James S. Baumstark
Vice President
Nuclear Engineering

Consolidated Edison Company of New York, Inc.
Indian Point 2 Station
Broadway & Bleakley Avenue
Buchanan, New York 10511

Internet: baumstarkj@coned.com
Telephone: (914) 734-5354
Cellular: (914) 391-9005
Pager: (917) 457-9698
Fax: (914) 734-5718

May 5, 1999

Re: Indian Point Unit No. 2
Docket No. 50-247

Document Control Desk
US Nuclear Regulatory Commission
Mail Station P1-137
Washington, DC 20555-0001

SUBJECT: Proposed Amendment to Licensing Basis to Implement Reactor Protection System (RPS) and Engineered Safety Features Actuation System (ESFAS) Relaxed Test Times and Completion Times in Accordance with WCAP-14333-P-A, Revision 1

Reference: NRC July 15, 1998 correspondence to Mr. Louis F. Liberatori Jr., Chairman, Westinghouse Owners Group, containing the Safety Evaluation Report for WCAP-14333.

Pursuant to 10 CFR 50.90, Consolidated Edison Company of New York, Inc. (Con Edison) transmits herewith one (1) signed original and two (2) copies of Application for Amendment to Operating License sworn to on May 5, 1999. This application proposes to amend the Indian Point Unit No. 2 licensing basis so as to permit relaxation of test times and allowed outage times (AOTs) for reactor protection and engineered safety features actuation instrumentation. This application follows the guidelines of WCAP-14333-P-A, Revision 1, "Probabilistic Risk Analysis of the RPS and ESFAS Test Times and Completion Times." Indian Point 2 has had analog channel test bypass times of 4 hours since 1991. Specifically, the amendment would allow:

- analog channel AOTs of 72 hours
- analog channel test bypass times of 12 hours
- logic cabinet and master relay AOTs of 24 hours
- On-line testing and maintenance of instrumentation

The proposed Technical Specification pages which support this amendment to Technical Specification Section 3.5.3, Basis for Instrument Operating Conditions (pages 3.5-2 to 3.5-6) and Tables 3.5-2 through 3.5-4, are provided as Attachment A for your review. The Technical Specification pages in Attachment A also include editorial changes to properly align Columns 3 and 4 at No. 11 in Table 3.5-2 and relocate No. 18a in Table 3.5-2 to Table 3.5-3 where it will become No. 6 (No. 18a in Table 3.5-2 involves Engineered Safety Features, and this should be in the Engineered Safety Features table which is Table 3.5-3). Attachment B to this application for amendment reflects the safety assessment supporting this change as well as the conclusion that the proposed change does not constitute a significant hazards consideration as defined by 10 CFR 50.92. Attachment C contains the determination of WCAP-14333 applicability to

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Indian Point Unit 2. Attachment D addresses Tier 2 and Tier 3 requirements as identified in WCAP-14333. Attachments C and D contain information proprietary to Westinghouse Electric Company. Attachment E provides a summary of the proposed changes. Attachment F contains the Affidavit for Withholding, the proprietary information notice, and the copyright notice in accordance with the requirements of 10 CFR 2.790. Attachment G contains the non-proprietary versions of Attachments C and D. Attachment H contains a list of commitments associated with the proposed change. WCAP-14333 provides generic justification for Technical Specification changes to allow for increased bypass times for testing, as well as increased allowed outage times for the analog channels, logic cabinets, and master relays. WCAP-14333 was approved by the NRC in the referenced SER.

Con Edison requests an approval date of November 15, 1999 for this Technical Specification amendment. Should you or your staff have any questions regarding this matter, please contact Mr. John McCann, Manager, Nuclear Safety and Licensing.

Very truly yours,

Attachments

C: Mr. Hubert J. Miller
Regional Administrator-Region I
US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Jefferey F. Harold, Project Manager
Project Directorate I-1
Division of Reactor Projects I/II
US Nuclear Regulatory Commission
Mail Stop 14B-2
Washington, DC 20555

Senior Resident Inspector
US Nuclear Regulatory Commission
PO Box 38
Buchanan, NY 10511

Mayor, Village of Buchanan
236 Tate Avenue
Buchanan, NY 10511

Mr. Jack Spath
New York State Energy Research and Development Authority
Corporate Plaza West
286 Washington Avenue Extension
Albany, NY 12223-6399

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of	)	
	)	
CONSOLIDATED EDISON COMPANY	)	Docket No. 50-247
OF NEW YORK, INC.	)	
(Indian Point Station,	)	
Unit No. 2)	)	

APPLICATION FOR AMENDMENT
TO OPERATING LICENSE

Pursuant to Section 50.90 of the Regulations of the Nuclear Regulatory Commission ("NRC"), Consolidated Edison Company of New York, Inc. ("Con Edison"), as holder of Facility Operating License No. DPR-26, hereby applies for amendment of the Technical Specifications contained in Appendix A of that license and a change to the Licensing Basis that allows:

- analog channel allowed outage times of 72 hours
- analog channel test bypass times of 12 hours
- logic cabinet and master relay allowed outage times of 24 hours
- On-line testing and maintenance of instrumentation

The proposed Technical Specification pages which support this amendment to Technical Specification Section 3.5.3, Basis for Instrument Operating Conditions (pages 3.5-2 to 3.5-6) and Tables 3.5-2 through 3.5-4, are provided as Attachment A. The Technical Specification pages in Attachment A also include editorial changes to properly align Columns 3 and 4 at No. 11 in Table 3.5-2 and relocate No. 18a in Table 3.5-2 to Table 3.5-3 where it will become No. 6. Attachment B to this application for amendment reflects the safety assessment supporting this change as well as the conclusion that the proposed change does not constitute a significant hazards consideration as defined in 10 CFR 50.92(c). Attachment C contains the determination of WCAP-14333 applicability to Indian Point Unit 2. Attachment D addresses Tier 2 and Tier 3 requirements as identified in WCAP-14333. Attachments C and D contain information proprietary to Westinghouse Electric Company. Attachment E provides a summary of the proposed changes. Attachment F contains the Affidavit for Withholding, the proprietary information notice, and the copyright notice in accordance with the requirements of 10 CFR 2.790. Attachment G contains the non-proprietary versions of Attachments C and D. Attachment H contains a list of commitments associated with the proposed change.

