May 15, 1992

Docket No. 50-397

Mr. G. C. Sorensen, Manager Regulatory Programs Washington Public Power Supply System 3000 George Washington Way P.O. Box 968 Richland, Washington 99352

Dear Mr. Sorensen:

SUBJECT: ISSUANCE OF AMENDMENT FOR THE WASHINGTON PUBLIC POWER SUPPLY SYSTEM NUCLEAR PROJECT NO. 2 (TAC NO. M79897)

The Commission has issued the enclosed Amendment No. 104 to the Facility Operating License No. NPF-21 for WPPSS Nuclear Project No. 2. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated February 21, 1991.

The amendment revises Technical Specifications to extend certain emergency core cooling system actuation instrumentation surveillance test intervals (STIs) from one to three months, to increase the allowable out-of-service time (AOT) for this instrumentation from two to six hours for testing purposes, and to provide for a 24-hour AOT for repairs.

A copy of the related Safety Evaluation is also enclosed. A notice of issuance will be included in the Commission's next regular biweekly <u>Federal</u> <u>Register</u> notice.

Sincerely,

Original signed by

William M. Dean, Project Manager Project Directorate V Division of Reactor Projects III/IV/V Office of Nuclear Reactor Regulation

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# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

May 15, 1992

Docket No. 50-397

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The amendment revises Technical Specifications to extend certain emergency core cooling system actuation instrumentation surveillance test intervals (STIs) from one to three months, to increase the allowable out-of-service time (AOT) for this instrumentation from two to six hours for testing purposes, and to provide for a 24-hour AOT for repairs.

A copy of the related Safety Evaluation is also enclosed. A notice of issuance will be included in the Commission's next regular biweekly <u>Federal</u> <u>Register</u> notice.

Sincerely.

William M. Dean, Project Manager Project Directorate V Division of Reactor Projects III/IV/V Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No.104to NPF-21

2. Safety Evaluation

cc w/enclosures: See next page Mr. G. C. Sorensen Washington Public Power Supply System

cc: Mr. J. W. Baker WNP-2 Plant Manager Washington Public Power Supply System P.O. Box 968, MD 927M Richland, Washington 99352

G. E. C. Doupe, Esq. Washington Public Power Supply System 3000 George Washington Way P. O. Box 968, MD 396 Richland, Washington 99532

Mr. R. G. Waldo, Chairman Energy Facility Site Evaluation Council Mail Stop PY-11 Olympia, Washington 98504

Mr. Alan G. Hosler, Licensing Manager Washington Public Power Supply System P. O. Box 968, MD PE21 Richland, Washington 99352

Mr. J. V. Parrish, Assistant Managing Director for Operations Washington Public Power Supply System P. O. Box 968, MD 1023 Richland, Washington 99352

Mr. L. L. Grumme, Acting Director Licensing and Assurance Washington Public Power Supply System P. O. Box 968, MD 280 Richland, Washington 99352 WPPSS Nuclear Project No. 2 (WNP-2)

Regional Administrator, Region V U.S. Nuclear Regulatory Commission 1450 Maria Lane, Suite 210 Walnut Creek, California 94596

Chairman Benton County Board of Commissioners P. O. Box 190 Prosser, Washington 99350-0190

Mr. R. C. Sorensen U. S. Nuclear Regulatory Commission P. O. Box 69 Richland, Washington 99352

Nicholas S. Reynolds, Esq. Winston & Strawn 1400 L Street, N.W. Washington, D.C. 20005-3502



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

# WASHINGTON PUBLIC POWER SUPPLY SYSTEM

# DOCKET NO. 50-397

# NUCLEAR PROJECT NO. 2

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 104 License No. NPF-21

- The Nuclear Regulatory Commission (the Commission) has found that: 1.
  - The application for amendment by the Washington Public Power Α. Supply System (licensee) dated February 21, 1991, 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 I:
  - The facility will operate in conformity with the application, the Β. provisions of the Act, and the rules and regulations of the Commission;
  - There is reasonable assurance (i) that the activities authorized С. 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;
  - The issuance of this amendment will not be inimical to the common D. defense and security or to the health and safety of the public; and
  - The issuance of this amendment is in accordance with 10 CFR Part Ε. 51 of the Commission's regulations and all applicable requirements have been satisfied.
- Accordingly, the license is amended by changes to the Technical Speci-2. fications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-21 is hereby amended to read as follows:

