MISCELLANEOUS CORRESPONDENCE

FOR THE DAVIS-BESSE INITIAL EXAMINATION - MARCH 2002

cc: D. Hills
M. Bielby

FirstEnergy

Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, Ohio 43449-9760

Guy G. Campbell
Vice President - Nuclear

419-321-8588
Fax: 419-321-8337

Docket Number 50-346
License Number NPF-3
Serial Number 1-1227
October 23, 2000

United States Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Subject: Voluntary Response to Regulatory Issue Summary 2000-14, Preparation and Scheduling of Operator Licensing Examinations

Ladies and Gentlemen:

The Davis-Besse Nuclear Power Station (DBNPS) is providing information in response to NRC Regulatory Issue Summary 2000-14, Preparation and Scheduling of Operator Licensing Examinations, as requested. The attached NRC Form 536, Operator Licensing Examination Data, provides information through calendar year 2004 for Operator Licensing Examinations and through calendar year 2002 for the Generic Fundamentals Examination.

The DBNPS requests that examinations be scheduled for calendar year 2002 as indicated on the attached NRC Form 536. Please confirm that these dates are available and acceptable.

Should you have any questions or require additional information, please contact Mr. David H. Lockwood, Manager – Regulatory Affairs, at (419) 321-8450.

Very truly yours,

Guy G. Campbell

AWB

Enclosure

cc: S. P. Sands, DB-1 NRC/NRR Senior Project Manager
J. E. Dyer, Regional Administrator, NRC Region III
D. E. Hills, Chief, Operator Licensing Branch, NRC Region III
K. S. Zellers, DB-1 NRC Senior Resident Inspector
Utility Radiological Safety Board

1003

ML003765354

NRC FORM 536 (6-2000) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0131 EXPIRES: 07/31/2002

Estimated burden per response to comply with this voluntary information collection request: 1 hour. This information collection is used to plan budgets and resources for operator examinations. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0131), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

OPERATOR LICENSING EXAMINATION DATA

FACILITY

Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, OH 43449

NRC REGION

III

A. PROPOSED EXAMINATION PREPARATION SCHEDULE

PROPOSED NUMBER	CY 01	CY 02	CY 03	CY 04
ESTIMATED NUMBER OF LICENSEE-PREPARED EXAMINATIONS	0	1	1	1
ESTIMATED NUMBER OF NRC-PREPARED EXAMINATIONS	0	0	0	0

B. INITIAL OPERATOR LICENSE EXAMINATIONS

PROPOSED NUMBER	CY 01	CY 02	CY 03	CY 04
NUMBER OF REACTOR OPERATORS	0	6	6	6
NUMBER OF SENIOR REACTOR OPERATORS - INSTANT	0	4	4	4
NUMBER OF SENIOR REACTOR OPERATORS - UPGRADE	0	2	2	2
NUMBER OF SENIOR REACTOR OPERATORS - LIMITED	0	0	0	0
PROPOSED DATES				
PRIMARY DATE		Feb., 2002	May, 2003	Feb., 2004
ALTERNATE DATE		March, 2002	June, 2003	March, 2004

C. PROPOSED GENERIC FUNDAMENTALS EXAMINATION (GFE) SCHEDULE

PROPOSED NUMBER	CY 01			CY 02		
	FIRST	SECOND	THIRD	FIRST	SECOND	THIRD
ESTIMATED NUMBER OF CANDIDATES	9	0	0	10	0	0

April 2, 2001

Mr. Guy G. Campbell
Vice President - Nuclear
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, OH 43449-9760

Dear Mr. Campbell:

In response to your facility letter dated October 23, 2000, we have tentatively scheduled an initial licensing examination for your operator license applicants at the Davis-Besse Nuclear Power Station during the week of March 4, 2002. Validation of the examination will occur at the station during the week of February 18, 2002. In the unlikely event that we are unable to support the examination during the scheduled week, we will inform you immediately upon discovery of such conditions and make arrangements to administer the examination at a mutually acceptable date.

As stated in your letter and confirmed in a telephone conversation between D. Imlay, Davis-Besse and M. Bielby, NRC, on February 23, 2001, your staff will develop the examination. To support the examination administration date, we have tentatively scheduled the date of January 14, 2002, to begin our review of your submitted examination.