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As required by 10 CFR 50.91(b)(1), a copy of this application and our analysis concluding that the proposed change does not constitute a significant hazards consideration has been provided to the appropriate New York State official designated to receive such amendments.

BY: James S. Baumstark

James S. Baumstark
Vice President
Subscribed and sworn to
before me this 5th day
of May, 1999.

Karen L. Lancaster
Notary Public

KAREN L. LANCASTER
Notary Public, State of New York
No. 60-4643659
Qualified In Westchester County
Term Expires 9/30/99

ATTACHMENT A

PROPOSED TECHNICAL SPECIFICATIONS

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
MAY 1999

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3.5 INSTRUMENTATION SYSTEMS

Operational Safety Instrumentation

Applicability

Applies to plant instrumentation systems.

Objectives

To provide for automatic initiation of the Engineered Safety Features in the event that principal process variable limits are exceeded, and to delineate the conditions of the plant instrumentation and safety circuits necessary to ensure reactor safety.

Specifications

3.5.1 When the plant is not in the cold shutdown condition, the Engineered Safety Features initiation instrumentation setting limits shall be as stated in Table 3.5-1.

3.5.2 For instrumentation channel, plant operation at rated power shall be permitted to continue in accordance with Tables 3.5-2 through 3.5-4. No more than one channel of a particular protection channel set shall be tested at the same time. By definition, an instrumentation channel failure shall not be regarded as a channel being tested.

3.5.3 In the event the number of channels of a particular function in service falls below the limits given in the column entitled Minimum Operable Channels, or Minimum Degree of Redundancy cannot be achieved, operation shall be limited according to the requirements shown in Column 5 or 6 of Tables 3.5-2 through 3.5-4. For on-line testing or maintenance of instruments with installed bypass capability, the required minimum degree of redundancy may be reduced by one to permit testing or maintenance of a channel in bypass.

3.5.4 In the event of sub-system instrumentation channel failure, Tables 3.5-2 through 3.5-4 need not be observed during the short period of time the operable sub-system channels are tested where the failed channel must be blocked to prevent unnecessary reactor trip.

3.5.5 The cover plate on the rear of the safeguards panel in the control room shall not be removed without authorization from the Watch Supervisor.

3.5.6 When the reactor coolant system is above 350°F, the instrumentation requirements as stated in Table 3.5-5 shall be met.

Basis

Instrumentation has been provided to sense accident conditions and to initiate operation of the Reactor Protection System or the Engineered Safety Features[1,4].

Safety Injection System Actuation

Protection against a loss-of-coolant or steam break accident is brought about by automatic actuation of the Safety Injection System, which provides emergency cooling and reduction of reactivity.

The loss-of-coolant accident is characterized by depressurization of the Reactor Coolant System and rapid loss of reactor coolant to the containment. The Engineered Safety Features have been designed to sense the effects of the loss-of-coolant accident by detecting low pressure and generator signals actuating the SIS active phase.

The SIS active phase is also actuated by a high containment pressure signal (Hi-Level) brought about by loss of high enthalpy coolant to the containment. This actuation signal acts as a backup to the low pressurizer pressure signal actuation of the SIS and also adds diversity to protection against loss of coolant.

Signals are also provided to actuate the SIS upon sensing the effects of a steamline-break accident. Therefore, SIS actuation following a steamline break is designed to occur upon sensing high differential steam pressure between any two steam generators or upon sensing high steamline flow in coincidence with low reactor coolant average temperature or low steamline pressure.

The increase in the extraction of RCS heat following a steamline break results in reactor coolant temperature and pressure reduction. For this reason, protection against a steamline-break accident is also provided by low pressurizer pressure signals actuating safety injection.

Protection is also provided for a steamline break in the containment by actuation of SIS upon sensing high containment pressure.

SIS actuation injects highly borated fluid into the Reactor Coolant System in order to counter the reactivity insertion brought about by cooldown of the reactor coolant which occurs during a steamline-break accident.

Containment Spray

The Engineered Safety Features actuation system also initiates containment spray upon sensing a high containment pressure signal (Hi-Hi Level). The containment spray acts to reduce containment pressure in the event of a loss-of-coolant or steamline-break accident inside the containment. The spray cools the containment directly and limits the release of fission products by absorbing iodine should it be released to the containment.

Containment spray is designed to be actuated at a higher containment pressure (approximately 50% of design containment pressure) than the SIS (2.0 psig). Since spurious actuation of containment spray is to be avoided, it is automatically initiated only on coincidence of Hi-Hi Level containment pressure sensed by both sets of two-out-of-three containment pressure signals.

Steamline Isolation

Steamline isolation signals are initiated by the Engineered Safety Features closing all steamline stop valves. In the event of a steamline break, this action prevents continuous, uncontrolled steam release from more than one steam generator by isolating the steamlines on high containment pressure (Hi-Hi Level) or high steamline flow. Protection is afforded for breaks inside or outside the containment even when it is assumed that there is a single failure in the steamline isolation system.

Feedwater Line Isolation

The feedwater lines are isolated upon actuation of the Safety Injection System in order to prevent excessive cooldown of the reactor coolant system. This mitigates the effect of an accident such as steam break which in itself causes excessive coolant temperature cooldown.

Feedwater line isolation also reduces the consequences of a steamline break inside the containment by stopping the entry of feedwater.