# (2) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No.  $^{104}$  and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This amendment is effective as of the date of issuance and must be fully implemented within 30 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Charle M. Tramel

Theodore R. Quay, Director Project Directorate V Division of Reactor Projects III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: May 15, 1992

## ATTACHMENT TO LICENSE AMENDMENT

## AMENDMENT NO. 104 TO FACILITY OPERATING LICENSE NO. NPF-21

## DOCKET NO. 50-397

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

## REMOVE

## INSERT

3/4 3-25	3/4 3-25
3/4 3-28	3/4 3-28
3/4 3-34	3/4 3-34
3/4 3-35	3/4 3-35
3/4 3-36	3/4 3-36

## INSTRUMENTATION

## 3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

## LIMITING CONDITION FOR OPERATION

3.3.3 The emergency core cooling system (ECCS) actuation instrumentation channels shown in Table 3.3.3-1 shall be OPERABLE with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.3.3-2 and with EMERGENCY CORE COOLING SYSTEM RESPONSE TIME as shown in Table 3.3.3-3.

APPLICABILITY: As shown in Table 3.3.3-1.

## ACTION:

- a. With an ECCS actuation instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Table 3.3.3-2, 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 one or more ECCS actuation instrumentation channels inoperable within 24 hours, take the ACTION required by Table 3.3.3-1.
- c. With either ADS trip system "A" or "B" inoperable, restore the inoperable trip system to OPERABLE status:
  - 1. Within 7 days, provided that the HPCS and RCIC systems are OPERABLE; otherwise,
  - 2. Within 72 hours.

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to less than or equal to 128 psig within the following 24 hours.

#### SURVEILLANCE REQUIREMENTS

4.3.3.1 Each ECCS actuation instrumentation channel 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 4.3.3.1-1.

4.3.3.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.3.3 The ECCS RESPONSE TIME of each ECCS trip function shown in Table 3.3.3-3 shall be demonstrated to be within the limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific ECCS trip system.

# TABLE 3.3.3-1

# EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

TRIP	FUN	CTION		MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM <sup>(A)</sup>	APPLICABLE OPERATIONAL CONDITIONS	ACTION
A.	DIV	ISION	I TRIP SYSTEM			
	1.	RHR	-A (LPCI MODE) & LPCS SYSTEM			
		a. b. c. d. f. g. h.	Reactor Vessel Water Level - Low Low Low, Level 1 Drywell' Pressure - High LPCS Pump Discharge Flow-Low (Minimum Flow) Reactor Vessel Pressure-Low (LPCS Permissive) Reactor Vessel Pressure-Low (LPCI Permissive) LPCI Pump A Start Time Delay Relay LPCI Pump A Discharge Flow-Low (Minimum Flow) Manual Initiation	2 2 1 1 1 1 1 1/division	1, 2, 3, $4^*$ , $5^*$ 1, 2, 3 1, 2, 3, $4^*$ , $5^*$ 1, 2, 3, $4^*$ , $5^*$	30 30 31 32 33 32 33 32 31 34
	2.	AUTO	MATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "A"#			
		a. b. c. d. e. f. g.	Reactor Vessel Water Level - Low Low Low, Level 1 ADS Timer Reactor Vessel Water Level - Low, Level 3 (Permissi LPCS Pump Discharge Pressure-High (Pump Running) LPCI Pump A Discharge Pressure-High (Pump Running) Manual Initiation Inhibit Switch	2 1 ve) 1 2 2 2/division 1/division	1, 2, 3 1, 2, 3	30 32 32 32 32 35 35

3/4 3-26

# TABLE 3.3.3-1 (Continued)

• :

# EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

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TRI	<u>TRIP_FUNCTION</u>		P FUNCTION MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM		APPLICABLE OPERATIONAL CONDITIONS	ACTION
B.	DIV	ISION	2 TRIP SYSTEM			
	1.	RHR	B and C (LPCI MODE)			
		a. b. c.	Reactor Vessel Water Level - Low Low Low, Level 1 Drywell Pressure - High Reactor Vessel Pressure-Low (LPCI Permissive)	2 2 1/valve	1, 2, 3, 4*, 5* 1, 2, 3 1, 2, 3,	30 30 32
		d. e. f.	LPCI Pump B Start Time Delay Relay LPCI Pump Discharge Flow-Low (Minimum Flow) Manual Initiation	1 1/pump 1/division	4*, 5* 1, 2, 3, 4*, 5* 1, 2, 3, 4*, 5* 1, 2, 3, 4*, 5*	33 32 31 34
	2.	AUT	DMATIC DEPRESSURIZATION SYSTEM TRIP SYSTEM "B"#			
		a. b. c. d.	Reactor Vessel Water Level - Low Low Low, Level 1 ADS Timer Reactor Vessel Water Level - Low, Level 3 (Permissi LPCI Pump B and C Discharge Pressure -	2 1 ve) 1	1, 2, 3 1, 2, 3 1, 2, 3	30 32 32
		e. f.	High (Pump Running) Manual Initiation Inhibit Switch	2/pump 2/division 1/division	1, 2, 3 1, 2, 3 1, 2, 3	32 35 35

WAS		EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION							
SHINGTO	TRIF	FUNCTION			MINIMUM OPERABI CHANNELS PER TRIP SYSTEM(a)	LE APP OPE	LICABLE RATIONAL	ACTION	
N	<b>C</b> .	DIVISION 3 TRIP SYSTEM			<u> </u>		0111003	ACTION	
NUC									
E									
R		a. Reactor Vessel Water Level -	- Low, Low, Le	vel 2	2(b)	1,	2, 3, 4*,	5* 30	
- -		D. Urywell Pressure - High C. Reactor Vessel Water Level-H	ligh lovel 9		2(b) 2(c)	1,	2, 3	30	
LIN		d. Condensate Storage Tanks Lev	vel-Low		2(d)	1,	2, 3, 4^, 2, 3, 4*,	5° 32 5* 36	
N		e. Suppression Pool Water Level	l-High		2(d)	ī,	2, 3, 4*,	5* 36	
		T. HPCS System Flow Rate-Low (M G. Manual Initiation	linimum Flow)		1 1/division	1,	2, 3, 4*,	5* 31	
		g. Handar zintöración				1, .	Z, 3, 4^,	5^ 34	
			TOTAL NO.	CHANNE	LS CHANNELS	OPERATIO	BLE		
3			OF CHANNELS	TO TRI	P OPERABLE	CONDITI	DNS	ACTION	
α ω	D.	LOSS OF POWER							
-28		1. 4.16 kV Emergency Bus Under-							
ŵ		voltage (Loss of Voltage)	2/bus	1/bus	2/bus	1, 2, 3	, 4**, 5**	37	
		2. 4.10 KV Emergency Bus Under- voltage (Degraded Voltage	3/bus	2/buc	2/hue	1 2 3	A** ***	20	
		Division 1 and 2)	57 545	27 DUS	2/ 045	1, 2, 3	, 4~~, 5~^	38	
		3. 4.16 kV Emergency Bus Undervoltag	le o (i	<b>•</b> "	- <i>t</i> i				
		(Degraded Voltage Division 3)	2/bus	2/bus	2/bus	1, 2, 3	, 4**, 5**	38	
			TABLE NOT	ATIONS					
Amer	(a)	A channel may be placed in an inoperable status for up to 6 hours during periods of required surveillance without placing the trip system in the tripped condition provided at least one other OPERABLE channel in the same trip system is monitoring that parameter.							
Idme	(b)	Also activates the associated division	diesel genera	ator.					
ent	(c)	Provides signal to close HPCS pump dis	charge valve d	only on 2	-out-of-2 logic	•			
No	(d)	Provides signal to HPCS pump suction v	alves only.	•	<b>J</b>				
•	*	When the system is required to be OPER	ABLE per Speci	ification	3.5.2 or 3.5.3				
64,	**	Required when ESF equipment is require	d to be OPFRAP	RIF.		-			
10	#	Not required to be OPERARIE when react	or steam domo		ie loce than a		a 100 act	-	
Ā		HE TOTAL OF NO OF ENDER WICH FOUL	vi sceam uume	hissaine	is less uidh O	r equal t	o 150 bei	y.	

