

Docket No. 50-388

SEP 04 1985

Mr. Norman W. Curtis  
Vice President  
Engineering and Construction - Nuclear  
Pennsylvania Power & Light Company  
2 North Ninth Street  
Allentown, Pennsylvania 18101

Dear Mr. Curtis:

SUBJECT: AMENDMENT NO. 16 TO FACILITY OPERATING LICENSE NO. NPF-22 -  
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 16 to Facility Operating License No. NPF-22 for the Susquehanna Steam Electric Station, Unit 2. The amendment is in response to your letter dated April 9, 1985. This amendment revises the Technical Specifications relating to SRM operability during reloading or offloading of the entire core when the core contains irradiated fuel.

A copy of the related safety evaluation supporting Amendment No.16 to Facility Operating License NPF-22 is enclosed.

Sincerely,

*Original signed by:*

Walter R. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosures:

- 1. Amendment No. 16 to NPF-22
- 2. Safety Evaluation

cc w/enclosures:  
See next page

LB#2/DL/LA  
EJF/son  
08/21/85

LB#2/DL/PM  
MCanalagione:1b  
08/20/85

OELD  
J. Goldberg  
08/27/85

LB#2/DL/BC  
WButler  
08/20/85

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PDR ADOCK 05000388  
P PDR

3. This amendment is effective upon the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

Walter R. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: **SEP 04 1985**

LB#2/DL/LA  
Elyton  
08/21/85

LB#2/DL/PH  
MCarbone:1b  
08/20/85

CEL  
J. Go Uberg  
08/27/85

LB#2/DL/BC  
WButler  
08/26/85

AD/L/BL  
TNovak  
08/30/85

WB  
(for) [signature]  
WB



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SEP 04 1985

DocId: 50-388

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A copy of the related safety evaluation supporting Amendment No. 16 to Facility Operating License NPF-22 is enclosed.

Sincerely,

A handwritten signature in black ink that reads "Walter R. Butler".

Walter R. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosures:

1. Amendment No. 16 to NPF-22
2. Safety Evaluation

cc w/enclosures:  
See next page

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Pennsylvania Power & Light Company

Susquehanna Steam Electric Station  
Unit 1 & 2

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Susquehanna

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P O. Box 1323  
Harrisburg, Pennsylvania 17120

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Board of Supervisors  
R. D. #1  
Berwick, Pennsylvania 18603

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Attn: EIS Coordinator  
Region III Office  
Curtis Building  
6th and Walnut Streets  
Philadelphia, Pennsylvania 19106

Pocket Filter\*  
NFC PDR\*  
Local PDR\*  
PFC Spacers  
NSIC  
LB#2 Reading  
Elyton\*  
T.Campagnone\*  
TNovak\*  
J.Saltzman, SAE  
Goldberg, CLLP\*  
CMiles  
Hdenton  
J.Kutberg  
Atalston  
W.Miller, LMB  
J.Pattlow\*  
Bermees\*  
Ejordan\*  
L.Hammitt\*  
Tearrhead (4)\*



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

PENNSYLVANIA POWER & LIGHT COMPANY  
ALLEGHENY ELECTRIC COOPERATIVE, INC.  
DOCKET NO. 50-388  
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2  
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 16  
License No. NPF-22

1. The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
  - A. The application for an amendment filed by the Pennsylvania Power & Light Company, dated April 9, 1985 complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter 1;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
  - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter 1;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-22 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 16, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. PP&L shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This amendment is effective upon the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Handwritten signature of Walter R. Butler in cursive script.

Walter P. Butler, Chief  
Licensing Branch No. 2  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: **SEP 04 1985**

ATTACHMENT TO LICENSE AMENDMENT NO. 16  
FACILITY OPERATING LICENSE NO. NPF-22  
DOCKET NO. 50-388

Replace the following pages of the Appendix "A" Technical Specifications with enclosed pages. The revised pages are identified by Amendment number and certain vertical lines indicating the area of change.

REMOVE

3/4 3-51  
3/4 3-52

3/4 3-53  
3/4 3-54

3/4 9-3  
3/4 9-4

B 3/4 9-1  
B 3/4 9-2

INSERT

3/4 3-51  
3/4 3-52

3/4 3-53  
3/4 3-54

3/4 9-3  
3/4 9-4

B 3/4 9-1  
B 3/4 9-2

## INSTRUMENTATION

### 3/4.3.6 CONTROL ROD BLOCK INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.3.6. The control rod block instrumentation channels shown in Table 3.3.6-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.6-2.

APPLICABILITY: As shown in Table 3.3.6-1.