Your letter indicated you are training approximately 12 candidates for the examination. Please inform us if the number of candidates declines below 10 as this will impact the examination schedule. Please also inform us at your earliest opportunity if you discover you are unable to support the examination on the scheduled dates.

Once your staff has determined a schedule for examination development, please have them contact the Chief Examiner to arrange for a suitable examination outline submittal date for NRC review. The intent is for the examination outline to be submitted early in the examination development process. This is to preclude the need to make significant changes to developed examination material as a result of the NRC review of the outline. Mr. Michael E. Bielby, Sr., has been tentatively assigned as the Chief Examiner and can be reached at 630-829-9762.

A supplementary letter will be sent to the training department approximately 120 days prior to the examination outlining examination security expectations, listing the materials required by the NRC to conduct the examination, reconfirming the examination dates, and reconfirming the number of candidates you have in the training program. If you have any questions concerning this information, please contact Mr. Michael Bielby, Sr., of my staff at 630-829-9762.

ML010950154

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

David E. Hills, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-346
License No. NPF-3

cc: B. Saunders, President - FENOC
Plant Manager
Manager - Regulatory Affairs
M. O'Reilly, FirstEnergy
Ohio State Liaison Officer
R. Owen, Ohio Department of Health
A. Schriber, Chairman, Ohio Public Utilities Commission
D. M. Imlay, Training Department

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DATE	03/22/01		03/26/01		03/27/01			

OFFICIAL RECORD COPY

November 15, 2001

Mr. Guy G. Campbell
Vice President - Nuclear
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, OH 43449-9760

Dear Mr. Campbell:

In a telephone conversation on December 14, 2001, between Mr. D. Imlay, Training, and Mr. M. Bielby, Chief Examiner, arrangements were made for the administration of licensing examinations at the Davis-Besse Nuclear Power Station the week of March 4, 2002. In addition, the NRC will make an examination validation visit to your facility the week of February 11, 2002.

As agreed during the telephone conversation, your staff will prepare the examinations based on the guidelines in Revision 8, Supplement 1, of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." The NRC regional office will discuss with your staff any changes that might be necessary before the examinations are administered.

To meet the above schedule, it will be necessary for your staff to furnish the examination outlines by December 3, 2001. The written examinations, operating tests, and the supporting reference materials identified in Attachment 2 of ES-201 will be due by January 14, 2002. Pursuant to 10 CFR 55.40(b)(3), an authorized representative of the facility licensee shall approve the outlines, examinations, and tests before they are submitted to the NRC for review and approval. All materials shall be complete and ready to use. Any delay in receiving the required examination and reference materials, or the submittal of inadequate or incomplete materials, may cause the examinations to be rescheduled.

In order to conduct the requested written examinations and operating tests, it will be necessary for your staff to provide adequate space and accommodations in accordance with ES-402, and to make the simulation facility available on the dates noted above. In accordance with ES-302, your staff should retain the original simulator performance data (e.g., system pressures, temperatures, and levels) generated during the dynamic operating tests until the examination results are final.

Appendix E of NUREG-1021 contains a number of NRC policies and guidelines that will be in effect while the written examinations and operating tests are being administered.

ML013190231

To permit timely NRC review and evaluation, your staff should submit preliminary reactor operator and senior reactor operator license applications (Office of Management and Budget (OMB) approval number 3150-0090), medical certifications (OMB approval number 3150-0024), and waiver requests (if any) (OMB approval number 3150-0090) at least 30 days before the first examination date. If the applications are not received at least 30 days before the examination date, a postponement may be necessary. Signed applications certifying that all training has been completed should be submitted at least 14 days before the first examination date.

This letter contains information collections that are subject to the *Paperwork Reduction Act of 1995* (44 U.S.C. 3501 et seq.). These information collections were approved by the Office of Management and Budget, approval number 3150-0018, which expires on April 30, 2003.

The public reporting burden for this collection is estimated to average 500 hours per response, including the time for reviewing instructions, gathering and maintaining the data needed, writing the examinations, and completing and reviewing the collection of information. Send comments on any aspect of this collection of information, including suggestions for reducing the burden, to the Information and Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, or by Internet electronic mail at BJS1@NRC.GOV; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0018), Office of Management and Budget, Washington, D.C. 20503.