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TABLE 3.3.3-1 (Continued)

EMERGENCY CODE COOLING SYSTEM ACTUATION INCIDUMENTATION

# TABLE 3.3.3-3

# EMERGENCY CORE COOLING SYSTEM RESPONSE TIMES

ECO	<u>cs</u>	RESPONSE TIME (Seconds)
1.	LOW PRESSURE CORE SPRAY SYSTEM	<u>&lt;</u> 43
2.	LOW PRESSURE COOLANT INJECTION MODE OF RHR SYSTEM	
	a. Pumps A and B	<u>&lt;</u> 43
	b. Pump C	<u>&lt;</u> 43
3.	AUTOMATIC DEPRESSURIZATION SYSTEM	N. A.
4.	HIGH PRESSURE CORE SPRAY SYSTEM	<u>&lt;</u> 27
5.	LOSS OF POWER	N.A.

+

TRIP	FUNCTION	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
Α.	DIVISION I TRIP SYSTEM 1. RHR-A (LPCI MODE) AND LPCS SYSTEM				
	Low Low Low, Level 1 b. Drywell Pressure - High C. LPCS Pump Discharge Flow-Low	S N.A.	Q Q	R R	1, 2, 3, 4*, 5* 1, 2, 3
	(Minimum Flow)	N.A.	Q	R	1, 2, 3, 4*, 5*
	<ul> <li>a. Reactor Vessel Pressure-Low (LPCS Permissive)</li> <li>a. Reactor Vessel Pressure-Low</li> </ul>	N.A.	Q	R	1, 2, 3, 4*, 5*
	(LPCI Permissive)	N.A.	Q	R	1, 2, 3, 4*, 5*
	Relay Relay g. LPCI Pump A Flow-low	N.A.	Q	Q	1, 2, 3, 4*, 5*
	(Minimum Flow) h. Manual Initiation	N.A. N.A.	Q R	R N. A.	1, 2, 3, 4*, 5* 1, 2, 3, 4*, 5*
	2. AUTOMATIC DEPRESSURIZATION SYSTEM				
	a. Reactor Vessel Water Level - Low Low Low, Level 1	S	0	R	1. 2. 3
	b. ADS Timer	N.A.	Q	Q	1, 2, 3
	Low, Level 3 (Permissive) d. LPCS Pump Discharge	S	Q	R	1, 2, 3
	Pressure-High (Pump Running) e. LPCI Pump A Discharge	N. A.	Q	R	1, 2, 3
	Pressure-High (Pump Running) f. Manual Initiation	N.A. N.A.	Q R	R N.A.	1, 2, 3 1, 2, 3
	g. Inhibit Switch	N.A.	Q	N. A.	1, 2, 3

# TABLE 4.3.3.1-1

# EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

	TAP	3LE 4.3.3.1-	<u>1</u> (Continued)		
	EMERGENCY CORE COOLING SYSTEM	ACTUATION I	NSTRUMENTATION	SURVEILLANCE REQU	UIREMENTS
TRIP F	UNCTION	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
B. <u>DI</u>	VISION 2 TRIP SYSTEM				
1	. RHR B AND C (LPCI MODE)				
2	<ul> <li>a. Reactor Vessel Water Level - Low Low Low, Level 1</li> <li>b. Drywell Pressure - High</li> <li>c. Reactor Vessel Pressure-Low (LPCI Permissive)</li> <li>d. LPCI Pump B Start Time Delay Relay</li> <li>e. LPCI Pump Discharge Flow-Low (Minimum Flow)</li> <li>f. Manual Initiation</li> <li><u>AUTOMATIC DEPRESSURIZATION SYSTEM</u> TRIP SYSTEM "B"#</li> </ul>	S N. A. N. A. N. A. N. A. N. A.	Q Q Q Q R	R R Q R N.A.	1, 2, 3, 4*, 5* 1, 2, 3 1, 2, 3, 4*, 5* 1, 2, 3, 4*, 5* 1, 2, 3, 4*, 5* 1, 2, 3, 4*, 5* 1, 2, 3, 4*, 5*
	<ul> <li>a. Reactor Vessel Water Level - Low Low Low, Level 1</li> <li>b. ADS Timer</li> <li>c. Reactor Vessel Water Level - Low, Level 3 (Permissive)</li> <li>d. LPCI Pump B and C Discharge Pressure-High (Pump Running)</li> <li>e. Manual Initiation</li> <li>f. Inhibit Switch</li> </ul>	S N.A. S N.A. N.A. N.A.	Q Q Q R Q R	R Q R N. A. N. A.	1, 2, 3 1, 2, 3

