

## CONTAINMENT SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

with soap bubbles while the containment is pressurized to  $P_a$ , 38 psig, during each Type A test.

- f. Air locks shall be tested and demonstrated OPERABLE per Surveillance Requirement 4.6.1.3.
- g. Leakage from isolation valves that are sealed with fluid from a seal system may be excluded, subject to the provisions of Appendix J, Section III.C.3, when determining the combined leakage rate provided the seal system and valves are pressurized to at least  $1.10 P_a$ , 41.8 psig, and the seal system capacity is adequate to maintain system pressure for at least 30 days.
- h. Type B tests for penetrations employing a continuous leakage monitoring system shall be conducted at  $P_a$ , 38 psig, at intervals no greater than once per 3 years.
- i. All test leakage rates shall be calculated using observed data converted to absolute values. Error analyses shall be performed to select a balanced integrated leakage measurement system.

K j. The provisions of Specification 4.0.2 are not applicable.

- j. Containment Purge + Exhaust Isolation valves Special leak rate test will be performed after each time the valves are opened if the valves have not been tested per the requirements of either Technical Specification 4.6.1.2 d or 4.6.1.2 j within the past six months. The special test shall be conducted by pressurizing the piping section including one valve inside and one valve outside the containment to a pressure greater than 20 psig. The leakage rate per penetration shall not exceed 0.15 L/a.

Docket No. 50-346  
License No. NPF-3  
Serial No. 979  
August 18, 1983  
Attachment II

I. Changes to Davis-Besse Nuclear Power Station Unit 1, Appendix A  
Technical Specifications

A. Time required to Implement. This change is to be effective upon  
NRC approval.

B. Reason for Change (Facility Change Request 83-065).

All incore detector strings, rather than just the symmetric  
incore are used for calculation of hot channel factors ( $F_{\Delta H}^N$  and  
 $F_Q$ ).

C. Safety Evaluation

(See attached)

D. Significant Hazards Considerations

(See attached)

### SAFETY EVALUATION

This amendment request proposes changes to Davis-Besse Technical Specification Section 3.3.3.2 relating to the incore detector instrumentation system. The function of the incore detector system is to represent the spatial neutron flux distribution and to provide input for nuclear physics parameter calculations.

The proposed change corrects an error in Technical Specification 3.3.3.2. This section implies that only the symmetric incore detector system is utilized for calculation of hot channel factors  $F_{\Delta H}^N$  and  $F_Q$ . However, all strings in the incore detector system are used for these calculations. The reference to symmetric incores for the hot channel factor calculation should therefore be corrected since the proposed change reflects the actual operating condition and since operability of at least 75% of the detectors used for this calculation will be required by the proposed change to the Technical Specifications.

Based on the above, it is concluded that this change in the Technical Specification does not present any unreviewed safety questions.

### SIGNIFICANT HAZARD CONSIDERATION

The amendment request to include operability of 75% of the incore detector strings, rather than just the symmetric incores that are used for calculation of hot channel factors ( $F_{\Delta H}^N$  and  $F_Q$ ) does not contain a significant hazard. The request is to correct a misrepresentation in the Technical Specifications that implies only the symmetric incore detector system is utilized for the calculation of the hot channel factors  $F_{\Delta H}^N$  and  $F_Q$ . All strings in the incore system are used for the hot channel factors and this request will reflect the actual operation.

The revised Technical Specification places additional restrictions on the actual total number of incore detectors that are required operable in each core quadrant.

The granting of the request would not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated (10CFR50.92(C)(1)).

The inclusion of operability of 75% of the incore detector string will not increase the probability of an accident previously evaluated.

- 2) Create the possibility of a new or different kind of accident previously evaluated 10CFR50.92(C)(2).

All accidents are still bounded by previous analysis and no new accidents are involved.

- 3) Involve a significant reduction in a margin of safety 10CFR50.92(C)(3).

This request will maintain the margins assumed in the accident analysis.

