control rod separation criteria are met immediately.

##### AND

2. Disarm the associated control rod drive (CRD) within 2 hours.

##### AND

3. Perform SR 4.3.B.1.1 and SR 4.3.B.1.2 for each withdrawn OPERABLE control rod within 24 hours from discovery of condition A concurrent with thermal power greater than the Low Power Setpoint (LPSP) of the RWM.

##### AND

4. Verify LCO 3.3.A.1 is met within 72 hours.

##### AND

## SURVEILLANCE REQUIREMENTS

### 4.3 REACTIVITY CONTROL (continued)

#### B. Control Rod Operability

##### SR 4.3.B.1.1

##### -----NOTE-----

Not required to be performed until 7 days after the control rod is withdrawn and thermal power is greater than the LPSP of the RWM.

Insert each fully withdrawn OPERABLE control rod at least one notch once per 7 days.

##### SR 4.3.B.1.2

##### -----NOTE-----

Not required to be performed until 31 days after the control rod is withdrawn and thermal power is greater than the LPSP of the RWM.

Insert each partially withdrawn OPERABLE control rod at least one notch once per 31 days.

##### SR 4.3.B.1.3

Verify each withdrawn control rod does not go to the withdrawn overtravel position.

- a. Each time the control rod is withdrawn to "full out" position.

##### AND

- b. Prior to declaring control rod OPERABLE after work on control rod or CRD system that could affect coupling.

##### SR 4.3.B.1.4

Verify each control rod scram time from fully withdrawn to notch position 04 is  $\leq 7$  seconds in accordance with SR 4.3.C.1, SR 4.3.C.2, SR 4.3.C.3 or SR 4.3.C.4

##### SR 4.3.B.1.5

Determine the position of each control rod once per 24 hours.

## LIMITING CONDITIONS FOR OPERATION

### 3.3 REACTIVITY CONTROL (continued)

#### B. Control Rod Operability (continued) LCO 3.3.B.1 (continued)

5. -----NOTE-----

Not applicable when thermal power > 20% RTP.

-----  
Ensure stuck rod is in compliance with banked position withdrawal sequence (BPWS) within 8 hours.

OR

Verify control rod drop accident limit of 280 cal/gm is not exceeded within 8 hours.

#### B. Two or more withdrawn control rods stuck.

1. Be in HOT SHUTDOWN within 12 hours.

#### C. One or more control rods inoperable for reasons other than condition A or B.

1. -----NOTE-----

RWM may be bypassed as allowed by LCO 3.3.F.

-----  
Fully insert inoperable control rod within 3 hours.

AND

2. Disarm the associated CRD within 4 hours.

## SURVEILLANCE REQUIREMENTS

### 4.3 REACTIVITY CONTROL (continued)

#### B. Control Rod Operability (continued)

## LIMITING CONDITIONS FOR OPERATION

### 3.3 REACTIVITY CONTROL (continued)

#### B. Control Rod Operability (continued)

##### LCO 3.3.B.1 (continued)

- D. -----NOTE-----  
Not applicable when thermal power  
> 20% RTP.

-----  
Two or more inoperable control rods  
not in compliance with BPWS and  
not separated by two or more  
OPERABLE control rods.

1. Restore compliance with  
BPWS within 8 hours.

OR

2. Verify control rod drop  
accident limit of  
280 cal/gm is not  
exceeded within 8 hours.

OR

3. Restore control rod(s) to  
OPERABLE status within  
8 hours.

- E. -----NOTE-----  
Not applicable when thermal  
power > 20% RTP.

-----  
One or more groups with four or  
more inoperable control rods.

1. Restore control rod(s) to  
OPERABLE status within 8  
hours.

- F. Required action and associated  
completion time of condition A, C,  
D, or E not met.

OR

Nine or more control rods  
inoperable.

1. Be in HOT SHUTDOWN  
within 12 hours.

## SURVEILLANCE REQUIREMENTS

### 4.3 REACTIVITY CONTROL (continued)

#### B. Control Rod Operability (continued)

### LIMITING CONDITIONS FOR OPERATION

#### 3.3 REACTIVITY CONTROL (continued)

##### B. Control Rod Operability (continued)

##### LCO 3.3.B.3

Control rods shall not be withdrawn for startup unless at least two source range channels have an observed count rate equal to or greater than three counts per second.

##### APPLICABILITY:

Prior to withdrawing control rods for startup.

##### ACTIONS:

##### A. LCO 3.3.B.3 cannot be met.

1. Place the mode switch in shutdown immediately.

### SURVEILLANCE REQUIREMENTS

#### 4.3 REACTIVITY CONTROL (continued)

##### B. Control Rod Operability (continued)

##### SR 4.3.B.3

Prior to control rod withdrawal for startup, verify that at least two source range channels have an observed count rate of at least three counts per second.

## LIMITING CONDITIONS FOR OPERATION

### 3.3 REACTIVITY CONTROL (continued)

#### C. Control Rod Scram Times

##### LCO 3.3.C

1. No more than 10 OPERABLE control rods shall be "slow," in accordance with Table 3.3.C-1, and
2. No more than 2 OPERABLE control rods that are "slow" shall occupy adjacent locations.

