DISTRIBUTION CONTROL LIST

Document Name: ITS/BASES/TRM

CC_NAME	NAME	DEPT	LOCATION
1	OPS PROCEDURE GROUP SUPV.	OPS PROCEDURE GROUP	IP2
3	PLANT MANAGER'S OFFICE	UNIT 3(UNIT 3/IPEC ONLY)	IP2
5	CONTROL ROOM & MASTER	OPS(3PT-D001/6(U3/IPEC)	IP3(ONLY)
11	RES DEPARTMENT MANAGER	RES (UNIT 3/IPEC ONLY)	45-4-A
16	BOCCIO JOHN	I&C OFFICE (SUPERVISOR)	45-2-A
19	STEWART ANN	LICENSING	GSB-2D
20	CHEMISTRY SUPERVISOR	CHEMISTRY DEPARTMENT	45-4-A
21	TSC(IP3)	EEC BUILDING	IP2
22	SHIFT MGR.(LUB-001-GEN)	OPS (UNIT 3/IPEC ONLY)	IP3
23	LIS	LICENSING & INFO SERV	OFFSITE
25	SIMULATOR	TRAIN(UNIT 3/IPEC ONLY)	48-2-A
28	RESIDENT INSPECTOR	US NRC 88' ELEVATION	IP2
32	EOF	E-PLAN (ALL EP'S)	EOF
47	CHAPMAN N	BECHTEL	OFFSITE
50	TADEMY L. SHARON	WESTINGHOUSE ELECTRIC	OFFSITE
55	GSB TECHNICAL LIBRARY	A MCCALLION/IPEC,IP2/IP3	GSB-4B
61	SIMULATOR	TRAIN(UNIT 3/IPEC ONLY)	48-2-A
69	CONROY PAT	LICENSING/ROOM 205	GSB-2D
99	BARANSKI J (ALL)	ST. EMERG. MGMT. OFFICE	OFFSITE
102	BILYOU CHRISTINE I&C ONLY	I&C SUPPORT	45-2-D
106	SIMULATOR INSTRUCT AREA	TRG/3PT-D001-D006 ONLY)	#48
164	CONTROL ROOM & MASTER	OPS(3PT-D001/6(U3/IPEC)	IP3(ONLY)
207	TROY M	PROCUREMENT ENG.	1A
273	FAISON CHARLENE	NUCLEAR LICENSING	WPO-12
319	L.GRANT (LRQ-OPS TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
354	L.GRANT(LRQ-OPS/TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
357	L.GRANT(ITS/INFO ONLY)	TRAINING - ILO CLASSES	48-2-A
424	GRANT LEAH (9 COPIES)	(UNIT 3/IPEC ONLY)	#48
474	OUELLETTE P	ENG., PLAN & MGMT INC	OFFSITE
483	SCHMITT RICHIE	MAINTENANCE ENG/SUPV	45-1-A
484	HANSLER ROBERT	REACTOR ENGINEERING	72'UNIT 2
485	DRAKE RICH	DESIGN ENG/GSB/3RD FLOOR	GSB-3B
489	CLOUGHNESSY PAT	PLANT SUPPORT TEAM	GSB-3B
491	ORLANDO TOM (MANAGER)	PROGRAMS/COMPONENTS ENG	45-3-G
492	FSS UNIT 3	OPERATIONS	K-IP-I210
493	OPERATIONS FIN TEAM	33 TURBIN DECK	45-1-A
494	AEOF/A.GROSJEAN(ALL EP'S)	E-PLAN (EOP'S ONLY)	WPO-12D
495	JOINT NEWS CENTER	EMER PLN (ALL EP'S)	EOF
496	L.GRANT(LRQ-OPS/TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
497	L.GRANT(LRQ-OPS/TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
500	L.GRANT (LRQ-OPS TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
501	L.GRANT (LRQ-OPS TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
512	L.GRANT (LRQ-OPS TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
513	L.GRANT (LRQ-OPS TRAIN)	LRQ (UNIT 3/IPEC ONLY)	#48
518	DOCUMENT CONTROL DESK	NRC (ALL EP'S)	OFFSITE
527	MILIANO PATRICK	NRC/SR. PROJECT MANAGER	OFFSITE
529	FIELDS DEBBIE	OUTAGE PLANNING	IP3/OSB