The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Thank you for your cooperation in this matter. Mr. D. Imlay has been advised of the policies and guidelines referenced in this letter. If you have any questions regarding the NRC's examination procedures and guidelines, please contact M. Bielby at 630-829-9762, or me at 630-829-9733.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

David E. Hills, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-346
License No. NPF-3

See Attached Distribution

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NAME	MBielby:sd		DEHills	DEH				
DATE	11/14/01		11/15/01					

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cc: B. Saunders, President - FENOC
Plant Manager
Manager - Regulatory Affairs
M. O'Reilly, FirstEnergy
Ohio State Liaison Officer
R. Owen, Ohio Department of Health
A. Schriber, Chairman, Ohio Public Utilities Commission
D. Imlay, Training Department

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FirstEnergy

Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, Ohio 43449-9760

Guy G. Campbell
Vice President - Nuclear

419-321-8588
Fax: 419-321-8337

Docket Number 50-346

License Number NPF-3

Serial Number 1-1253

November 30, 2001

Mr. M. Bielby
Chief Examiner – Region III
United States Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

Subject: Operator License Examination Outline

Dear Mr. Bielby:

Enclosed is the operator license examination outline required to support the operator license examinations being administered at the Davis-Besse Nuclear Power Station (DBNPS) during the week of March 4, 2002. This examination outline is considered confidential material and shall be withheld from public disclosure until after the scheduled operator examinations are complete.

Mr. Donald Bondy, Senior Nuclear Instructor, can respond to questions with regard to the submitted materials, at (419) 321-8275.

If you require additional information, please contact Mr. David H. Lockwood, Manager – Regulatory Affairs, at (419) 321-8450.

Sincerely yours,

AWB/s
Enclosures

cc: √D. E. Hills, Chief - Operations Branch, NRC Region III w/o
S. P. Sands, DB-1 NRC/NRR Project Manager w/o
D. S. Simpkins, DB-1 Senior Resident Inspector (Acting) w/o
USNRC Document Control Desk w/o
Utility Radiological Safety Board w/o

DEC 11 2001

Docket Number 50-346
License Number NPF-3
Serial Number 1-1253
Attachment
Page 1 of 1

COMMITMENT LIST

The following list identifies those actions committed to by the Davis-Besse Nuclear Power Station in this document. Any other actions discussed in the submittal represent intended or planned actions by Davis-Besse. They are described only as information and are not regulatory commitments. Please notify the Manager – Regulatory Affairs (419) 321-8450 at Davis-Besse of any questions regarding this document or associated regulatory commitments.

COMMITMENTS	DUE DATE
None	N/A

FENOC
FirstEnergy Nuclear Operating Company

Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, Ohio 43449-9760

Howard W. Bergendahl
Vice President - Nuclear

419-321-8588
Fax: 419-321-8337

Docket Number 50-346

License Number NPF-3

Serial Number 1-1256

January 10, 2002

Mr. M. Bielby
Chief Examiner – Region III
United States Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

Subject: Operator License Examination Submittal

Dear Mr. Bielby:

Enclosed are the written operator license examination and supporting materials, prepared by the staff of the Davis-Besse Nuclear Power Station (DBNPS) for the examination to be administered at the DBNPS during the week of March 4, 2002.

The following items, which are considered confidential, are being submitted to the NRC for review and approval. These materials shall be withheld from public disclosure until after the scheduled examination is complete.

- A detailed listing of all materials submitted
- Written operator license examinations
- Three simulator examination scenarios
- Ten walk-through examination job performance measures
- Five administrative topics at the SRO examination level
- Five administrative topics at the RO examination level
- Reference materials that support the examination materials listed above

Mr. Don L. Bondy, Senior Nuclear Instructor, or Mr. John C. House, Senior Nuclear Instructor, can respond to questions with regard to the submitted materials, at (419) 321-8275 or (419) 321-7331, respectively.

Should you have any questions, please contact Mr. David H. Lockwood, Manager - Regulatory Affairs, at (419) 321-8450.

