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SECRET



**Pennsylvania Power & Light Company**

Two North Ninth Street • Allentown, PA 18101 • 215 / 770-5151

Harold W. Keiser  
Senior Vice President-Nuclear  
215/770-4194

APR - 2 1990

Director of Nuclear Reactor Regulation  
Attention: Dr. W.R. Butler, Project Director  
Project Directorate I-2  
Division of Reactor Projects  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

SUSQUEHANNA STEAM ELECTRIC STATION  
REQUEST FOR WAIVER OF COMPLIANCE:  
PROPOSED AMENDMENTS 129 AND 81 TO  
LICENSE NOS. NPF-14 AND NPF-22  
REGARDING DIESEL GENERATOR TESTING  
PLA-3368                      FILES A17-2/R41-2

Docket Nos. 50-387  
and 50-388

Reference: Letter, PLA-3362, H.W. Keiser to W.R. Butler,  
"Proposed Amendment 129 to NPF-14 and Proposed  
Amendment 81 to NPF-22, Diesel Generator Technical  
Specifications", dated March 16, 1990.

Dear Dr. Butler:

The purpose of this letter is to request a waiver of compliance from the Technical Specifications for Susquehanna SES Units 1 and 2. Specifically, PP&L is requesting that the referenced proposed exigent amendment request be made temporarily effective until the formal amendment is processed. The basis for this request is as follows.

As you are aware, the Susquehanna diesel generators are undergoing significant refurbishment as a result of our continuing evaluation of the crankcase overpressurization events that occurred in the latter part of 1989. Refurbishment of the first of the diesels will soon be completed. In order to return the diesel to service, several of the affected surveillance requirements must be performed. Based on our judgment (as described in detail in the referenced letter) that the current diesel testing surveillance requirements potentially contribute to premature engine failure, PP&L does not want to perform these tests on the diesel generators after refurbishment.

This was part of our logic in requesting that the referenced change be handled on an exigent basis. The basis for that request was provided per the guidance in 10CFR50.91, but will be reiterated and

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expanded upon here to be sure our intent is understood. 10CFR50.91 requires that a reason for the exigency, why it cannot be avoided, and evidence that the request was made in a timely manner be provided. The reason for the exigency was PP&L's desire to enhance diesel generator reliability as soon as possible by reducing the potential for having to perform the current tests (eg., should a surveillance requirement need to be performed based on entry into an action). A more certain concern, however is our desire to avoid the upcoming testing which is required to be performed in order to return each refurbished diesel to service.

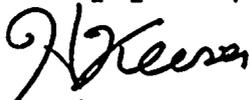
The first of these tests will begin as early as April 6, 1990. Therefore, this request is indeed of an exigent nature and cannot be avoided. With regard to timeliness, PP&L believes that the March 16, 1990 submittal was timely given the time taken to investigate the events and PP&L's initial focus of trying to determine a single root cause. After several discussions with the staff of the multiple potential root causes that were under evaluation, PP&L redirected our efforts toward timely mitigation of as many potential contributors as possible. Since Technical Specification testing was a potential contributor, PP&L took immediate action to develop the actual proposed changes and then to perform the required onsite and offsite committee reviews.

PP&L is satisfied with the results of this process, but we have been informed by your staff that our exigent request cannot be processed in time to meet our need date of April 6, 1990. Therefore, a waiver of compliance is hereby requested in order to avoid: 1) delaying the return of a diesel generator to service, and thereby delaying refurbishment of the other diesel generators, or 2) returning the diesel(s) to service by performing testing which we have established as a potential contributor to premature engine failure.

Additionally, at the request of your staff, we have attached marked-up pages of the referenced submittal to ensure that footnote symbols are consistently applied throughout the submittal.

Any questions on this transmittal should be directed to Mr. D.J. Walters at (215) 770-6536.