A001

ATTACHMENT 10.1 SMM CONTROLLED DOCUMENT TRANSMITTAL FORM

SITE MANAGEMENT MANUAL CONTROLLED DOCUMENT TRANSMITTAL FORM - PROCEDURES

Page 1 of 1

Entergy	CONTROLLED DOCUMENT TRANSMITTAL FORM - PROCEDURES

TO: DISTRIBUTION DATE: 1/24/05 PHONE NUMBER: 271-7057

FROM: IPEC DOCUMENT CONTROL

The Document(s) identified below are forwarded for use. In accordance with IP-SMM-AD-103, please review to verify receipt, incorporate the document(s) into your controlled document file, properly disposition superseded, void, or inactive document(s). Sign and return the receipt acknowledgement below within fifteen (15) working days.

AFFECTED DOCUMENT: IP3 ITS / BASES / TRM

DOC #	REV #	TITLE	INSTRUCTIONS

*******FOLLOW THE ATTACHED INSTRUCTIONS*********

**********PLEASE NOTE EFFECTIVE DATE**********

RECEIPT OF THE ABOVE LISTED DOCUMENT(S) IS HEREBY ACKNOWLEDGED. I CERTIFY THAT ALL SUPERSEDED, VOID, OR INACTIVE COPIES OF THE ABOVE LISTED DOCUMENT(S) IN MY POSSESSION HAVE BEEN REMOVED FROM USE AND ALL UPDATES HAVE BEEN PERFORMED IN ACCORDANCE WITH EFFECTIVE DATE(S) (IF APPLICABLE) AS SHOWN ON THE DOCUMENT(S).

NAME (PRINT) SIGNATURE DATE CC# 518

INDIAN POINT 3
TECHNICAL SPECIFICATION BASES

INSTRUCTIONS FOR UPDATE: **12-01/24/05**

	REMOVE		INSERT
a)	List of Effective Sections; 3 pages (Rev. 11)	a)	List of Effective Sections; 3 pages (Rev. 12)
b)	Section 3.7.11; Rev. 2 9 pages	b)	Section 3.7.11; Rev. 3 9 pages

TECHNICAL SPECIFICATION BASES
LIST OF EFFECTIVE SECTIONS

BASES SECTION	REV	NUMBER OF PAGES	EFFECTIVE DATE
Tbl of Cnt	1	4	05/18/2001
B 2.0 SAFETY LIMITS			
B 2.1.1	0	5	03/19/2001
B 2.1.2	0	4	03/19/2001
B 3.0 LCO AND SR APPLICABILITY			
B 3.0	1	15	09/30/2002
B 3.1 REACTIVITY CONTROL			
B 3.1.1	0	6	03/19/2001
B 3.1.2	0	7	03/19/2001
B 3.1.3	1	7	10/27/2004
B 3.1.4	0	13	03/19/2001
B 3.1.5	0	5	03/19/2001
B 3.1.6	0	6	03/19/2001
B 3.1.7	0	8	03/19/2001
B 3.1.8	0	7	03/19/2001
B 3.2 POWER DISTRIBUTION LIMITS			
B 3.2.1	0	7	03/19/2001
B 3.2.2	0	7	03/19/2001
B 3.2.3	0	9	03/19/2001
B 3.2.4	0	7	03/19/2001
B 3.3 INSTRUMENTATION			
B 3.3.1	1	59	09/30/2002
B 3.3.2	3	45	12/04/2002
B 3.3.3	2	19	09/30/2002
B 3.3.4	0	7	03/19/2001
B 3.3.5	1	6	10/27/2004
B 3.3.6	0	10	03/19/2001
B 3.3.7	0	6	03/19/2001
B 3.3.8	1	4	03/17/2003
B 3.4 REACTOR COOLANT SYSTEM			
B 3.4.1	0	6	03/19/2001
B 3.4.2	0	3	03/19/2001
B 3.4.3	1	9	10/27/2004
B 3.4.4	0	4	03/19/2001
B 3.4.5	0	6	03/19/2001
B 3.4.6	0	6	03/19/2001
B 3.4.7	0	7	03/19/2001
B 3.4.8	0	4	03/19/2001
B 3.4.9	2	5	06/20/2003
B 3.4.10	0	5	03/19/2001
B 3.4.11	0	8	03/19/2001
B 3.4.12	1	20	10/27/2004
B 3.4.13	2	6	11/19/2001
B 3.4.14	0	10	03/19/2001
B 3.4.15	2	7	11/19/2001
B 3.4.16	0	7	03/19/2001
B 3.5 ECCS			
B 3.5.1	1	10	10/27/2004
B 3.5.2	0	13	03/19/2001
B 3.5.3	0	4	03/19/2001
B 3.5.4	0	9	03/19/2001