Sincerely yours,

AWB/s

cc: S. P. Sands, DB-1 NRC/NRR Senior Project Manager (w/o)
D. E. Hills, Chief, Operator Licensing Branch, NRC Region III (w/o)
D. S. Simpkins, DB-1 NRC Senior Resident Inspector (Acting) (w/o)
USNRC Document Control Desk (w/o)
Utility Radiological Safety Board (w/o)

COMMITMENT LIST

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COMMITMENTS	DUE DATE
None	N/A

FirstEnergy

Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, Ohio 43449-9760

Docket Number 50-346

License Number NPF-3

Serial Number 1-1264

Mr. M. E. Bielby
Operator License Examiner – Region III
United States Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

Subject: Operator License Post-Examination Documentation Submittal

Dear Mr. Bielby:

Enclosed is the post-examination documentation for the written operator initial license examination administered at the Davis-Besse Nuclear Power Station (DBNPS) on March 8, 2002. The written examination administered at the DBNPS, revised in accordance with Nuclear Regulatory Commission (NRC) comments, was submitted to the NRC on January 14, 2002 (DBNPS Serial Letter Number 1-1256).

The following examination documentation is being submitted to the NRC for review and approval:

- A clean copy of each candidate's answer sheet
- The written examination seating chart
- The Written Examination Grading Quality Checklist
- Documentation of questions asked and answers given to candidates during the written examination
- Documentation of post-examination comments by the candidates
- Post-Examination Analysis

If there are any questions concerning this matter or you require additional information, please contact Mr. David H. Lockwood, Manager – Regulatory Affairs, at 419-321-8450.

Sincerely yours,

William A Mugge

William A. Mugge
Manager – Nuclear Training
Davis-Besse Nuclear Power Station

GMW/s

Attachments

cc: Stephen P. Sands, DB-1 NRC/NRR Project Manager w/o
C. Scott Thomas, DB-1 Senior NRC Resident Inspector w/o
USNRC Document Control Desk w/o
Utility Radiological Safety Board w/o

COMMITMENT LIST

The following list identifies those actions committed to by the Davis-Besse Nuclear Power Station in this document. Any other actions discussed in the submittal represent intended or planned actions by Davis-Besse. They are described only as information and are not regulatory commitments. Please notify the Manager – Regulatory Affairs (419-321-8450) at Davis-Besse of any questions regarding this document or associated regulatory commitments.

COMMITMENTS	DUE DATE
None	N/A

Question: 1

The reactor was at 100% power. A reactor trip occurred 30 minutes ago. The most reactive control rod failed to insert and has been determined to be immovable.

How is the shutdown margin (SDM) effected by the following reactivity effects?

a. Xenon will increase the SDM; the stuck control rod will lower the SDM.

b. Xenon has no effect on the SDM; the stuck control rod has no effect on the SDM.

c. Xenon will increase the SDM; the stuck control rod has no effect on the SDM.

d. Xenon has no effect on the SDM; the stuck control rod will lower the SDM.

Answer:

a.

CHANNEL FUNCTIONAL TEST

1.11 A CHANNEL FUNCTIONAL TEST shall be:

a. Analog channels - the injection of a simulated signal into the channel as close to the primary sensor as practicable to verify OPERABILITY including alarm and/or trip functions.

b. Bistable channels - the injection of a simulated signal into the channel sensor to verify OPERABILITY including alarm and/or trip functions.

CORE ALTERATION

1.12 CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

SHUTDOWN MARGIN

1.13 SHUTDOWN MARGIN shall be the instantaneous amount of reactivity by which the reactor is subcritical or would be subcritical from its present condition assuming:

a. No change in axial power shaping rod position, and

b. All control rod assemblies (safety and regulating) are fully inserted except for the single rod assembly of highest reactivity worth which is assumed to be fully withdrawn.

IDENTIFIED LEAKAGE

1.14 IDENTIFIED LEAKAGE shall be:

a. Leakage (except CONTROLLED LEAKAGE) into closed systems, such as pump seal or valve packing leaks that are captured and conducted to a sump or collecting tank, or

b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE, or

Question: 3

The reactor and all four RCPs were tripped from 100% power due to a loss of cooling water. Both AFPTs tripped on overspeed. The secondary side Reactor Operator:

a. CAN start the MDFP immediately, if he/she announces his/her intended action in accordance with Specific Rule 4, SG Level Setpoints.

b. CAN NOT start the MDFP until Step 4.8, Check for SFRCS Actuation, is reached in DB-OP-02000.

c. CAN start the MDFP immediately with permission from the Unit Supervisor and the Shift Manager.

d. CAN NOT start the MDFP until directed to use Attachment 1, Guidelines for Restoring Feedwater.