#### ACTION:

- a. With a control rod block instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.6-2, declare the channel inoperable until the channel is restored to OPERABLE status with its trip setpoint adjusted consistent with the Trip Setpoint value.
- b. With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, take the ACTION required by Table 3.3.6-1.

#### SURVEILLANCE REQUIREMENTS

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4.3.6 Each of the above required control rod block trip systems and instrumentation channels shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.6-1.

TABLE 3.3.6-1

<u>CONTROL ROD BLOCK INSTRUMENTATION</u>			
<u>TRIP FUNCTION</u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP FUNCTION</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. <u>ROD BLOCK MONITOR</u> <sup>(a)</sup>			
a. Upscale	2	1*	60
b. Inoperative	2	1*	60
c. Downscale	2	1*	60
2. <u>APRM</u>			
a. Flow Biased Neutron Flux - Upscale	4	1	61
b. Inoperative	4	1, 2, 5	61
c. Downscale	4	1	61
d. Neutron Flux - Upscale, Startup	4	2, 5	61
3. <u>SOURCE RANGE MONITORS</u>			
a. Detector not full in <sup>(b)</sup>	3	2	61
	2	5	61
b. Upscale <sup>(c)</sup>	3	2	61
	2	5	61
c. Inoperative <sup>(c)</sup>	3	2	61
	2	5	61
d. Downscale <sup>(d)</sup>	3	2	61
	2***	5	61
4. <u>INTERMEDIATE RANGE MONITORS</u>			
a. Detector not full in	6	2, 5	61
b. Upscale	6	2, 5	61
c. Inoperative <sup>(e)</sup>	6	2, 5	61
d. Downscale <sup>(e)</sup>	6	2, 5	61
5. <u>SCRAM DISCHARGE VOLUME</u>			
a. Water Level-High	2	1, 2, 5**	62
6. <u>REACTOR COOLANT SYSTEM RECIRCULATION FLOW</u>			
a. Upscale	2	1	62
b. Inoperative	2	1	62
c. Comparator	2	1	62

TABLE 3.3.6-1 (Continued)

CONTROL ROD BLOCK INSTRUMENTATION

ACTION

- ACTION 60 - Declare the RBM inoperable and take the ACTION required by Specification 3.1.4.3.
- ACTION 61 - With the number of OPERABLE Channels:
- a. One less than required by the Minimum OPERABLE Channels per Trip Function requirement, restore the inoperable channel to OPERABLE status within 7 days or place the inoperable channel in the tripped condition within the next hour.
  - b. Two or more less than required by the Minimum OPERABLE Channels per Trip Function requirement, place at least one inoperable channel in the tripped condition within 1 hour.
- ACTION 62 - With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip Function requirement, place the inoperable channel in the tripped condition within 1 hour.

NOTES

- \* With THERMAL POWER  $\geq$  30% of RATED THERMAL POWER.
- \*\* With more than one control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.
- \*\*\* Not required when eight or fewer fuel assemblies (adjacent to the SRMs ) are in the core.
- (a) The RBM shall be automatically bypassed when a peripheral control rod is selected or the reference APRM channel indicates less than 30% of RATED THERMAL POWER.
- (b) This function shall be automatically bypassed if detector count rate is  $\geq$  100 cps or the IRM channels are on range 3 or higher.
- (c) This function is automatically bypassed when the associated IRM channels are on range 8 or higher.
- (d) This function is automatically bypassed when the IRM channels are on range 3 or higher.
- (e) This function is automatically bypassed when the IRM channels are on range 1.