BASES SECTION	REV	NUMBER OF PAGES	EFFECTIVE DATE
B 3.6 CONTAINMENT			
B 3.6.1	0	5	03/19/2001
B 3.6.2	0	9	03/19/2001
B 3.6.3	0	17	03/19/2001
B 3.6.4	0	3	03/19/2001
B 3.6.5	1	5	06/20/2003
B 3.6.6	1	13	12/04/2002
B 3.6.7	0	6	03/19/2001
B 3.6.8	0	6	03/19/2001
B 3.6.9	0	8	03/19/2001
B 3.6.10	0	12	03/19/2001
B 3.7 PLANT SYSTEMS			
B 3.7.1	1	6	12/04/2002
B 3.7.2	0	10	03/19/2001
B 3.7.3	1	7	05/18/2001
B 3.7.4	0	5	03/19/2001
B 3.7.5	0	11	03/19/2001
B 3.7.6	1	4	12/04/2002
B 3.7.7	1	4	12/17/2004
B 3.7.8	0	7	03/19/2001
B 3.7.9	1	9	09/30/2002
B 3.7.10	0	3	03/19/2001
B 3.7.11	**3**	**9**	**01/24/2005**
B 3.7.12	0	4	03/19/2001
B 3.7.13	2	7	06/20/2003
B 3.7.14	0	3	03/19/2001
B 3.7.15	0	5	03/19/2001
B 3.7.16	0	6	03/19/2001
B 3.7.17	0	4	03/19/2001
B 3.8 ELECTRICAL POWER			
B 3.8.1	1	32	01/22/2002
B 3.8.2	0	7	03/19/2001
B 3.8.3	0	13	03/19/2001
B 3.8.4	1	11	01/22/2002
B 3.8.5	0	4	03/19/2001
B 3.8.6	0	8	03/19/2001
B 3.8.7	1	6	06/20/2003
B 3.8.8	1	4	06/20/2003
B 3.8.9	2	14	06/20/2003
B 3.8.10	0	4	03/19/2001
B 3.9 REFUELING OPERATIONS			
B 3.9.1	0	4	03/19/2001
B 3.9.2	0	4	03/19/2001
B 3.9.3	1	8	03/17/2003
B 3.9.4	0	4	03/19/2001
B 3.9.5	0	4	03/19/2001
B 3.9.6	0	4	03/19/2001