Answer:

c.

6.9.2 (Continued)

e. The Shift Manager should, if appropriate, initiate corrective action to repair and restore the disabled protective feature.

f. Administrative procedures and Technical Specifications shall be followed as applicable.

6.10 Abnormal Operations

6.10.1 SM and US Responsibility

During abnormal operations, the Shift Manager/Unit Supervisor shall:

a. Analyze and evaluate the situation and take appropriate action in accordance with applicable procedures.

b. Notify the shift member performing the STA function, who shall evaluate the situation and make appropriate recommendations.

c. Make notifications in accordance with DB-OP-00002, Operations Section Event/Incident Notification and Actions.

d. Call out additional support personnel as required to operate the plant in a safe and reliable manner.

e. Prior to returning to normal operations:

1. The cause of any unexplained power change, any unexpected change in any process variable, or any unexpected change in any instrument reading shall have been determined.

2. Corrective action shall be either completed or pending.

3. Specific authorization shall have been obtained from the Duty Operations Superintendent.

6.10.2 Reactor Operator Responsibility

During abnormal operations, the RO(s) shall:

a. Analyze and evaluate the situation and take appropriate action in accordance with applicable procedures.

b. Stabilize the plant in a known safe condition.

(Continued)

6.10.2 Continued)

c. If conditions warrant, reduce power level as required until the cause of the condition has been determined and the Reactor is known to be in a safe condition.

NOTE 6.10.2.d

Manual actuations shall be considered very carefully since an incorrect manual actuation may have serious consequence to plant safety.

d. Prior to manual actuation of any safety system which is not specifically directed by the Emergency Procedure, an Abnormal or Alarm Response procedure:

1. The RO shall clearly announce his intention to the Control Room SRO.

2. The Control Room SRO should acknowledge the ROs intention, and may direct the action not to be taken.

3. If an SRO is not present, the RO has the responsibility to take actions deemed necessary.

e. Manually actuate safety systems (i.e. RPS, SFAS, SFRCS, or ARTS) as directed by Emergency, Abnormal or Alarm Response Procedures.

6.10.3 Non-Licensed Operator Responsibility

During Abnormal Equipment operation a qualified NLO shall:

a. Analyze and evaluate the situation and take appropriate action as directed by Control Room Personnel and in accordance with applicable procedures.

b. Inform the Control Room of all procedure actions performed.

c. If procedures are inadequate for the situation inform and take direction from Shift Supervision.

SPECIFIC RULE 4

4.0 SG LEVEL SETPOINTS

_____ 4.1 WHEN using AFW,
THEN maintain full continuous AFW flow until the appropriate SG level is reached.

_____ 4.2 IF SFRCS has NOT actuated,
THEN maintain Low Level Limits on the Startup Range using MFW.

_____ 4.3 IF SFRCS has actuated
AND SA2 has NOT actuated,
THEN maintain operable SGs at 49 inches (55 inches) on the Startup Range using AFW OR at 40 inches using MFW if AFW is not available.

_____ 4.4 IF SFRCS has actuated
AND SA2 has actuated OR SCM is NOT Adequate,
THEN maintain operable SGs at 124 inches (130 inches) on the Startup Range using AFW or MFW if AFW is not available.

Question: 9

Direction provided in DB-OP-02000, RPS, SFAS, SFRCS Trip, or SG Tube Rupture, takes priority over abnormal procedures with the exception of:

a. DB-OP-02508, Control Room Evacuation and DB-OP-02519, Serious Control Room Fire.

b. DB-OP-02501, Serious Station Fire and DB-OP-02519, Serious Control Room Fire.

c. DB-OP-02508, Control Room Evacuation and DB-OP-02529, Fire Procedure.

d. DB-OP-02501, Serious Station Fire and DB-OP-02529, Fire Procedure.

Answer:

b.