Therefore, based on the attached safety evaluation and the above, the requested amendment does not contain a Significant Hazard.

d. For  $F_{\Delta H}^N$  and  $F_Q$  measurements with the Incore Detector System at least 75% of all incore detectors in each core quadrant shall be OPERABLE

## INSTRUMENTATION

### INCORE DETECTORS

#### LIMITING CONDITION FOR OPERATION

3.3.3.2 As a minimum, the incore detectors shall be OPERABLE as specified below.

a. For AXIAL POWER IMBALANCE measurements:

1. Nine detectors shall be arranged such that there are three detectors in each of three strings and there are three detectors lying in the same axial plane with one plane at the core mid-plane and one plane in each axial core half.
2. The axial planes in each core half shall be symmetrical about the core mid-plane.
3. The detector strings shall not have radial symmetry.

b. For QUADRANT POWER TILT measurements with the Minimum Incore Detector System:

1. Two sets of 4 detectors shall lie in each core half. Each set of detectors shall lie in the same axial plane. The two sets in the same core half may lie in the same axial plane.
2. Detectors in the same plane shall have quarter core radial symmetry.

c. For QUADRANT POWER TILT ~~and~~ <sup>N</sup> measurements ~~with the Symmetric Incore Detector System~~ at least 75% of the detectors in each core quadrant shall be OPERABLE.

**ADD** **DELETE** **75%** **Symmetric Incore**  
APPLICABILITY: When the incore detection system is used for measurement of:

- a. The AXIAL POWER IMBALANCE.
- b. The QUADRANT POWER TILT.
- c.  $F_{\Delta H}^N$
- d.  $F_Q$

#### ACTION:

With less than the specified minimum incore detector arrangement OPERABLE, do not use incore detectors for the above applicable measurement. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

Docket No. 50-346  
License No. NPF-3  
Serial No. 979  
August 18, 1983  
Attachment III

I. Changes to Davis-Besse Nuclear Power Station Unit 1, Appendix B  
Technical Specifications

A. Time required to Implement. This change is to be effective upon  
NRC approval.

B. Reason for Change (Facility Change Request 83-086).

In response to a letter from Mr. J. Stolz, dated December 21,  
1982 (Log No. 1163) concerning Application to Amend Appendix B  
Technical Specifications.

C. Safety Evaluation

(See attached)

D. Significant Hazards Consideration

(See attached)



## SAFETY EVALUATION

This amendment request concerns deletion of Sections 2.0, 2.1, 2.2, 2.3, 3.1, 4.0 and 5.4.1 Part A of Appendix B Technical Specifications and submittal of an Environmental Protection Plan.

The monitoring required by Sections 2.1, 2.2, 2.3, 2.1 and 4.0 of Appendix B consists of environmental impact assessments of the effect of plant operation on water chemistry, zooplankton, phytoplankton, benthos, migratory birds, vegetation, and noise levels. More specifically, these studies are designed to assess the effect of the cooling tower, the non-radioactive portions of our waste water and the cooling water intake system on the wildlife around the plant. These environmental surveillance programs were developed "to monitor the non-radiological impacts from Davis-Besse..." (Ap.B Sec. 3.1) and as such are non-nuclear related. In addition, these programs require monitoring beyond that which is required in the NPDES Permit for Davis-Besse issued by the Ohio Environmental Protection Agency.

Since the time that the original Technical Specifications for Davis-Besse were issued, a legal decision was made by the Atomic Safety Licensing Appeal Board that has a direct impact upon the non-radiologic environmental monitoring programs of all nuclear power plants. As a result of this 27 December 1978 ("Yellow Creek") decision, the NRC may no longer require any non-radiologic environmental monitoring beyond that which is required by the NPDES Permit. The Board determined that the 1972 amendments to the Federal Water Pollution Control Act vest primary responsibility for controlling water pollution in the EPA Administrator and prohibit other federal agencies from invoking the National Environmental Policy Act, under the guise of License conditions, as authority for imposing different monitoring requirements than those in the NPDES Permit.

Discontinuance of the non-radiologic environmental monitoring does not affect the design or function of any operating systems or monitoring equipment connected with nuclear safety.

Reporting requirements of the Proposed Environmental Protection Plan involve copying the NRC on routine reports sent to the EPA concerning non-conformance with and/or changes to the Station NPDES permit. Furthermore, any unusual environmental occurrence and/or change to the site which might involve an environmental impact question shall be recorded and reported to the NRC within 5 days by telephone, telegraph, or facsimile transmissions followed by a written report.