Very truly yours,



H. W. Keiser

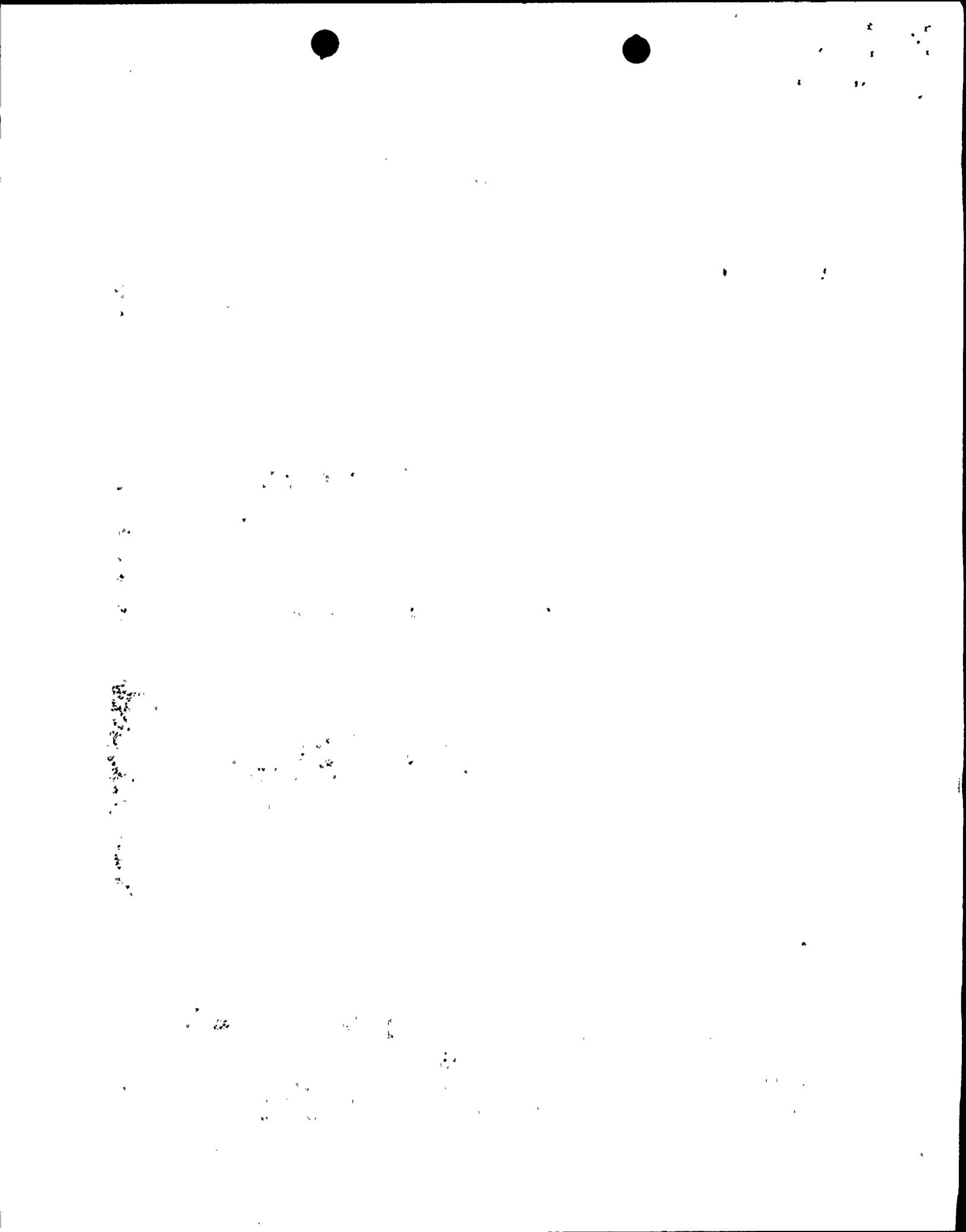
Attachments



THE UNIVERSITY OF CHICAGO  
DIVISION OF THE PHYSICAL SCIENCES  
DEPARTMENT OF PHYSICS  
530 SOUTH EAST ASIAN AVENUE  
CHICAGO, ILLINOIS 60607

- 3 - FILE-A17-2/R41-2 PLA-3368  
Dr. W. R. Butler

cc: (NRC Document Control Desk) (original)  
NRC Region I  
Mr. M.C. Thadani, NRC Project Manager  
Mr. G.S. Barber, NRC Senior Resident Inspector



3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

A.C. SOURCES - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

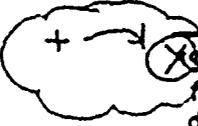
- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Four of the five separate and independent diesel generators ~~each~~ <sup>+</sup>  with:
  - 1. Separate engine mounted day fuel tanks containing a minimum of 325 gallons of fuel,
  - 2. A separate fuel storage system containing a minimum of 47,570 gallons of fuel for diesel generator A, B, C and D; and 60,480 gallons for diesel generator E, and
  - 3. A separate fuel transfer pump.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one offsite circuit of the above 3.8.1.1.a required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter and Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours sequentially on four diesel generators; restore at least two offsite circuits to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With one diesel generator of 3.8.1.1.b inoperable, demonstrate the OPERABILITY of the A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter; and Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours; restore the diesel generator to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

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  ~~X~~ Shared with Unit 2. An OPERABLE diesel generator may be removed from service for a period of eight hours when aligning diesel generator E to the Class 1E distribution system. If alignment of diesel generator E is not completed within eight hours, the appropriate ACTION will be followed. The specified time limits in the ACTION will be measured from the time alignment of diesel generator E began, with the exception of the initial performance of Surveillance Requirement 4.8.1.1.1.a. The time limit for 4.8.1.1.1.a will be measured from the determination that diesel generator E will not or cannot be aligned.