Davis-Besse Nuclear Power Station

ABNORMAL PROCEDURE

DB-OP-02508

CONTROL ROOM EVACUATION

REVISION 01/TOTAL REWRITE

Prepared by: Jim Chaudk 5/20/99
Date

Sponsor: David Imlay 6/2/99
Superintendent - Operations
Date

Approved by: Dave Eshelman 6/3/99
Manager - Plant Operations
Date
JUN 9 1999

Effective Date: _____

Procedure Classification:

__X__ Safety Related

_____ Quality Related

_____ Non-Quality Related

LEVEL OF USE:
STEP-BY-STEP

CONTROL ROOM EVACUATION

LIST OF EFFECTIVE PAGES

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CONTROL ROOM EVACUATION

TABLE OF CONTENTS

1.0 PURPOSE

To provide guidance to the operating shift for placing the plant in stable HOT STANDBY conditions for events requiring Control Room evacuation with the plant initially in MODE 1 or 2.

This procedure was written assuming the following conditions:

- No failures have occurred to the Main Control Panels that create an accident or preclude safe operation of equipment from outside the Control Room and all necessary automatic features are operational.
- Inaccessibility to the Control Room does not occur simultaneously with or subsequent to an accident condition.

2.0 SYMPTOMS

2.1 Control Room Evacuation

> CAUTION 2.1.1
>
> Evacuation for a serious Control Room fire is covered in DB-OP-02519, Serious Control Room Fire.

2.1.1 Any event or condition other than a serious Control Room fire that would be life-threatening if personnel remain in the Control Room.

2.1.2 GO TO Subsection 3.1.

3.0 IMMEDIATE ACTIONS

3.1 Immediate Actions - Control Room Evacuation

		ACTIONS	DETAILS
_____	3.1.1	Trip the Reactor.	Use either REACTOR TRIP pushbutton. Refer to DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture.
_____	3.1.2	Initiate AFW flow AND isolation of BOTH SGs by depressing SFRCS MANUAL ACTUATION Switches HIS 6403 (AFP 1 TO SG 1 & ISO SG 1) AND HIS 6404 (AFP 2 TO SG 2 & ISO SG 2).	
_____	3.1.3	GO TO Subsection 4.1.	

4.0 SUPPLEMENTARY ACTIONS

4.1 Supplementary Actions-Control Room Evacuation

	ACTIONS		DETAILS
4.1.1	IF time is still available prior to Control Room evacuation, THEN perform the following:		
_____	a.	Trip the Turbine.	EMERGENCY TRIP pushbutton (EHC Panel 1)
_____	b.	Isolate Letdown.	HIS MU 2B, LETDOWN ISO, or HIS MU 3, LETDOWN CLRS OUTLET
_____	c.	Transfer MU Pump suctions MU 3971 and MU 6405 to the BWST position AND press OFF for each switch.	
_____	d.	Start the second Makeup Pump.	HIS MU 24A, MAKEUP PUMP 1 HIS MU 24B, MAKEUP PUMP 2
_____	e.	Set PZR level controller to 100 inches.	MU 32, PRESSURIZER LEVEL CONTROL
_____	f.	Sound the Initiate Emergency Procedures Alarm AND announce twice the intention to evacuate the Control Room.	Either EMER pushbutton on RO's desk or EMER on HSC-3-5724 may be used. The emergency alarm can only be actuated from the Control Room. Attention all personnel; attention all personnel; the Control Room is being evacuated. All members of the Onsite Emergency Organization report to your designated emergency response facilities. All nonessential personnel go to the nearest designated assembly area and standby.