REVISION HISTORY FOR BASES

AFFECTED SECTIONS	REV	EFFECTIVE DATE	DESCRIPTION
ALL	0	03/19/01	Initial issue of Bases derived from NUREG-1431, in conjunction with Technical Specification Amendment 205 for conversion of 'Current Technical Specifications' to 'Improved Technical Specifications'.
BASES UPDATE PACKAGE 01-031901			
B 3.4.13 B 3.4.15	1	03/19/01	Changes regarding containment sump flow monitor per NSE 01-3-018 LWD Rev 0. Change issued concurrent with Rev 0.
BASES UPDATE PACKAGE 02-051801			
Table of Contents	1	05/18/01	Title of Section B 3.7.3 revised per Tech Spec Amend 207
B 3.7.3	1	05/18/01	Implementation of Tech Spec Amend 207
BASES UPDATE PACKAGE 03-111901			
B 3.3.2	1	11/19/01	Correction to statement regarding applicability of Function 5, to be consistent with the Technical Specification.
B 3.3.3	1	11/19/01	Changes to reflect reclassification of certain SG narrow range level instruments as QA Category M per NSE 97-3-439, Rev 1.
B 3.4.13 B 3.4.15	2	11/19/01	Changes to reflect installation of a new control room alarm for 'VC Sump Pump Running'. Changes per NSE 01-3-018, Rev 1 and DCP 01-3-023 LWD.
B 3.7.11	1	11/19/01	Clarification of allowable flowrate for CRVS in 'incident mode with outside air makeup.'
BASES UPDATE PACKAGE 04-012202			
B 3.3.2	2	01/22/02	Clarify starting logic of 32 ABFP per EVL-01-3-078 MULTI, Rev 0.
B 3.8.1	1	01/22/02	Provide additional guidance for SR 3.8.1.1 and Condition Statements A.1 and B.1 per EVL-01-3-078 MULTI, Rev 0.
B 3.8.4	1	01/22/02	Revision of battery design description per plant modification and to reflect Tech Spec Amendment 209.
B 3.8.9	1	01/22/02	Provide additional information regarding MCC in Table B 3.8.9-1 per EVL-01-3-078 MULTI, Rev 0.
BASES UPDATE PACKAGE 05-093002			
B 3.0	1	09/30/02	Changes to reflect Tech Spec Amendment 212 regarding delay period for a missed surveillance. Changes adopt TSTF 358, Rev 6.
B 3.3.1	1	09/30/02	Changes regarding description of turbine runback feature per EVAL-99-3-063 NIS.
B 3.3.3	2	09/30/02	Changes to reflect Tech Spec Amendment 211 regarding CETs and other PAM instruments.
B 3.7.9	1	09/30/02	Changes regarding SWN-35-1 and -2 valves per EVAL-00-3-095 SWS, Rev 0.

AFFECTED SECTIONS	REV	EFFECTIVE DATE	DESCRIPTION
			BASES UPDATE PACKAGE 06-120402
B 3.3.2 B 3.6.6 B 3.7.1 B 3.7.6	3 1 1 1	12/04/02	Changes to reflect Tech Spec Amendment 213 regarding 1.4% power uprate.
			BASES UPDATE PACKAGE 07-031703
B 3.3.8 B 3.7.13 B 3.9.3	1 1 1	03/17/2003	Changes to reflect Tech Spec Amendment 215 regarding implementation of Alternate Source Term analysis methodology to the Fuel Handling Accident
			BASES UPDATE PACKAGE 08-032803
B 3.4.9	1	03/28/2003	Changes to reflect Tech Spec Amendment 216 regarding relaxation of pressurizer level limits in MODE 3.
			BASES UPDATE PACKAGE 09-062003
B 3.4.9	2	06/20/2003	Changes to reflect commitment for a dedicated operator per Tech Spec Amendment 216.
B 3.6.5	1	06/20/2003	Implements Corrective Action 11 from CR-IP3-2002-02095; 4 FCUs should be in operation to assure representative measurement of containment air temperature.
B 3.7.11	2	06/20/2003	Correction to Background description regarding system response to Firestat detector actuation per ACT 02-62887.
B 3.7.13	2	06/20/2003	Revision to Background description of FSB air tempering units to reflect design change per DCP 95-3-142.
B 3.8.7 B 3.8.8 B 3.8.9	1 1 2	06/20/2003 06/20/2003 06/20/2003	Changes to reflect replacement of Inverter 34 per DCP-01-022.
			BASES UPDATE PACKAGE 10-102704
B 3.1.3	1	10/27/2004	Clarification of the surveillance requirements for TS 3.1.3 per 50.59 screen.
B 3.3.5	1	10/27/2004	Clarify the requirements for performing a Trip Actuating Device Operational Test (TADOT) on the 480V degraded grid and undervoltage relays per 50.59 screen.
B 3.4.3 B 3.4.12	1 1	10/27/2004	Extension of the RCS pressure/temperature limits and corresponding OPS limits from 16.17 to 20 EFPY (TS Amendment 220).
B 3.5.1	1	10/27/2004	Changes to reflect Tech Spec Amendment 222 regarding extension of completion time for Accumulators.
			BASES UPDATE PACKAGE 11-121004
B 3.7.7	1	12/17/2004	Addition of valves CT-1300 and CT-1302 to Surveillance SR 3.7.7.2 to verify that all city water header supply isolation valves are open. Reflects Tech Spec Amendment 218.
			BASES UPDATE PACKAGE 12-012405
B 3.7.11	3	01/24/2005	Temporary allowance for use of KI/SCBA for unfiltered inleakage above limit