Setting Limits

The Engineered Safety Features Actuation System instrumentation trip setpoints Specified in Table 3.5-1 are the nominal values at which the bistables may be set for each functional unit. A setpoint for an Engineered Safety Features Actuation System or interlock function is applicable to the process rack modules and is considered to be adjusted consistent with the nominal value when the "as left" value is within the band allowed for calibration accuracy. Sensor/Transmitters are considered to be adjusted consistent with the nominal value when the "as left" value(s) at the calibration point(s) is (are) within the band allowed for calibration accuracy. This band is defined by the calibration accuracy applied in both the conservative and non-conservative directions about the trip setpoint for process rack modules and calibration point(s) for sensor/transmitters as defined by plant calibration procedures and the plant setpoint study.

To accommodate the instrument drift assumed to occur between operational tests and the accuracy to which setpoints can be measured and calibrated, administrative limits for the setpoints have been determined. Operation with "as found" setpoints less conservative than the Trip Setpoint but within the administrative limit is acceptable since allowances have been made in the plant setpoint study to account for the applicable instrument uncertainties and the plant administrative process, including the administrative limit, verifying that the instrument performance complies with the plant setpoint study. Operation with "as found" setpoints less conservative than the administrative limit requires that further instrument operability evaluations be performed. This would include verification that the channel is capable of demonstrating operating performance within the design characteristics of the instruments through channel calibration, drift evaluations, instrument response characteristics, and other manufacturer recommended tests. Process rack modules or a sensor/transmitter found outside the "as left" band for calibration accuracy must be returned to within the band after the performance of each surveillance test.

1. The Hi Level containment pressure limit is set at 2.0 psig containment pressure. Initiation of Safety Injection protects against loss-of-coolant[2,4] or steamline-break[3,4] accidents as discussed in the safety analysis.

2. The Hi-Hi Level containment pressure limit is set at about 50% of design containment pressure. Initiation of Containment Spray and Steamline Isolation protects against large loss of coolant[2] or steamline-break accidents[3] as discussed in the safety analysis.

3. The pressurizer low-pressure limit is set substantially below system operating pressure limits. However, it is sufficiently high to protect against a loss-of-coolant accident as shown in the safety analysis[2].

4. The steamline high differential pressure limit is set well below the differential pressure expected in the event of a large steamline-break accident as shown in the safety analysis[3].

5. The high steamline flow limit is set at approximately 40% of the full steam flow at 0% to 20% load. Between 20% and 100% (full) load, the trip setpoint is ramped linearly with respect to first stage turbine pressure from 40% of the full steam flow to 110% of the full steam flow. These setpoints will initiate safety injection in the case of a large steamline-break accident. Coincident low T_{avg} setting limit for SIS and steamline isolation initiation is set below its hot shutdown value. The coincident steamline pressure setting limit is set below the full load operating pressure. The safety analyses show that these settings provide protection in the event of a large steamline break[3].

Instrument Operating Conditions

During plant operation, the complete instrumentation systems will normally be in service. Reactor safety is provided by the Reactor Protection System, which automatically initiates appropriate action to prevent exceeding established limits. Safety is not compromised, however, by continuing operation with certain instrumentation channels out of service since provisions were made for this in the plant design. This specification outlines limiting conditions for operation necessary to preserve the effectiveness of the Reactor Control and Protection System when any one or more of the channels is out of service.

Almost all reactor protection channels are supplied with sufficient redundancy to provide the capability for channel calibration and test at power. Exceptions are backup channels such as reactor coolant pump breakers. The removal of one trip channel on process control equipment is accomplished by placing that channel bistable in a tripped mode; e.g., a two-out-of-three circuit becomes a one-out-of-two circuit. A channel bistable may also be placed in a bypassed mode; e.g., a two-out-of-three circuit becomes a two-out-of-two circuit. The nuclear instrumentation system channels are not intentionally placed in a tripped mode since the test signal is superimposed on the normal detector signal to test at power. Testing of the NIS power range channel requires (1) bypassing the Dropped Rod protection from NIS for the channel being tested, and (2) defeating the ΔT protection channel set that is being fed from the NIS channel, and (3) defeating the power mismatch section of T_{avg} control channels when the appropriate NIS channel is being tested. However, the Rod Position system and remaining NIS channels still provide the dropped-rod protection. Testing does not trip the system unless a trip condition exists in a concurrent channel.

The Functional Units having risk informed AOTs are identified with either (1) or (2) in column 6 of Tables 3.5-2 through 3.5-4. Risk informed AOTs for analog channels is 72 hours and for logic channels is 24 hours. This is the maximum duration that a channel is permitted to be bypassed.

References

(1) UFSAR Section 7.2

(2) UFSAR Section 14.3

(3) UFSAR Section 14.2.5

(4) Safety Evaluation accompanying the Indian Point Unit No. 2 "Application for Amendment to Operating License," sworn to on May 29, 1979 by Mr. William J. Cahill, Jr. of Consolidated Edison.

Table 3.5-2

Reactor Trip Instrumentation Limiting Operating Conditions

No.	Functional Unit	1 No. of Channels	2 No. of Channels to Trip	3 Min. Operable Channels	4 Min. Degree of Redun-dancy	5 Operator Action if Conditions of Column 3 Cannot be Met	6 Operator Action if Conditions of Column 4 Cannot be Met
1.	Manual	2	1	1	0	Maintain hot shutdown	Same as Column 5
2.	Nuclear Flux Power Range	4	2	3	2	Maintain hot shutdown	(1)
2.a	Nuclear Flux Power Range	4	2	2	1	Maintain hot physics tests only	Same as Column 5
3.	Nuclear Flux Intermediate Range	2	1	1*	0	Maintain hot shutdown	Same as Column 5
4.	Nuclear Flux Source Range	2	1	1**	0	Maintain hot shutdown	Same as Column 5
5.	Overtemperature delta T	4	2	3	2	Maintain hot shutdown	(1)
6.	Overpower delta T	4	2	3	2	Maintain hot shutdown	(1)
7.	Low Pressurizer Pressure	4	2	3	2	Maintain hot shutdown	(1)