		ACTIONS	DETAILS
_____	4.1.2	Evacuate the Control Room.	
_____	a.	Record time of evacuation. _____	
_____	4.1.3	Proceed to the Fire Brigade Locker Room Key Cabinet and obtain Emergency Key Rings as necessary.	The Shift Manager and the Unit Supervisor have a key to open the Fire Brigade Locker Room Key Cabinet. Four Emergency Key Rings and two Fire Brigade Key Rings are located in the Fire Brigade Locker Room Key Cabinet.
	4.1.4	Distribute the attachments of this procedure and the Emergency Key Rings to the following shift personnel AND direct them to perform those actions required to stabilize the plant:	
_____	a.	Primary Side RO, Attachment 5, 6, 7 AND an Emergency Key Ring	Attachment 5, Primary Side Reactor Operator Actions Outside the Control Room Attachment 6, Manual Control of ICS 11A Attachment 7, Manual Control of ICS 11B
_____	b.	Secondary Side RO, Attachment 4 AND an Emergency Key Ring.	Attachment 4, Secondary Side Reactor Operator Actions Outside the Control Room
_____	c.	IF the Shift Manager is fulfilling the STA function, THEN the SM is given Attachment 3, OTHERWISE the Shift Engineer is given Attachment 3.	Attachment 3, Shift Engineer Actions Outside the Control Room
_____	d.	Shift Manager, Attachment 2	Attachment 2, Shift Manager Actions Outside the Control Room
_____	e.	Unit Supervisor, Attachment 1 AND an Emergency Key Ring.	Attachment 1, Unit Supervisor Actions Outside the Control Room.

	ACTIONS	DETAILS
4.1.5	WHEN the plant is stable THEN direct the Primary Side RO to perform the following:	The plant is considered stable when the following conditions exist:
_____	a. Restore letdown.	• Th is 540°F to 555°F
_____	b. Stop the second Makeup Pump.	• PZR level is greater than 40 inches
_____	c. Realign Makeup Pump suction to the Makeup Tank.	• RCS pressure is 2000 to 2150 PSIG • SG pressure is less than the lowest MSSV setpoint and on AVV control.
_____ 4.1.6	IF plant control has been reestablished from the Control Room AND the unit is still in HOT STANDBY, THEN GO TO DB-OP-06910, Trip Recovery.	
_____ 4.1.7	IF the decision is made to place the unit in COLD SHUTDOWN from outside the Control Room, THEN REFER TO DB-OP-06903, Plant Shutdown and Cooldown.	DB-OP-06903, should be used as a guide. Details for evolutions requiring a coordinated effort should be planned in advance to ensure adequate controls and instrumentation are available.

5.0 REFERENCES

5.1 Developmental

None

5.2 Implementation

5.2.1 DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Leak

5.2.2 DB-OP-02519, Serious Control Room Fire

5.2.3 DB-OP-06903, Plant Shutdown and Cooldown

5.2.4 DB-OP-06910, Trip Recovery

5.2.5 DB-NE-06202, Reactivity Balance Calculations

5.2.6 RA-EP-01700, Alert

5.2.7 RA-EP-01800, Site Area Emergency

5.2.8 RA-EP-02710, Reentry

Approved by David Imlay

Date 10/6/00

Revision 01

Abnormal Procedure Discussion for DB-OP-02508, Control Room Evacuation, Rev01, Ch 01.

Purpose:

The purpose of this procedure is to provide guidance to the operating shift for placing the plant in stable Hot Standby conditions for events requiring Control Room evacuation with the plant initially in Mode 1 or 2. This procedure assumes the following conditions:

1. No failures have occurred to the Main Control Panels that create an accident or preclude safe operation of equipment from outside the Control Room and all necessary automatic features are operational.
2. Inaccessibility to the Control Room does not occur simultaneously with or subsequent to an accident condition.

Applicable Technical Specifications:

None

Applicable USAR Sections and/or Procedures mentioned in the USAR:

Section 7.4.1.6, Auxiliary Shutdown Panel

Discussion:

This procedure is implemented whenever any event or condition, other than a serious Control Room fire, requires a temporary evacuation of the Control Room. The operator can establish and maintain the station in a safe Hot Standby condition using the controls provided at the Aux Shutdown Panel.

The following controls and instrumentation are provided on the Aux Shutdown Panel:

1. Pressurizer level indicators.
2. Pressurizer heater controls and control transfer switches (to or from the Main Control Panels).
3. RC pressure indicators.
4. RC temperature indicators.
5. Steam Generators level indicators.
6. Main Steam pressure indicators.
7. Aux Feed Pump Governor controls and control transfer switches (to or from the Main Control Panels).
8. Service Water to Aux Feedwater isolation valve switches and control transfer switches (to or from the Main Control Panels).