B 3.7 PLANT SYSTEMS

B 3.7.11 Control Room Ventilation System (CRVS)

BASES

BACKGROUND

The CRVS provides a protected environment from which operators can control the unit following an uncontrolled release of radioactivity, chemicals, or toxic gas.

The Control Room Ventilation System consists of the following equipment: a single filter unit consisting of two roughing filters, two high efficiency particulate air (HEPA) filters; two activated charcoal adsorbers for removal of gaseous activity (principally iodines); two 100% capacity filter booster fans; and, a single duct system including dampers, controls and associated accessories to provide for three different air flow configurations. The air-conditioning units associated with the CRVS are governed by LCO 3.7.12, "Control Room Air Conditioning System (CRACS)."

The CRVS is divided into two trains with each train consisting of a filter booster fan and the associated inlet damper and the following components which are common to both trains: the control room filter unit, damper A (filter unit bypass for outside air makeup to the Control Room), damper B (filter unit inlet for outside air makeup to the Control Room), damper C (filter unit inlet for reticulated air), and the toilet and locker room exhaust fan. The two filter booster fans (F 31 and F 32) are powered from safeguards power trains 5A (EDG 33) and 6A (EDG 32), respectively. The automatic dampers that are common to both trains are positioned in the fail-safe position (open or closed) by either of the redundant actuation channels.

The CRVS is an emergency system, parts of which operate during normal unit operations.

The three different CRVS air flow configurations are as follows:

(continued)

BACKGROUND (continued)

a) Normal operation consists of approximately 85% (8500 cfm) unfiltered recirculated flow driven by the air-conditioning fans and approximately 15% (1500 cfm) unfiltered outside air makeup;

b) Incident mode with outside air makeup (i.e. 10% incident mode) consists of approximately 87% (9250 cfm) unfiltered recirculated flow driven by the two safety related air-conditioning fans, at least 10% (> 1000 cfm) filtered recirculated flow driven by either one of the two filter booster fans and 35 to 400 cfm filtered outside air makeup;

c) Incident mode with no outside air makeup (i.e. 100% incident mode) consists of 85% (9100 cfm) unfiltered recirculated flow driven by the two safety related air-conditioning fans, approximately 15% filtered recirculated flow driven by either one of the two filter booster fans and no outside air makeup.

Note that the required recirculation rates are demonstrated with surveillance tests conducted with the air conditioning system (CRACS) operating. An inoperable CRACS fan will affect the flow balance of the CRVS due to interconnected ductwork. Therefore, if the fan associated with one of the air-conditioning units governed by LCO 3.7.12 is inoperable, Conditions in both LCO 3.7.11, Control Room Ventilation System, and LCO 3.7.12, Control Room Air Conditioning System (CRACS), will apply.

Incident mode with outside air makeup is the preferred method of operation during any radiological event because it provides outside air for pressurization of the Control Room. Calculations indicate that very low flowrates (e.g. 35 cfm) of outside air makeup will maintain the Control Room at a slight positive pressure. Nevertheless, due to the difficulty of adjusting and maintaining the flow dampers to provide a low flow, the dampers are typically adjusted to provide a flow of approximately 250 cfm (2.5% outside air makeup). However, a higher volume of outside air makeup to

(continued)

BACKGROUND (continued)

the Control Room increase the thyroid dose to the operators during an accident. Therefore, the Control Room dose assessment assumes a filtered outside air makeup of approximately 400 cfm (4.0% outside air makeup).

On a Safety Injection signal or high radiation in the Control Room (Radiation Monitor R-1), the CRVS will actuate to the incident mode with outside air makeup (i.e. 10% incident mode). This will cause one of the two filters booster fans to start, the locker room exhaust fan to stop, and CRVS dampers to open or close as necessary to filter all incoming outside air and direct approximately 10% of the recirculated air through the filter unit. In the event that the first booster fan fails to start, the second booster fan will start after a predetermined time delay.