TABLE 3.3.6-2

CONTROL ROD BLOCK INSTRUMENTATION SETPOINTS

<u>TRIP FUNCTION</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
1. <u>ROD BLOCK MONITOR</u>		
a. Upscale	$\leq 0.66 W + 40\%$	$\leq 0.66 W + 43\%$
1) 106%	$\leq 0.66 W + 42\%$	$\leq 0.66 W + 45\%$
2) 108%#		
b. Inoperative	NA	NA
c. Downscale	$\geq 5/125$ divisions of full scale	$\geq 3/125$ of divisions full scale
2. <u>APRM</u>		
a. Flow Biased Neutron Flux - Upscale	$\leq 0.58 W + 50\%*$	$\leq 0.58 W + 53%*$
b. Inoperative	NA	NA
c. Downscale	$\geq 5\%$ of RATED THERMAL POWER	$\geq 3\%$ of RATED THERMAL POWER
d. Neutron Flux - Upscale Startup	$\leq 12\%$ of RATED THERMAL POWER	$\leq 14\%$ of RATED THERMAL POWER
3. <u>SOURCE RANGE MONITORS</u>		
a. Detector not full in	NA	NA
b. Upscale	$\leq 2 \times 10^5$ cps	$\leq 4 \times 10^5$ cps
c. Inoperative	NA	NA
d. Downscale	$\geq 0.7$ cps**	$\geq 0.5$ cps**
4. <u>INTERMEDIATE RANGE MONITORS</u>		
a. Detector not full in	NA	NA
b. Upscale	$\leq 108/125$ divisions of full scale	$\leq 110/125$ divisions of full scale
c. Inoperative	NA	NA
d. Downscale	$\geq 5/125$ divisions of full scale	$\geq 3/125$ divisions of full scale
5. <u>SCRAM DISCHARGE VOLUME</u>		
a. Water Level - High	$\leq 44$ gallons	$\leq 44$ gallons
6. <u>REACTOR COOLANT SYSTEM RECIRCULATION FLOW</u>		
a. Upscale	$\leq 108/125$ divisions of full scale	$\leq 111/125$ divisions of full scale
b. Inoperative	NA	NA
c. Comparator	$\leq 10\%$ flow deviation	$\leq 11\%$ flow deviation

\*The Average Power Range Monitor rod block function is varied as a function of recirculation loop flow (W). The trip setting of this function must be maintained in accordance with Specification 3.2.2.

\*\*Provided signal-to-noise ratio is  $> 2$ . Otherwise, 3 cps as trip setpoint and 2.8 cps for allowable value.

#May be used when the associated MCPR requirements in Specification 3.2.3 are satisfied.

## REFUELING OPERATIONS

### 3/4.9.2 INSTRUMENTATION

#### LIMITING CONDITION FOR OPERATION

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3.9.2 At least 2 source range monitor\* (SRM) channels shall be OPERABLE and inserted to the normal operating level with:

- a. Continuous visual indication in the control room,
- b. At least one with audible alarm in the control room,
- c. One of the required SRM detectors located in the quadrant where CORE ALTERATIONS are being performed and the other required SRM detector located in an adjacent quadrant, and
- d. The "shorting links" removed from the RPS circuitry prior to and during the time any control rod is withdrawn\*\* and shutdown margin demonstrations are in progress.

APPLICABILITY: OPERATIONAL CONDITION 5.

#### ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS\*\* and insert all insertable control rods.

#### SURVEILLANCE REQUIREMENTS

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4.9.2 Each of the above required SRM channels shall be demonstrated OPERABLE by:

- a. At least once per 12 hours:
  1. Performance of a CHANNEL CHECK,
  2. Verifying the detectors are inserted to the normal operating level, and
  3. During CORE ALTERATIONS, verifying that the detector of an OPERABLE SRM channel is located in the core quadrant where CORE ALTERATIONS are being performed and another is located in an adjacent quadrant.

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\*The use of special movable detectors during CORE ALTERATIONS in place of the normal SRM nuclear detectors is permissible as long as these special detectors are connected to the normal SRM circuits. These channels are not required when eight or fewer fuel assemblies (adjacent to the SRMs) are in the core.

\*\*Not required for control rods removed per Specification 3.9.10.1 and 3.9.10.2.

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

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- b. Performance of a CHANNEL FUNCTIONAL TEST:
  - 1. Within 24 hours prior to the start of CORE ALTERATIONS, and
  - 2. At least once per 7 days.
- c. Verifying that the channel count rate is at least 0.7 cps:\*\*\*
  - 1. Prior to control rod withdrawal,
  - 2. Prior to and at least once per 12 hours during CORE ALTERATIONS, and
  - 3. At least once per 24 hours.
- d. Verifying that the RPS circuitry "shorting links" have been removed within 8 hours prior to and at least once per 12 hours during:
  - 1. The time any control rod is withdrawn,## or
  - 2. Shutdown margin demonstrations.

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\*\*\*provided the signal-to-noise ratio is  $\geq 2$ , otherwise, 3 cps.

##Not required for control rods removed per Specification 3.9.10.1 or 3.9.10.2.

## 3/4.9 REFUELING OPERATIONS

### BASES

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#### 3/4.9.1 REACTOR MODE SWITCH

Locking the OPERABLE reactor mode switch in the Shutdown or Refuel position, as specified, ensures that the restrictions on control rod withdrawal and refueling platform movement during the refueling operations are properly activated. These conditions reinforce the refueling procedures and reduce the probability of inadvertent criticality, damage to reactor internals or fuel assemblies, and exposure of personnel to excessive radioactivity.

#### 3/4.9.2 INSTRUMENTATION

The OPERABILITY of at least two source range monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core.