Table 3.5-2

Reactor Trip Instrumentation Limiting Operating Conditions

No.	Functional Unit	1 No. of Channels	2 No. of Channels to Trip	3 Min. Operable Channels	4 Min. Degree of Redun-dancy	5 Operator Action if Conditions of Column 3 Cannot be Met	6 Operator Action if Conditions of Column 4 Cannot be Met
8.	Hi Pressurizer Pressure	3	2	2	1	Maintain hot shutdown	(1)
9.	Pressurizer Hi Water Level	3	2	2	1	Maintain hot shutdown	(1)
10.	Low Flow Loop ≥ 75% F.P. Low Flow Two Loops 10-75% F.P.	3/loop 3/loop	2/loop (any loop) 2/loop (any two loops)	2/operable Loop 2/operable loop	1/operable loop 1/operable loop	Maintain hot shutdown	(1)
11.	Lo-Lo Steam Generator Water Level	3/loop	2/loop	2/loop	1/loop	Maintain hot shutdown	(1)
12.	Undervoltage 6.9 kV Bus	1/bus	2	3	2	Maintain hot shutdown	(1)
13.	Low frequency 6.9 kV Bus	1/bus	2	3	2	Maintain hot shutdown***	(1)
14.	Quadrant power tilt monitors	2	NA	1	0	Log individual upper and lower ion chamber currents once/shift and after load change > 10%.	Same as Column 5

Table 3.5-2

Reactor Trip Instrumentation Limiting Operating Conditions

No.	Functional Unit	1 No. of Channels	2 No. of Channels to Trip	3 Min. Operable Channels	4 Min. Degree of Redun-dancy	5 Operator Action if Conditions of Column 3 Cannot be Met	6 Operator Action if Conditions of Column 4 Cannot be Met
15.	DELETED						
16.	Control Rod Protection****	3	2	2	1	During RCS cooldown, manually open reactor trip breakers prior to T_{cold} decreasing below 381°F. Maintain reactor trip breakers open during RCS cool- down when T_{cold} is less than 381°F.	Same as Column 5
17.	Turbine Trip ≥ 35% F.P. A. Low Auto Stop Oil Pressure	3	2	2	1	Maintain reactor power below 35% F.P.	(2)
18.	Reactor Trip Logic	2	1	2#	1#	Be in hot shutdown within the next six hours.	Same as Column 5

Table 3.5-2

Reactor Trip Instrumentation Limiting Operating Conditions

No.	Functional Unit	1 No. of Channels	2 No. of Channels to Trip	3 Min. Operable Channels	4 Min. Degree of Redun-dancy	5 Operator Action if Conditions of Column 3 Cannot be Met	6 Operator Action if Conditions of Column 4 Cannot be Met
19.	Reactor Trip Breakers	2	1	2#	1#	With either diverse trip feature inoperable, or the breaker incapable of tripping for any other reason, restore it to operable conditions or, be in hot shutdown within the next six hours and open both reactor trip breakers. The breaker shall not be bypassed except for the time required for performing maintenance and/or testing to restore it to operability.	Same as Column 5

Table 3.5-2

Reactor Trip Instrumentation Limiting Operating Conditions

F.P. = Rated Power

* If two of four power range channels are greater than 10% F.P., channels are not required.

** If one of two intermediate range channels is greater than 10^{-10} amps, channels are not required.

*** 2/4 trips all four reactor coolant pumps.

**** Required only when control rods are positioned in core locations containing LOPAR fuel.

\# A reactor trip breaker and/or associated logic channel may be bypassed for maintenance for up to 24 hours or surveillance testing for up to eight hours provided the redundant reactor trip breaker and/or associated logic channel is operable.

(1) Restore all channels as required by column 1 to an OPERABLE status within 72 hours or place the inoperable channel in trip. Otherwise, maintain hot shutdown.

(2) Restore all channels as required by column 1 to an OPERABLE status within 72 hours or place the inoperable channel in trip. Otherwise, reduce reactor power below 35%.

Table 3.5-3

Instrumentation Operating Conditions for Engineered Safety Features

No.	Functional Unit	1 No. of Channels	2 No. of Channels to Trip	3 Min. Operable Channels	4 Min. Degree of Redun-dancy	5 Operator Action if Conditions of Column 3 Cannot be Met	6 Operator Action if Conditions of Column 4 Cannot be Met
1	Safety Injection						
a.	Manual	2	1	1	0	Cold shutdown	Same as Column 5
b.	High Containment Pressure (Hi Level)	3	2	2	1	Cold shutdown	(1)
c.	High Differential Pressure Between Steam Lines	3/steam line	2/steam line	2/steam line	1/steam line	Cold shutdown	(1)
d.	Pressurizer Low Pressure*	3	2	2	1	Cold shutdown	(1)
e.	High Steam Flow in 2/4 Steam Lines Coincident	2/line	1/2 in any 2 lines	1/line in each of 3 lines	2	Cold shutdown	(1)
	With Low T_{avg} or Low Steam Line Pressure	4 T_{avg} Signals	2	3	2		
		4 Pres-sure Signals	2	3	2		

* Permissible bypass if reactor coolant pressure less than 2000 psig.