If for any reason it is required or desired to operate with 100% recirculated air (e.g., toxic gas condition is identified), the CRVS can be placed in the incident mode with no outside air makeup (i.e. 100% incident mode) by remote manually operated switches. The Firestat detectors will shutdown both air conditioning units associated with the CRVS, resulting in shutting the outside air dampers. However, if any filter booster fan was running at that time, it will continue to run.

The control room is continuously monitored by radiation and toxic gas detectors. On a Safety Injection signal or high radiation in the Control Room (Radiation Monitor R-1), will cause actuation of the emergency radiation state of the CRVS (i.e., incident mode with outside air makeup (i.e. 10% incident mode)).

The CRVS does not actuate automatically in response to toxic gases. Separate chlorine, ammonia and oxygen probes are provided to detect the presence of these gases in the outside air intake. Additionally, monitors in the Control Room will detect low oxygen levels and high levels of chlorine and ammonia. The CRVS may be placed in the incident mode with no outside air makeup (i.e. 100% incident mode) to respond to these conditions. Instrumentation for toxic gas monitoring is governed by the IP3 Technical Requirements Manual (TRM) (Ref. 4). Generally, the manually initiated actions of the toxic gas isolation state are more restrictive, and will override the actions of the emergency radiation state.

(continued)

BASES

BACKGROUND (continued)

A single train will create a slight positive pressure in the control room. The CRVS operation in maintaining the control room habitable is discussed in the FSAR, Section 9.9 (Ref. 1).

The CRVS is designed in accordance with Seismic Category I requirements.

The CRVS is designed to maintain the control room environment for 30 days of continuous occupancy after a Design Basis Accident (DBA) without exceeding a 5 rem whole body dose or 30 rem to the thyroid.

APPLICABLE SAFETY ANALYSES

The CRVS active components are arranged in redundant, safety related ventilation trains. The location of components and ducting within the control building envelope ensures an adequate supply of filtered air to all areas requiring access. The CRVS provides airborne radiological protection for the control room operators, as demonstrated by the control room accident dose analyses for the most limiting design basis accident (i.e., DBA LOCA) fission product release presented in the FSAR, Chapter 14 (Ref. 2).

Radiation monitor R-1 is not required for the Operability of the Control Room Ventilation System because control room isolation is initiated by the safety injection signal in MODES 1, 2, 3, 4, and control room isolation is not required for maintaining radiation exposure within General Design Criteria 19 limits following a fuel handling accident or gas-decay-tank rupture.

The worst case active failure of a component of the CRVS, assuming a loss of offsite power, does not impair the ability of the system to perform its design function. However, the original CRVS design was not required to meet single failure criteria and, although upgraded from the original design, CRVS does not satisfy all requirements in IEEE-279 for single failure tolerance.

(continued)

APPLICABLE SAFETY ANALYSES (continued)

Each of the automatic dampers that are common to both trains is positioned in the fail-safe position (open or closed) by either of the redundant actuation channels.

The CRVS satisfies Criterion 3 of 10 CFR 50.36.

LCO

Two CRVS trains are required to be OPERABLE to ensure that at least one is available. Total system failure could result in exceeding a dose of 5 rem whole body or 30 rem to the thyroid of the control room operator in the event of a large radioactive release.

The CRVS is considered OPERABLE when the individual components necessary to limit operator exposure are OPERABLE in both trains. A CRVS train is OPERABLE when the associated:

a. Filter booster fan and an air-conditioning unit fan powered from the same safeguards power train are OPERABLE;

b. HEPA filters and charcoal adsorbers are not excessively restricting flow, and are capable of performing their filtration functions; and

c. Ductwork, valves, and dampers are OPERABLE or in the incident mode, and air circulation can be maintained.

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

In the event that tracer gas testing identifies unfiltered inleakage in excess of limits established in applicable dose consequence analyses, SCBA and KI pills may be implemented as compensatory measures as long as an evaluation concludes that the operator dose limits of GDC-19 continue to be met.

Instrumentation for toxic gas monitoring is governed by the IP3 Technical Requirements Manual (TRM) (Ref. 4) and is not included in the LCO.