The minimum count rate is not required when eight or fewer fuel assemblies are in the core because calculations for SSES have shown the eight fuel assemblies at maximum reactivity conditions and worst possible core geometry are subcritical. During a typical core reloading two irradiated fuel assemblies will be loaded around each SRM to produce greater than the minimum required count rate. Loading schemes are selected to provide for a continuous multiplying medium to be established between the required operable SRMs and the location of the core alteration. This enhances the ability of the SRMs to respond to the loading of each fuel assembly. During a core unloading the last fuel to be removed is that fuel adjacent to the SRMs.

#### 3/4.9.3 CONTROL ROD POSITION

The requirement that all control rods be inserted during other CORE ALTERATIONS ensures that fuel will not be loaded into a cell without a control rod.

#### 3/4.9.4 DECAY TIME

The minimum requirement for reactor subcriticality prior to fuel movement ensures that sufficient time has elapsed to allow the radioactive decay of the short lived fission products. This decay time is consistent with the assumptions used in the accident analyses.

#### 3/4.9.5 COMMUNICATIONS

The requirement for communications capability ensures that refueling station personnel can be promptly informed of significant changes in the facility status or core reactivity condition during movement of fuel within the reactor pressure vessel.

## REFUELING OPERATIONS

### BASES

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#### 3/4.9.6 REFUELING PLATFORM

The OPERABILITY requirements ensure that (1) the refueling platform will be used for handling control rods and fuel assemblies within the reactor pressure vessel, (2) each hoist has sufficient load capacity for handling fuel assemblies and control rods, and (3) the core internals and pressure vessel are protected from excessive lifting force in the event they are inadvertently engaged during lifting operations.

#### 3/4.9.7 CRANE TRAVEL - SPENT FUEL STORAGE POOL

The restriction on movement of loads in excess of the nominal weight of a fuel assembly over other fuel assemblies in the storage pool ensures that in the event this load is dropped (1) the activity release will be limited to that contained in a single fuel assembly, and (2) any possible distortion of fuel in the storage racks will not result in a critical array. This assumption is consistent with the activity release assumed in the safety analyses.

#### 3/4.9.8 and 3/4.9.9 WATER LEVEL - REACTOR VESSEL and WATER LEVEL - SPENT FUEL STORAGE POOL

The restrictions on minimum water level ensure that sufficient water depth is available to remove 99% of the assumed 10% iodine gap activity released from the rupture of an irradiated fuel assembly. This minimum water depth is consistent with the assumptions of the safety analysis.

#### 3/4.9.10 CONTROL ROD REMOVAL

These specifications ensure that maintenance or repair of control rods or control rod drives will be performed under conditions that limit the probability of inadvertent criticality. The requirements for simultaneous removal of more than one control rod are more stringent since the SHUTDOWN MARGIN specification provides for the core to remain subcritical with only one control rod fully withdrawn.

#### 3/4.9.11 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

The requirement that at least one residual heat removal loop be OPERABLE or that an alternate method capable of decay heat removal be demonstrated and that an alternate method of coolant mixing be in operation ensures that (1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor pressure vessel below 140°F as required during REFUELING, and (2) sufficient coolant circulation would be available through the reactor core to assure accurate temperature indication and to distribute and prevent stratification of the poison in the event it becomes necessary to actuate the standby liquid control system.

The requirement to have two shutdown cooling mode loops OPERABLE when there is less than 22 feet of water above the reactor vessel flange ensures that a single failure of the operating loop will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and 22 feet of water above the reactor vessel flange, a large heat sink is available for core cooling. Thus, in the event a failure of the operating RHR loop, adequate time is provided to initiate alternate methods capable of decay heat removal or emergency procedures to cool the core.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION  
AMENDMENT NO. 16 TO NPF-22  
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 2  
DOCKET NO. 50-388

Introduction

By letter dated April 9, 1985, from B. Kenyon of Pennsylvania Power & Light Company (PP&L) to A. Schwencer, NRC, the licensee requested Technical Specification changes for Susquehanna Steam Electric Station Unit 2 (SSES-2). These changes are related to the required use and operability of the Source Range Monitors (SRM) during reloading (or unloading) of the entire core. The requested Technical Specification changes for SSES-2 actually take the form of removing the SRM minimum count rate operability requirement when there are eight or fewer fuel assemblies in the reactor.