Table 3.5-3

Instrumentation Operating Conditions for Engineered Safety Features

No.	Functional Unit	1 No. of Channels	2 No. of Channels to Trip	3 Min. Operable Channels	4 Min. Degree of Redun-dancy	5 Operator Action if Conditions of Column 3 Cannot be Met	6 Operator Action if Conditions of Column 4 Cannot be Met
2.	Containment Spray						
a.	Manual	2	1	1	0	Cold shutdown	Same as Column 5
b.	High Containment Pressure (Hi-Hi Level)	2 sets of 3	2 of 3 in each set	2 per set	1/set	Cold shutdown	(1)
3.	Loss Of Power						
a.	480V Emergency Bus Undervoltage (Loss of Voltage)	2/bus	1/bus	1/bus	0	Cold shutdown	Same as Column 5
b.	480V Emergency Bus Undervoltage (De-graded Voltage)	2/bus	2/bus	1/bus	0	Cold shutdown	Same as Column 5
4.	Auxiliary Feedwater						
a.	Steam Gen. Water Level (Low-Low)						
	i. Start Motor-Driven Pumps	3/stm gen.	2 in any stm gen.	2 chan. in each stm gen.	1	Reduce RCS temperature such that T < 350°F	(2)

Table 3.5-3

Instrumentation Operating Conditions for Engineered Safety Features

No.	Functional Unit	1 No. of Channels	2 No. of Channels to Trip	3 Min. Operable Channels	4 Min. Degree of Redun-dancy	5 Operator Action if Conditions of Column 3 Cannot be Met	6 Operator Action if Conditions of Column 4 Cannot be Met
	ii. Start Turbine-Driven Pump	3/stm gen.	2/3 in each of two stm gen.	2 chan. in each stm gen.	1	T < 350°F	(2)
b.	S.I. Start Motor-Driven Pumps	(All safety injection initiating functions and requirements)					
c.	Station Blackout Start Motor-Driven and Turbine-Driven Pumps	2	1	1	0	T < 350°F	Same as Column 5
d.	Trip of Main Feed-water Pumps Start Motor-Driven Pumps	2	1	1	0	Hot shutdown	Same as column 5
5.	Overpressure Protection System (OPS)	3	2	2	1	Refer to Specification 3.1.A.4	Same as Column 5
6.	Engineered Safety Features (S1) Logic	2	1	2#	1#	Be in Hot shutdown within the next 6 hours	Same as column 5

Table 3.5-3

Instrumentation Operating Conditions for Engineered Safety Features

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An Engineered Safety Feature (SI) logic channel may be bypassed for maintenance for up to 24 hours or surveillance testing for up to eight hours provided the redundant logic channel is operable.

(1) Restore all channels as required by column 1 to an OPERABLE status within 72 hours or place the inoperable channel in trip. Otherwise, proceed to cold shutdown.

(2) Restore all channels as required by column 1 to an OPERABLE status within 72 hours or place the inoperable channel in trip. Otherwise, reduce T_{avg} to less than 350°F.

Table 3.5-4

Instrumentation Operating Conditions for Isolation Functions

No.	Functional Unit	1 No. of Channels	2 No. of Channels to Trip	3 Min. Operable Channels	4 Min. Degree of Redun-dancy	5 Operator Action if Conditions of Column 3 Cannot be Met	6 Operator Action if Conditions of Column 4 Cannot be Met
1.	Containment Isolation						
a.	Automatic Safety Injection (Phase A)	See Item No. 1 of Table 3.5-3				Cold shutdown	(1)
b.	Containment Pressure (Phase B)	See Item No. 2 of Table 3.5-3				Cold shutdown	(1)
c.	Manual						
	Phase A (one out of two)	2	1	1	0	Cold shutdown	Same as Column 5
	Phase B (one out of two)	2	1	1	0	Cold shutdown	Same as Column 5
2.	Steam Line Isolation						
a.	High Steam Flow in 2/4 Steam Lines Coincident with Low T_{avg} or Low Steam Line Pressure	See Item No. 1(e) of Table 3.5-3				Cold shutdown	(1)
b.	High Containment Pressure (Hi-Hi Level)	See Item No. 2(b) of Table 3.5-3				Cold shutdown	(1)
c.	Manual	1/loop	1/loop	1/loop	0	Cold shutdown	Same as Column 5

Table 3.5-4

Instrumentation Operating Conditions for Isolation Functions

No.	Functional Unit	1 No. of Channels	2 No. of Channels to Trip	3 Min. Operable Channels	4 Min. Degree of Redun-dancy	5 Operator Action if Conditions of Column 3 Cannot be Met	6 Operator Action if Conditions of Column 4 Cannot be Met
3.	Feedwater Line Isolation						
a.	Safety Injection	See Item No. 1 of Table 3.5-3					
4.	Containment Purge And Pressure Relief Isolation						
a.	Containment Radioactivity High (R-41/R-42)	2	1	*	0	*	*

* See Specification 3.1.F

(1) Restore all logic channels as required by column 1 to an OPERABLE status within 24 hours. Otherwise, proceed to cold shutdown.

ATTACHMENT B

SAFETY ASSESSMENT

AND

BASIS FOR NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
MAY 1999

SAFETY ASSESSMENT

The specific proposed changes, as set forth in our application, seek to allow Reactor Protection System (RPS) and Engineered Safety Features Actuation System (ESFAS) instrumentation:

- analog channel AOTs of 72 hours
- analog channel test bypass times of 12 hours
- logic cabinet and master relay AOTs of 24 hours
- On-line testing and maintenance of instrumentation

JUSTIFICATION FOR REQUESTED CHANGES

BASES

The NRC Safety Evaluation approving WCAP-14333 on July 15, 1998 contains certain conditions for implementing the Technical Specification changes in the WCAP. These conditions are:

- Confirm the applicability of the WCAP-14333 analyses to Indian Point Unit 2.
- Examine the need for and place necessary restrictions on concurrent equipment outages when entering the proposed AOTs in order to avoid risk significant configurations (Tier 2).
- Establish a proceduralized configuration risk management program capable of assessing the risk associated with both planned and unplanned work activities (Tier 3).

Attachment C contains the assessment demonstrating the applicability of the WCAP-14333 analyses to Indian Point Unit 2. Attachment D contains the details of the Tier 2 requirements. Addressing the conditions of the NRC Safety Evaluation approving WCAP-14333 constitutes addressing the regulatory positions of Regulatory Guides 1.174 and 1.177.

BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The proposed changes do not involve a significant hazards consideration since:

1. The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

   The reactor protection and engineered safety features functions are not initiators of any design basis accident or event and therefore do not increase the probability of any accident previously evaluated. The proposed changes to the AOTs, bypass times, and allowing on-line testing and maintenance have an insignificant impact on plant safety based on the calculated CDF increase being less than 1.0E-06. Therefore, the proposed changes do not result in a significant increase in the consequences of an accident previously evaluated.

2. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

   The proposed changes do not result in a change in the manner in which the RPS and ESFAS provide plant protection. No change is being made which alters the functioning of the RPS and ESFAS. Rather, the likelihood or probability of the RPS or ESF functioning properly is affected as described above. Therefore, the proposed changes do not create the possibility of a new or different kind of accident nor involve a reduction in the margin of safety as defined in the Safety Analysis Report.

3. The proposed change does not involve a significant reduction in a margin of safety.

   The proposed changes do not alter the manner in which safety limits, limiting safety system setpoints or limiting conditions for operation are determined. The impact of increased AOTs, testing times, and allowing on-line testing and maintenance are expected to result in an overall improvement in safety because:

   - The longer AOTs for the master relays, logic cabinets, and analog channels will promote improved maintenance practices that will provide improved component performance, improved availability of the protection system, and a reduced number of spurious reactor trips and spurious actuation of safety equipment.

   - The longer AOTs and bypass times for the analog channels will provide additional time before being required to place the channel in trip. With the channel in trip, the logic required to cause a reactor trip or a safety system actuation is reduced to 1 of 2 (for 2 of 3 logic) and to 1 of 3 (for 2 of 4 logic). With the reduced logic requirement, the potential for a spurious actuation is increased. Leaving the channel in the bypass state for additional time does reduce the availability of signals to initiate component actuation for event mitigation when required, but as shown in this analysis, the impact on plant safety is small due to the availability of other signals or operator action to trip the reactor or cause component actuation.

- The longer allowed outage times will provide plant operators additional flexibility in operating the plant. There will be additional time available before an action needs to be taken to shut down the plant or place a channel in the tripped state. This additional flexibility will facilitate prioritizing component repairs.

CONCLUSION

This change will not adversely impact the following:

ALARA Program
Security and Fire Protection Programs
Emergency Plan
FSAR or SER Conclusions
Overall Plant Operations and the Environment

Based on the preceding analysis it is concluded that operation of Indian Point Unit No. 2 in accordance with the proposed amendment does not increase the probability of an accident previously evaluated, does not create the possibility of a new or different kind of accident from any accident previously evaluated, nor reduces any margin of plant safety. Therefore, the license amendment does not involve a Significant Hazards Consideration as defined in 10 CFR 50.92.

The proposed change has been reviewed by both the Station Nuclear Safety Committee (SNSC) and the Nuclear Facilities Safety Committee (NFSC). Both Committees concur with the proposed changes.

ATTACHMENT E

SUMMARY OF PROPOSED CHANGES

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
MAY 1999

The proposed license amendment would allow:

- analog channel AOTs of 72 hours
- analog channel test bypass times of 12 hours
- logic cabinet and master relay AOTs of 24 hours
- On-line testing and maintenance of instrumentation

These changes apply to the following RPS and ESFAS instrumentation:

Nuclear Flux Power Range	Overtemperature delta T
Overpower delta T	Low Pressurizer Pressure
Hi Pressurizer Pressure	Pressurizer Hi Water Level
Low Flow Loop ≥ 75% F.P.	Low Flow Two Loops 10-75% F.P.
Lo-Lo Steam Generator Water Level	Undervoltage 6.9 kV Bus
Low frequency 6.9kV Bus	Reactor Trip Logic
Low Auto Stop Oil Pressure Turbine Trip ≥35% F.P.	Reactor Trip Breakers
Engineered Safety Features (SI) Logic	SI - High Containment Pressure (Hi Level)
SI - Pressurizer Low Pressure	SI - High Differential Pressure Between Steam Lines
SI – High Steam Flow in 2/4 Steam Lines Coincident with Low T_{avg} or Low Steam Line Pressure	Containment Spray - High Containment Pressure (Hi-Hi Level)
Auxiliary Feedwater Steam Gen. Water Level (Low-Low) start Motor-Driven Pumps	Auxiliary Feedwater Steam Gen. Water Level (Low-Low) start Turbine-Driven Pump

The instrumentation on control rod protection and Auxiliary Feedwater Turbine-Driven Pump start on Steam Generator Water Level low-low (2/3 in each of two SGs) was evaluated to justify inclusion in this license amendment since these functions were not previously address by TOP or WCAP-14333. Also as part of implementing the technical specification changes, the trigger for entering an AOT on instrumentation covered by this request is based on total number of required channels and not minimum OPERABLE channels as is the case in the current technical specifications.

ATTACHMENT F

AFFIDAVIT FOR WITHHOLDING OF PROPRIETARY INFORMATION

AND

PROPRIETARY INFORMATION NOTICE

AND

COPYRIGHT NOTICE

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
MAY 1999

Westinghouse Electric Company,
a division of CBS Corporation

Box 355
Pittsburgh Pennsylvania 15230-0355

February 15, 1999

CAW-99-1324

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Mr. Samuel J. Collins

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: Indian Point Unit 2, Docket No 50-247, Application for Amendment to Operating License to Implement Relaxations Allowed by WCAP-14333-P-A, Revision 1

Dear Mr. Collins:

The application for withholding is submitted by Westinghouse Electric Company, a division of CBS Corporation ("Westinghouse"), pursuant to the provisions of paragraph (b)(1) of Section 2.790 of the Commission's regulations. It contains commercial strategic information proprietary to Westinghouse and customarily held in confidence.