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WASHINGTON NUCLEAR - UNIT 2

3/4 3-35

Amendment No. 11, 104

	Energenor cone ovoerna ororen n		INSTRONENTATION 3	JONALITITUMOE VEAL	JIREPIENTS
TRIF	P FUNCTION	CHANNEL CHECK	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
C.	DIVISION 3 TRIP SYSTEM				
	1. HPCS SYSTEM				
	a. Reactor Vessel Water Level - Low Low, Level 2 b. Drywell Pressure-High	S N.A.	Q Q	R R	1, 2, 3, 4*, 5* 1, 2, 3
	Level 8	S	Q	R	1, 2, 3, 4*, 5*
	d. Condensate Storage Tank Level - Low	N.A.	Q	R	1, 2, 3, 4*, 5*
	Level - High	N.A.	Q	R	1, 2, 3, 4*, 5*
	(Minimum Flow) g. Manual Initiation	N.A. N.A.	Q Ř	R N.A.	1, 2, 3, 4*, 5* 1, 2, 3, 4*, 5*
D.	LOSS OF POWER				
	<ol> <li>4.16 kV Emergency Bus Undervoltage (Loss of Voltage)</li> </ol>	N.A.	N.A.	R	1, 2, 3, 4**, 5**
	<ol> <li>4.16 kV Emergency Bus Undervoltage (Degraded Voltage Division 1 and 2)</li> </ol>	N.A	M***	R	1, 2, 3, 4**, 5**
	<ol> <li>4.16 kV Emergency Bus Undervoltage (Degraded Voltage Division 3)</li> </ol>	N.A.	N.A.	R	1, 2, 3, 4**, 5**
		TABLE N	<b>OTATIONS</b>		

TABLE 4.3.3.1-1 (Continued)

## EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

#Not required to be OPERABLE when reactor steam dome pressure is less than or equal to 128 psig.

\*When the system is required to be OPERABLE per Specification 3.5.2.

\*\*Required when ESF equipment is required to be OPERABLE.

\*\*\*The secondary time delay 3 second relays are exempt from this monthly testing. The secondary time delay relays associated with this logic will be functionally tested as part of the Logic System Functional Testing (Surveillance Requirement 4.3.3.2)

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

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# RELATED TO AMENDMENT NO. 104 TO FACILITY OPERATING LICENSE NO. NPF-21

# WASHINGTON PUBLIC POWER SUPPLY SYSTEM

# NUCLEAR PROJECT NO. 2

# DOCKET NO. 50-397

## 1.0 INTRODUCTION

By letter dated February 21, 1991, Washington Public Power Supply System submitted a request for changes to the Technical Specifications (TS) for Nuclear Project No. 2. The proposed changes would extend the surveillance test intervals (STIs) and allowable out-of-service time (AOT) for certain emergency core cooling system (ECCS) and reactor core isolation cooling (RCIC) system actuation instrumentation. The proposed change is based on GE Topical Report NEDC-30936, Part 1 and Part 2 (Refs. 1 and 2). The staff has accepted these GE Topical Reports on a generic basis (Refs. 3 and 4), but each licensee was required to show specific applicability of this report to their plant. Also, each licensee was required to confirm that any increase in instrument drift due to the extended STIs is properly accounted for in the setpoint calculation methodology.

## 2.0 EVALUATION

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PDR

The licensee's submittal requested relaxation in the AOTs and STIs for both the ECCS and RCIC systems. The GE Topical Report covers the analysis for only the ECCS instrumentation and does not include the RCIC system instrumentation. The staff's SER of the Topical Report allows the changes to the ECCS instrumentation. At the time of submittal, a GE Topical Report associated with the RCIC system actuation instrumentation (Ref. 5) had not yet been approved by the staff. The licensee subsequently submitted a request for a change to the Technical Specifications related to the RCIC system actuation instrumentation (Ref. 6). This request is currently being evaluated.

With respect to the ECCS instrumentation, the licensee has stated that they have reviewed the setpoint drift characteristics and confirmed that the setpoint will remain within existing allowances for the requested STI extension. The licensee has documented this analysis and it is available for future staff review. This satisfies one of the conditions set in the staff's SER of the GE Topical Report.