Evaluation

During reload operations the Technical Specifications require minimum count rate levels to be met in order to meet the operability requirement for the SRMs. In the case of SSES this is 0.7 counts/second with a signal to noise ratio of at least 2. During reload operations in a BWR in which the entire core is unloaded, there may be times, when too few fuel assemblies are in the core, to meet the minimum count rate necessary to get a reading from the SRMs. For this condition, other monitors, Fuel Loading Chambers (FLCs), usually called "dunking chambers," which can be moved from place to place in the core as loading proceeds, are used as a replacement for the SRMs. Some utilities have found that the FLCs are an impediment to operations. The licensee has stated that during the SSES Unit 1 end-of-cycle defueling, the FLCs, which were being used to provide neutron monitoring, produced anomalous readings which were attributed to detector saturation caused by the high gamma flux existing from the irradiated fuel. PP&L will be offloading the entire core for the upcoming Unit 2 refueling outage and as a result is expecting to experience the same problem.

During the past several years several other utilities have requested Technical Specification changes to permit loading operations such that the use of FLCs can be avoided. An example being the most recently approved Technical Specification revision for Browns Ferry. The loading operation for full core reloads involving irradiated fuel may begin without minimum count rates for the SRM for a limited number of assembly loadings (determined to be subcritical). These loadings place irradiated fuel adjacent to SRM locations. This provides sufficient neutron sources (e.g. from gamma-neutron reactions) to meet the Technical Specification minimum SRM count rate requirements. After the SRMs are thus fully operational the loading proceeds in the usual manner, (e.g., spiral loading from the center for Browns Ferry).

PP&L proposes (for full core reloads with irradiated fuel as part of the reload) to begin the reload by first inserting 8 irradiated assemblies (into a fully controlled core). There will be 2 assemblies adjacent to each of the four SRMs. The SRMs are in a square array 6 control cells apart. This

proposed method is expected to provide the required SRM count rate of 0.7 counts/second with a 2 to 1 source/noise ratio. If the count rate is not reached the FLCs will be used as a backup.

The licensee determined that the 8 assemblies in a maximized state with a clustered, uncontrolled configuration would be subcritical and that there would be no possibility of reaching criticality during the loading around the SRMs. Based on calculations previously seen by the staff these subcriticality results are acceptable. The actual conditions are controlled (all rods in). The 4 separate regions of 2 assemblies do not interact making actual conditions far more subcritical than the calculated results show. Loading patterns to be used following the first 8 assemblies are selected to maintain a continuous multiplying medium between the operating SRM and the loading region to enhance the response of the SRM to the loading changes. During unloading the last fuel to be removed will be adjacent to the SRMs. Except for the SRM count rate during the first (last) 8 assembly loading (unloading), all normal limits and control interlocks will be in effect at all times.

The licensee has requested Technical Specification changes to implement this procedure. The changes affect Table 3.3.6-1 (Control Rod Block Instrumentation) in a footnote to the SRM down-scale trip operable channels requirements, and also Technical Specification 3.9.2 (Refueling Operation - Instrumentation) for SRM requirements. In both cases the change indicates that the SRMs are not required (i.e., the minimum count rate for operability is not required) when 8 or fewer fuel assemblies (which would be adjacent to SRM) are in the core. The bases for 3.9.2 is augmented to indicate the loading scheme.

The essence of the loading scheme, to provide a subcritical configuration while providing for a suitable count rate for the SRM and the subsequent well monitored loading for the remainder of the core, is the same as that proposed and approved for Browns Ferry. The loading pattern to be used following SRM operability, which is directly interconnected to the SRM, is somewhat different than the Browns Ferry central spiral loading pattern. Our review has indicated that PP&L's proposal is more directly related to the SRM count rate and is fully acceptable.

### Conclusions

PP&L has requested Technical Specification changes for Susquehanna Unit 2 which would remove during the loading (unloading) of the first (last) 8 fuel assemblies (adjacent to the SRM) the requirement that the SRM meet the minimum count rate requirement with fuel in the core. Other loading requirements will be unchanged. The primary reason for wanting the change is to eliminate the need for FLCs ("dunking chambers") during loading operations. The primary basis for the safety of the requested change is that the core will be well below criticality during the loading of the 8 assemblies, and subsequent loading will be well monitored by the SRMs. Our review has concluded that the process is acceptable and that the requested Technical Specification changes appropriately implement this process. The NRC staff approves this change for Unit 2. This same change was approved for Unit 1 on April 30, 1985.

### Environmental Consideration

This amendment involves a change in the installation or use of a facility component located within the restricted area defined in 10 CFR Part 20. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in the individual or cumulative occupational radiation exposure. The Commission has made a proposed no significant hazards consideration finding with respect to this amendment and has received no comments on such findings. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

### Conclusion

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: **SEP 04 1985**