##### APPLICABILITY:

RUN and STARTUP MODES;  
REFUEL MODE when the reactor vessel head is fully tensioned.

##### ACTIONS:

#### A. LCO 3.3.C cannot be met.

1. Be in HOT SHUTDOWN within 12 hours.

## SURVEILLANCE REQUIREMENTS

### 4.3 REACTIVITY CONTROL (continued)

#### C. Control Rod Scram Times

##### NOTE

During single control rod scram time Surveillances, the control rod drive (CRD) pumps shall be isolated from the associated scram accumulator.

##### SR 4.3.C.1

Verify each control rod scram time is within the limits of Table 3.3.C-1 with reactor steam dome pressure  $\geq 800$  psig prior to exceeding 40% RTP after each reactor shutdown  $\geq 120$  days.

##### SR 4.3.C.2

Verify for a representative sample, each tested control rod scram time is within the limits of Table 3.3.C-1 with reactor steam dome pressure  $\geq 800$  psig within each 200 days of cumulative operation in RUN.

##### SR 4.3.C.3

Verify each affected control rod scram time is within the limits of Table 3.3.C-1 with any reactor steam dome pressure prior to declaring control rod OPERABLE after work on control rod or CRD System that could affect scram time.

##### SR 4.3.C.4

Verify each affected control rod scram time is within the limits of Table 3.3.C-1 with reactor steam dome pressure  $\geq 800$  psig prior to exceeding 40% RTP after fuel movement within the affected core cell AND prior to exceeding 40% RTP after work on control rod or CRD System that could affect scram time.

Table 3.3.C-1 (page 1 of 1)  
Control Rod Scram Times

NOTES

1. OPERABLE Control Rods with scram times not within the limits of this Table are considered "slow."
2. Enter applicable Conditions and Required Actions of LCO-3.3.B, "Control Rod OPERABILITY," for control rods with scram times > 7 seconds to notch position 04. These control rods are inoperable, in accordance with SR 4.3.B.1.4, and are not considered "slow."

NOTCH POSITION	SCRAM TIMES <sup>(a)(b)</sup> (seconds) WHEN REACTOR STEAM DOME PRESSURE $\geq$ 800 PSIG
44	0.57
34	1.23
24	1.99
04	3.51

- a) Maximum scram time from fully withdrawn position, based on de-energization of scram pilot valve solenoids at time zero.
- b) Scram times as a function of reactor steam dome pressure, when < 800 psig are within established limits.

### LIMITING CONDITIONS FOR OPERATION

#### 3.3 REACTIVITY CONTROL (continued)

##### D. Control Rod Scram Accumulators

###### LCO 3.3.D

Each control rod scram accumulator shall be OPERABLE.

###### APPLICABILITY:

RUN and STARTUP MODES;  
REFUEL MODE when the reactor vessel head is fully tensioned.

###### ACTIONS:

###### NOTE

Separate condition entry is allowed for each control rod scram accumulator.

- A. One control rod scram accumulator inoperable with reactor steam dome pressure  $\geq 950$  psig.

###### 1. NOTE

Only applicable if the associated control rod scram time was within limits of Table 3.3.C-1 during the last scram time surveillance.

Declare the associated control rod scram time "slow" within 8 hours.

###### OR

2. Declare the associated control rod inoperable within 8 hours.

- B. Two or more control rod scram accumulators inoperable, with reactor steam dome pressure  $\geq 950$  psig.

1. Restore charging water header pressure to  $\geq 940$  psig within 20 minutes from discovery of inoperable accumulators with charging water header  $< 940$  psig.

###### AND

### SURVEILLANCE REQUIREMENTS

#### 4.3 REACTIVITY CONTROL (continued)

##### D. Control Rod Scram Accumulators

###### SR 4.3.D

Verify each control rod scram accumulator pressure is  $\geq 940$  psig every 7 days.

### LIMITING CONDITIONS FOR OPERATION

#### 3.3 REACTIVITY CONTROL (continued)

##### D. Control Rod Scram Accumulators (continued)

###### LCO 3.3.D (continued)

###### 2.1 -----NOTE-----

Only applicable if the associated control rod scram time was within limits of Table 3.3.C-1 during the last scram time surveillance.

Declare the associated control rod scram time "slow" within 1 hour.

OR

###### 2.2 Declare the associated control rod inoperable within 1 hour.

##### C. One or more control rod scram accumulators inoperable, with reactor steam dome pressure < 950 psig.

###### 1. Verify all control rods associated with inoperable accumulators are fully inserted immediately upon discovery of charging water header pressure < 940 psig.

AND

###### 2. Declare the associated control rod inoperable within 1 hour.

##### D. Required action and associated completion time if B.1 or C.1 not met.

###### 1. -----NOTE-----

Not applicable if all inoperable control rod scram accumulators are associated with fully inserted control rods.

Place the reactor mode switch in the shutdown position immediately.

### SURVEILLANCE REQUIREMENTS

#### 4.3 REACTIVITY CONTROL (continued)

##### D. Control Rod Scram Accumulators (continued)