The licensee has also submitted a plant specific analysis for ECCS (Ref. 7) which identifies the differences in ECCS design, support systems, and

instrumentation between the plant specific configuration and the configuration used in the generic analysis. These differences were classified by the licensee into three categories:

- (a) differences which have no negative impact on the reliability of the ECCS and hence no analysis is required to resolve these differences;
- (b) differences which could be resolved with engineering judgement and hence only a simple study is required; and
- (c) differences which require additional analysis to evaluate the effect on ECCS reliability.

Based on this analysis, the licensee has identified only one item in category (b) where there is a difference. Where the generic model requires 3 of 8 automatic depressurization system (ADS) valves to open to achieve success, WNP-2 requires 3 of 7 ADS valves to open. Since the probability of failure in either case is very low (less than 7E-15 per demand), this difference has a negligible impact relative to the results obtained for the generic model.

The plant specific analysis also identified two items in category (c) where differences occurred. These items are:

- (1) the generic model has the low pressure coolant injection (LPCI) and low pressure core spray (LPCS) injection valve permissive signal from reactor pressure vessel (RPV) pressure using a "one out of two taken twice" logic, whereas WNP-2 uses one RPV pressure signal per valve for this permissive signal; and
- (2) the generic model has no ADS inhibit switch, whereas WNP-2 has an ADS inhibit switch.

The licensee has performed the analysis based on the GE Topical Report. According to this analysis the failure frequency increases by a small amount, but remains within the topical report's guidelines of acceptability as approved by the staff.

## 3.0 STATE CONSULTATION

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In accordance with the Commission's regulations, the Washington State official was notified of the proposed issuance of the amendment. The State official had no comments.

## 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes surveillance requirements. The NRC 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 individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (56 FR 37592). Accordingly, the 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 the amendment.

#### 5.0 <u>CONCLUSION</u>

The staff finds acceptable the licensee's request of February 21, 1991, to amend the license for the proposed TS changes relative to ECCS actuation instrumentation. However, based on the information provided to support this submittal and the fact that the GE Topical Report associated with the RCIC system actuation instrumentation had not yet been evaluated by the staff at the time of this submittal, the request for extending the STIs and AOT for the RCIC system can not be approved. A request for making a similar change to the TS for the RCIC system is currently being evaluated as a result of another submittal (Ref. 6) by the licensee.

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: H. Garg

Date: May 15, 1992

## REFERENCES

- 1. GE Topical Report NEDC-30936P-A, "Technical Specification Improvement Methodology (With Documentation for BWR ECCS Actuation Instrumentation) Part 1," dated December 1988 (draft submittal November 1985)
- 2. GE Topical Report NEDC-30936P-A, "Technical Specification Improvement Methodology (With Documentation for BWR ECCS Actuation Instrumentation) Part 2," dated December 1988 (draft submittal July 1987)
- 3. Letter from Thadani, A. C., NRC to Grace, D. N., BWR Owners' Group, "General Electric Company (GE) Topical Report NEDC-30936, 'BWR Owners' Group Technical Specification Improvement Methodology (With Demonstration for BWR ECCS Actuation Instrumentation) Part 1'," dated December 9, 1988.
- 4. Letter from Rossi, C. E., NRC to Grace, D. N., BWR Owners' Group, "General Electric Company (GE) Topical Report NEDC-30936, 'BWR Owners' Group Technical Specification Improvement Methodology (With Demonstration for BWR ECCS Actuation Instrumentation) Part 2'," dated December 9, 1988.
- 5. GE Topical Report GENE-770-06-2, "Addendum to Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," dated February 1991.
- 6. Letter to NRC from Sorenson, G. C., WPPSS (GO2-91-188), dated October 15, 1991. "Nuclear Plant No. 2, Operating License NPF-21 Request for Amendment to TS 3/4.3.5 and Tables 3.3.5-1 & 4.3.5.1-1 RCIC Actuation Instrumentation and Surveillance Requirements."
- 7. Letter to BWR Owner's Group Technical Specification Improvement Committee Members for Cleveland Electric Illuminating Company and Washington Public Power Supply System from Rash, L. (GE), 0G7-277-12, dated April 20, 1987. "Plant-Specific Technical Specification Improvement (TSI) Analysis for the Emergency Core Cooling System (ECCS)," (attachment 2, proprietary).