The proprietary material for which withholding is being requested is identified in the proprietary version of the subject report. In conformance with 10 CFR Section 2.790, Affidavit CAW-99-1324 accompanies this application for withholding, setting forth the basis on which the identified proprietary information may be withheld from public disclosure.

Accordingly, it is respectfully requested that the subject information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10CFR Section 2.790 of the Commission's regulations.

Correspondence with respect to this application for withholding or the accompanying affidavit should reference CAW-99-1324 and should be addressed to the undersigned.

Very truly yours,

H. A. Sepp, Manager
Regulatory and Licensing Engineering

Enclosure

cc: T. Carter/NRC (5E7)

9907120174 990505
PDR ADOCK 05000247
P PDR

CAW-99-1324

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared Henry A. Sepp, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Corporation ("Westinghouse") and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

Henry A. Sepp, Manager
Regulatory and Licensing Engineering

Sworn to and subscribed
before me this 15 day
of February, 1999

Notary Public

Notarial Seal
Janet A. Schwab, Notary Public
Monroeville Boro, Allegheny County
My Commission Expires May 22, 2000
Member, Pennsylvania Association of Notaries

2152A.Doc/1/0215

(1) I am Manager, Regulatory and Licensing Engineering, in the Nuclear Service Division, of the Westinghouse Electric Company and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rulemaking proceedings, and am authorized to apply for its withholding on behalf of the Westinghouse Energy Systems Business Unit.

(2) I am making this Affidavit in conformance with the provisions of 10CFR Section 2.790 of the Commission's regulations and in conjunction with the Westinghouse application for withholding accompanying this Affidavit.

(3) I have personal knowledge of the criteria and procedures utilized by the Westinghouse Energy Systems Business Unit in designating information as a trade secret, privileged or as confidential commercial or financial information.

(4) Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.

(i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.

(ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

(a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

(b) It consists of supporting data, including test data, relative to a process (or

component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.

(c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.

(d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.

(e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.

(f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

(a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.

(b) It is information which is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.

(c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

(d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.

(e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.

(f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.

(iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10CFR Section 2.790, it is to be received in confidence by the Commission.

(iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.

(v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in Attachments C and D of Consolidated Edison Company of New York, Inc. (Con Edison) Application for Amendment to Operating License, Docket No. 50-247. This information is being transmitted by Consolidated Edison Company of New York, Inc. (Con Edison) letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk, Attention Samuel J. Collins. The proprietary information as submitted for use by Consolidated Edison Company of New York, Inc. (Con Edison), Indian Point Unit 2 is expected to be applicable in other licensee submittals in response to certain NRC requirements for justification of the relaxed allowed outage times and bypass test times contained in WCAP-14333.

This information is part of that which will enable Westinghouse to:

(a) Provide documentation supporting determination of the WCAP-14333 analysis on a plant specific basis.

(b) Provide the applicable engineering evaluation which establishes the Tier 2 requirements as identified in WCAP-14333

(c) Provide complete licensing packages to support license amendments.

Further this information has substantial commercial value as follows:

(a) Westinghouse plans to sell the use of similar information to its customers for purposes of implementing the relaxations contained in WCAP-14333.

(b) Westinghouse can sell support and defense of the methodology in the licensing process.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar methodologies and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended for developing the methodology.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.790 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) contained within parentheses located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.790(b)(1).

COPYRIGHT NOTICE

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.790 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

ATTACHMENT G

NON-PROPRIETARY VERSIONS OF

ATTACHMENT C AND D

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
MAY 1999

NON-PROPRIETARY VERSIONS OF

ATTACHMENT C

APPLICABILITY OF WCAP-14333

TO

INDIAN POINT UNIT 2

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
MAY 1999

Attachment C
Applicability of WCAP-14333 to Indian Point 2

STATEMENT OF APPLICABILITY TO INDIAN POINT NUCLEAR GENERATING UNIT 2

Attachment C
Applicability of WCAP-14333 to Indian Point 2

[ ]

Attachment C
Applicability of WCAP-14333 to Indian Point 2

Table 1
WCAP-14333 Implementation Guidelines: Applicability of the Analysis
General Parameters

Parameter	WCAP-14333 Analysis Assumptions	Plant Specific Parameter
Logic Cabinet Type	Relay and SSPS	Relay
Component Test Intervals		
• Analog channels	3 months	3 months
• Logic cabinets (SSPS)	2 months	NA
• Logic cabinets (Relay)	1 month	2 months/staggered[1,2]
• Master Relays (SSPS)	2 months	NA
• Master Relays (Relay)	1 month	2 months/staggered[1,3]
• Slave Relays	3 months	refueling[4]
• Reactor trip breakers	2 months	2 months/staggered[1]
Analog Channel Calibrations		
• Done at-power	yes	yes[5]
• Interval	18 months	24 months
Typical At-Power Maintenance Intervals		
• Analog channels	24 months	≥ 24 months
• Logic cabinets (SSPS)	18 months	NA
• Logic cabinets (Relay)	12 months	≥ 12 months
• Master relays (SSPS)	infrequent	NA
• Master relays (Relay)	infrequent	infrequent
• Slave relays	infrequent	infrequent
• Reactor trip breakers	12 months	≥ 12 months
AMSAC	Credited for AFW pump start	yes

Attachment C
Applicability of WCAP-14333 to Indian Point 2

Total Transient Event Frequency	3.6	3.0
ATWS Contribution to CDF (current PRA model)	8.4E-06	5.8E-07
Total CDF from Internal Events (current PRA model)	5.8E-05	3.4E-05
Total CDF from Internal Events (IPE) (see Table 1A for the list of PRA model changes between the IPE and current model)	Not Applicable	3.8E-05

Notes for Table 1

1. "2 month/staggered": surveillance tests done every 2 months on a staggered basis meaning one RTB/logic train or master relay/logic train is tested every month.