Note that the required recirculation rates are demonstrated with surveillance tests conducted with the air conditioning system (CRACS) operating. An inoperable CRACS fan will affect the flow

(continued)

BASES

LCO (continued)

balance of the CRVS due to interconnected ductwork. Therefore, if the fan associated with one of the air-conditioning units governed by LCO 3.7.12 is inoperable, Conditions in both LCO 3.7.11, Control Room Ventilation System, and LCO 3.7.12, Control Room Air Conditioning System (CRACS), will apply.

APPLICABILITY

In MODES 1, 2, 3, 4 CRVS must be OPERABLE to limit operator exposure during and following a DBA.

The CRVS is not required in MODE 5 or 6, or during movement of irradiated fuel assemblies and core alterations because analysis indicates that isolation of the control room is not required for maintaining radiation exposure within acceptable limits following a fuel handling accident or gas decay tank rupture.

Administrative controls address the role of the CRVS in maintaining control room habitability following an event at Indian Point Unit 2.

ACTIONS

A.1

When one CRVS train is inoperable, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CRVS train is adequate to perform the control room protection function. However, the overall reliability is reduced because a failure in the OPERABLE CRVS train could result in loss of CRVS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and ability of the remaining train to provide the required capability.

B.1

When neither CRVS train is Operable, action must be taken to restore at least one train to OPERABLE status within 72 hours. The 72 hour Completion Time is acceptable because of the low probability of a DBA occurring during this time period.

(continued)

ACTIONS (continued)

C.1 and C.2

If Required Actions A.1 or B.1 are not met within the required Completion Time, the unit must be placed in a MODE that minimizes accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

SURVEILLANCE REQUIREMENTS

SR 3.7.11.1

Standby systems should be checked periodically to ensure that they function properly. As the environment and normal operating conditions on this system are not too severe, testing each train once every month provides an adequate check of this system. Note that a CRVS train includes both the filter booster fan and an air-conditioning unit fan powered from the same safeguards power train. The 31 day Frequency is based on the reliability of the equipment and the two train redundancy availability.

SR 3.7.11.2

This SR verifies that the required CRVS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CRVS filter tests are in accordance with the sections of Regulatory Guide 1.52 (Ref. 3) identified in the VFTP. The VFTP includes testing the performance of the HEPA filter, charcoal adsorber efficiency, minimum flow rate, and the physical properties of the activated charcoal. Specific test Frequencies and additional information are discussed in detail in the VFTP.

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.11.3

This SR verifies that each CRVS train starts and operates on an actual or simulated actuation signal. The Frequency of 24 months is based on operating experience which has demonstrated this Frequency provides a high degree of assurance that the booster fans will operate and dampers actuate to the correct position when required.

SR 3.7.11.4

This SR verifies the integrity of the control room enclosure, and the assumed inleakage rates of the potentially contaminated air. The control room positive pressure, with respect to potentially contaminated adjacent areas, is periodically tested to verify proper functioning of the CRVS. During the operation in the incident mode with outside air makeup (i.e. 10% incident mode), the CRVS is designed to maintain the control room at a slight positive pressure with respect to adjacent areas in order to prevent unfiltered inleakage. The CRVS is designed to maintain this positive pressure with very low volumes of outside air makeup. Due to the difficulty of adjusting and maintaining the flow dampers to provide a low flow, it was determined that the damper should be adjusted to provide a flow of approximately 250 cfm (2.5% outside air makeup). Note that the higher the volume of outside air makeup to the Control Room, the higher the thyroid dose to the operators during an accident. The acceptance criteria of 400 cfm (4.0% outside air makeup) is the volume used in the Control Room dose assessment.

The SR Frequency of 24 months on a staggered test basis is acceptable because operating experience has demonstrated that the control room boundary is not normally disturbed. Staggered testing is acceptable because the SR is primarily a verification of Control Room integrity because fan operation is tested elsewhere.

(continued)

REFERENCES

1. FSAR, Section 9.9.

2. FSAR, Chapter 14.

3. Regulatory Guide 1.52, Rev. 2.

4. IP3 Technical Requirements Manual.