An attempt is made to complete the Immediate Actions of this procedure prior to evacuating the Control Room. The Immediate Actions are to (1) Trip the Reactor, and (2) Initiate AFW Flow and Isolation of Both Steam Generators. These actions place the plant in a known condition and allow control of secondary cooling from the Aux Shutdown Panel. These Immediate Actions are completed in the attachments if they can't be completed from the Control Room.

If time permits prior to evacuating the Control Room, there are Supplemental Actions which can be performed in the Control Room which aid in plant control and reduce component manipulation for the

operators in the plant after the evacuation. These actions are based on the Supplementary Actions contained in DB-OP-02000, RPS, SFAS, SFRCS Trip, or SG Tube Rupture. These actions are duplicated in the attachments if they can't be completed from the Control Room.

When the required actions have been completed to establish local control at the Aux Shutdown Panel, the Assistant Shift Supervisor will notify the Shift Supervisor. The time it takes to establish local control at the Aux Shutdown Panel is used to determine the proper emergency classification. If local control is established within 15 minutes, then an Alert is declared, otherwise a Site Area Emergency is declared.

The attachments contain the steps necessary to stabilize the plant in Hot Standby. The following is a summary of shift personnel responsibilities:

- Shift Supervisor - assumes the duty of the Emergency Director and performs the Emergency Notifications
- Assistant Shift Supervisor (CTRM SRO) - assumes plant control from the Aux Shutdown Panel and directs the completion of the procedure.
- Shift Manager - monitors post-trip plant parameters using the SPDS/DADS located in the Work Support Center to provide technical and analytical support the Shift Supervisor.
- Secondary Side RO - completes the actions required to stabilize the secondary plant from outside the Control Room utilizing the Zone 1 and 2 Operators.
- Primary Side RO - completes the actions required to stabilize the primary plant outside the Control Room and distributes the attachments for manually controlling the AVVs to the Zone 3 Operator.

The station can be maintained in a safe Hot Standby condition from outside the Control Room until access to the Control Room is regained. The need for taking the station to Cold Shutdown condition from outside the Control Room is not anticipated. However, the ability to bring the station to Cold Shutdown condition from outside the Control Room exists with the present station design. Through local controls, all necessary functions can be performed outside the Control Room, and with proper manpower and coordination the station can be cooled down over an extended period of time.

Davis-Besse Nuclear Power Station

OPERATIONS ADMINISTRATIVE INSTRUCTION

DB-OP-01003

OPERATIONS PROCEDURE USE INSTRUCTIONS

REVISION 01

Prepared by: Scott Wise — 5/1/01 Date

Sponsor: w/ Beattie — Superintendent - Operations — 5-7-01 Date

Approved by: Robert W Schrull — Manager – Plant Operations — 5/22/01 Date

Effective Date: 7/9/01

Procedure Classification:

__X__ Safety Related

_____ Quality Related

_____ Non-Quality Related

LEVEL OF USE:

GENERAL REFERENCE

6.5 Use of Emergency and Abnormal Procedures

6.5.1 The Immediate Actions stated in the Emergency Operating Procedure DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture and Abnormal Procedures for a normal Reactor Trip shall be committed to memory by licensed operators. Only ATWS Immediate Actions that deenergize the CRD system from the Control Room shall be committed to memory. The remaining ATWS actions will be directed by the CTRM SRO. When the Emergency Operating Procedure or Abnormal Procedure is entered, the Reactor Operators shall complete their immediate actions. The Control Room SRO shall verify immediate actions have been completed.

6.5.2 Direction provided in DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture takes priority over abnormal procedures with the exception of Serious Control Room Fire and Serious Station Fire Abnormal Procedures.

6.5.3 The following procedure use guidelines apply to the Emergency Operating Procedure DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture. Deviating from these guidelines is at the discretion of the Control Room SRO after obtaining a peer check from the Shift Manager or another SRO.

a. The hierarchy for the performance of DB-OP-02000 sections is as follows.

1. Immediate Operator Actions

2. Specific Rules

3. Symptom Based Procedure Sections in the following priority:

a. Lack of Adequate Subcooling Margin

b. Lack of Heat Transfer

c. Overcooling

d. Steam Generator Tube Rupture.

If a condition occurs that is of a higher priority or higher in the hierarchy, the Control Room SRO will route to the section for those actions.

(Continued)