Table 1A
PRA Model Changes since the IPE

The following changes were made to the plant model since the IPE and taken together are believed to account for the change in overall CDF since the IPE:

- Addition of a sixth fan in the emergency diesel generator building and separation of their power supplies such that failure of two of the three emergency diesel generators will not result in failure of the third.
- Addition of black start capability for gas turbine 2. The IPE did not take credit for this gas turbine.
- Use of a more realistic turbine-driven auxiliary feedwater pump mission time given requirements to proceed to cold shutdown on loss of the two redundant motor-driven pumps.
- Development of detailed fault trees for quantifying loss of service water and loss of component cooling water initiating events.
- More detailed modeling of the AC power, DC power, and charging systems that allowed removal of conservative assumptions.

Attachment C
Applicability of WCAP-14333 to Indian Point 2

Table 2
WCAP-14333 Implementation Guidelines: Applicability of the Analysis (Cont'd)
Reactor Trip Actuation Signals

Event	WCAP-14333 Analysis Assumption	Plant Specific Parameter
Large LOCA	Not Required	Agree
Medium LOCA	Not Required	Agree
Small LOCA	Nondiverse[1] w/OA[2]	Agree
Steam Generator Tube Rupture	Nondiverse w/OA	Agree
Interfacing System LOCA	Not Required	Agree
Reactor Vessel Rupture	Not Required	Agree
Secondary Side Breaks	Nondiverse w/OA	Agree
Transient Events, such as: - Positive Reactivity Insertion - Loss of Reactor Coolant Flow - Total or Partial Loss of Main Feedwater - Loss of Condenser - Turbine Trip - Loss of DC Bus - Loss of Vital AC Bus - Loss of Instrument Air - Spurious Safety Injection - Inadvertent Opening of a Steam Valve	Diverse[3] w/OA	Agree
Reactor Trip	Generated by RPS	Agree
Loss of Offsite Power	Not Required by RPS	Agree
Station Blackout	Not Required by RPS	Agree
Loss of Service Water or Component Cooling Water	Nondiverse w/OA	Agree

Notes for Table 2

1. Nondiverse means that (at least) one signal will be generated to initiate reactor trip for the event.
2. OA indicates that an operator could take action to initiate reactor trip for the event, that is, there is sufficient time for action and procedures are in place that will instruct the operator to take action.
3. Diverse means that (at least) two signals will be generated to initiate reactor trip for the event.

Attachment C
Applicability of WCAP-14333 to Indian Point 2

Table 3
WCAP-14333 Implementation Guidelines: Applicability of the Analysis (Cont'd)
Engineered Safety Features Actuation Signals

Safety Function	Event	WCAP-14333 Analysis Assumption	Plant Specific Parameter
Safety Injection	Large LOCA	Nondiverse[1]	Agree
	Medium LOCA	Nondiverse, OA[2] by SI switch on main control board	Agree
	Small LOCA	Nondiverse, OA by SI switch on main control board, OA of individual components	Agree
	Interfacing Systems LOCA	Nondiverse, OA by SI switch on main control board, OA of individual components	Agree
	SG Tube Rupture	Nondiverse, OA by SI switch on main control board, OA of individual components	Agree
	Secondary Side Breaks	Nondiverse, OA by SI switch on main control board, OA of individual components	Agree
Auxiliary Feedwater Pump Start	Events generating SI signal Transient events	Pump actuation on SI signal Nondiverse, AMSAC, operator action	Agree Agree
Main Feedwater Isolation	Secondary Side Breaks	Nondiverse	Agree
Steamline Isolation	Secondary Side Breaks	Nondiverse	Agree
Containment Spray Actuation	All events	Nondiverse signal	Agree
Containment Isolation	All events	From SI signal	Agree
Containment Cooling	All events	From SI signal	Agree

Notes for Table 3

1. Nondiverse means that (at least) one signal will be generated to initiate the engineered safety feature noted for the event.
2. OA indicates that an operator could take action to initiate the engineered safety feature for the event, that is, there is sufficient time for action and procedures are in place that will instruct the operator to take action.

NON-PROPRIETARY VERSIONS OF

ATTACHMENT D

WCAP-14333 IMPLEMENTATION: TIER 2 REQUIREMENTS

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
MAY 1999

Attachment D
WCAP-14333 Implementation: Tier 2 Requirements

Purpose

Identify Tier 2 requirements for implementing the allowed outage time changes in WCAP-14333.

Background

The NRC issued a SER on WCAP-14333, "Probabilistic Risk Analysis of the RPS and ESFAS Test Times and Completion Times", on July 15, 1998. The SER approved the topical report and provided requirements for Licensees on implementation of the changes in this WCAP. One of these requirements is:

- Address Tier 2 and 3 analyses including the CRMP (Configuration Risk Management Program) insights which confirm that these insights are incorporated into their decision making process before taking equipment out of service.

Tier 2 analyses are performed to identify any limitations on equipment unavailability when entering an allowed outage time that is risk-informed, such as those justified in WCAP-14333, to preclude potentially high risk configurations. Tier 3 addresses the establishment of a proceduralized CRMP capable of assessing the risk associated with both planned and unplanned work activities. The purpose of these limitations is to ensure that the plant risk does not increase to unacceptable levels if multiple components are out of service simultaneously. The licensee needs to identify these equipment unavailability limitations.

Tier 2 Limitations

Attachment D
WCAP-14333 Implementation: Tier 2 Requirements

ATTACHMENT H

LIST OF COMMITTMENTS

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
INDIAN POINT UNIT NO. 2
DOCKET NO. 50-247
MAY 1999

ATTACHMENT H

LIST OF COMMITTMENTS

Commitment	Due Date
Establish a program of configuration risk management	90 days after receipt of the approved Technical Specification changes