## ELECTRICAL POWER SYSTEMS

### LIMITING CONDITION FOR OPERATION (Continued)

#### ACTION (Continued)

- c. With one offsite circuit and one diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter; and Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours, restore one of the inoperable sources to OPERABLE status within 12 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Restore the other A.C. power source (offsite circuit or diesel generator) to OPERABLE status in accordance with the provisions of Section 3.8.1 Action Statement a or b, as appropriate, with the time requirement of that Action Statement based on the time of initial loss of the remaining inoperable A.C. power source.
- d. With one diesel generator of the above required A.C. electrical power sources inoperable, in addition to ACTION b or c, above, verify within 2 hours that all required systems, subsystems, trains, components and devices that depend on the remaining diesel generator as a source of emergency power are also OPERABLE; otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- e. With two of the above required offsite circuits inoperable, demonstrate the OPERABILITY of four diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.4, for one diesel generator at a time, within eight hours unless the diesel generators are already operating; restore at least one of the inoperable offsite circuits to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours. With only one offsite circuit restored to OPERABLE status, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- f. With two or more of the above required diesel generators inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter and 4.8.1.1.2.a.4, for one diesel generator at a time, within 2 hours, and at least once per 8 hours thereafter; restore at least three of the diesel generators to OPERABLE status within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Restore four diesel generators to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

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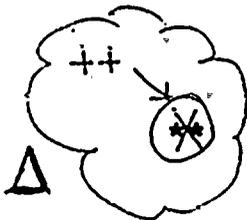
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ACTION:

- a. With one offsite circuit of the above 3.8.1.1.a required A.C. power sources inoperable:
1. Perform Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter, and
  2. For each of the four ~~four~~ OPERABLE, aligned diesel generators:
    - a) Verify Surveillance Requirement 4.8.1.1.2.a.4 has been successfully performed within the last 24 hours, or
    - b) Perform Surveillance Requirement 4.8.1.1.2.a.4 sequentially on each diesel generator within 24 hours, and
  3. Restore both offsite circuits to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With one diesel generator of 3.8.1.1.b inoperable,
1. Perform Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter, and
  2. # For each of the remaining three OPERABLE, aligned diesel generators:
    - a) Verify Surveillance Requirement 4.8.1.1.2.a.4 has been successfully performed within the last 24 hours, or
    - b) Perform Surveillance Requirement 4.8.1.1.2.a.4 sequentially on each diesel generator within 24 hours, and
  3. Restore the diesel generator to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

If the cause of the inoperability of the offsite circuit is inoperability of an ESS transformer, only the two diesel generators associated with the inoperable ESS transformer are required to be tested.





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- c. ## With one offsite circuit and one diesel generator of the above required A.C. electrical power sources inoperable,
1. Perform Surveillance Requirement 4.8.1.1.1.a on the remaining A.C. sources within one hour and at least once per 8 hours thereafter, and
  2. # Perform Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours on the remaining three OPERABLE aligned diesel generators, and
  3. Restore one of the inoperable sources (offsite circuit or diesel generator) to OPERABLE status within 12 hours or be in HOT SHUTDOWN in the next 12 hours and COLD SHUTDOWN in the following 24 hours, and
  4. Restore the other inoperable source to OPERABLE status in accordance with 3.8.1.1 ACTION a or b, as appropriate, with the time requirement of that Action Statement based on the time of initial loss of the remaining inoperable A.C. power source.
- d. With one diesel generator of the above required A.C. electrical power sources inoperable, in addition to ACTION b or c above,
1. Verify within two hours that all required systems, subsystems, trains, components, and devices that depend on the remaining aligned diesel generators as a source of emergency power are also OPERABLE, or
  2. Be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN in the following 24 hours.
- e. ## With both of the above required offsite circuits inoperable,
1. Perform Surveillance Requirement 4.8.1.1.2.a.4 for each of the four aligned diesel generators, one at a time, within 8 hours, unless the diesel generators are already running, and
  2. Restore at least one of the inoperable offsite circuits to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours, and

3. Restore the other inoperable offsite circuit to OPERABLE status within 72 hours from the time of initial loss of the first offsite circuit, or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

f. ## With two or more of the above required aligned diesel generators inoperable,

1. Perform Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter, and
2. Perform Surveillance Requirement 4.8.1.1.2.a.4, for one diesel generator at a time for the remaining OPERABLE aligned diesel generators, within 2 hours and once per 8 hours thereafter, and
3. Restore at least three aligned diesel generators to OPERABLE status within two hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours, and
4. Restore to four OPERABLE aligned diesel generators within 72 hours from time of loss of the first diesel generator or be in at least HOT SHUTDOWN in the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

# This ACTION is not required to be performed if the diesel generator is inoperable solely due to preplanned preventative maintenance.

## Performance of Surveillance Requirement 4.8.1.1.2.a.4 per Action Statement c, e, or f above meets the requirements of Action Statements a or b.



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