Based on the above, it is concluded that this change in the Technical Specification does not present any unreviewed safety questions.

## SIGNIFICANT HAZARD CONSIDERATION

The attached amendment request for a change to Appendix B of the Davis-Besse Nuclear Power Station Unit 1 Technical Specification does not contain a significant hazard. The request is being submitted in response to a NRC request to incorporate the non-radiological non-aquatic matters into a new Appendix B retitled as an Environmental Protection Plan (EPP). The request for the EPP follows a proposed guidelines established by the NRC and modified to include revisions due to the "Yellow Creek Decision" and completion of monitoring as required by the Technical Specifications. All radiological Environmental Technical Specifications in Appendix B under current NRC practices are to be incorporated into Appendix A.

The EPP is designed to promote NRC awareness of environmental effects of plant operation while recognizing that regulation of non-radiological aquatic matters is the responsibility of other agencies. In accordance with the proposed EPP unusual or important environmental events that indicates or could result in significant environmental impact causally related to plant operation shall be reported and promptly reported to the NRC.

The granting of the request would not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated 10CFR50.92(C)(1).

This request will not increase the probability or consequences of an accident previously evaluated as the radiological parts of Appendix B will be covered by Appendix A. The non-radiological non-aquatic matters will be governed by other agencies.

- 2) Create the possibility of a new or different kind of accident previously evaluated 10CFR50.92(C)(2).

All accidents are still bounded by previous analysis and no new accidents are involved.

- 3) Involve a significant reduction in a margin of safety 10CFR50.92(C)(3).

This request will maintain the margins assumed in the accident analysis.

Therefore, based on the attached safety evaluation and the above, the requested amendment does not contain a Significant Hazard.



APPENDIX B, PART II, NON-RADIOLOGICAL  
TO FACILITY OPERATING LICENSE NO. NPF-3  
DAVIS-BESSE NUCLEAR POWER STATION  
UNIT NO. 1

TOLEDO EDISON COMPANY  
DOCKET NO. 50-346

ENVIRONMENTAL PROTECTION PLAN  
(NON-RADIOLOGICAL)

July, 1983

DAVIS-BESSE NUCLEAR POWER STATION

UNIT 1

ENVIRONMENTAL PROTECTION PLAN

(NON-RADIOLOGICAL)

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## 1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of environmental values during construction and operation of the nuclear facility. The principal objectives of the EPP are as follows:

- (1) Verify that the plant is operated in an environmentally acceptable manner, as established by the FES and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES which relate to water quality matters are regulated by way of the licensee's NPDES permit.

In the FES-OL dated October, 1975, the staff considered the environmental impacts associated with the operation of the one-unit Davis-Besse Nuclear Power Station. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment. The Appendix B Environmental Technical Specifications issued with the license included monitoring programs and other requirements to permit resolution of the issues.

Aquatic issues are now addressed by the effluent limitations, monitoring requirements and the Section 316(b) demonstration requirement contained in the effective NPDES Permit issued by the State of Ohio Environmental Protection Agency. The NRC will therefore rely on this agency for regulation of matters involving water quality and aquatic biota.

### 3.0 Consistency Requirements

#### 3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such changes, tests or experiments do not involve an unreviewed environmental question, and do not involve a change in the Environmental Protection Plan.\* Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this section.

Before engaging in additional construction or operational activities which may affect the environment, the licensee shall prepare and record an environmental evaluation of such activity.\*\* When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activities and obtain prior approval from the Director, Office of Nuclear Reactor Regulation.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the final environmental statement (FES) as modified by staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level [in accordance

\*This provision does not relieve the licensee of the requirements of 10 CFR 50.59.

\*\*Activities are excluded from this requirement if all measurable nonradiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction.

with 10 CFR Part 51.5(b)(2)] or (3) a matter not previously reviewed and evaluated in the documents specified in (1) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include a written evaluation which provide bases for the determination that the change, test or experiment does not involve an unreviewed environmental question. The licensee shall include as part of his Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

### 3.2 Reports Related to the NPDES Permits

Violations of the NPDES Permit (pursuant to Section 401 of the Clean Water Act) shall be reported to the NRC by submittal of undocketed copies of the reports required by the NPDES Permit.

The NRC will receive undocketed copies of changes and additions to the NPDES Permit within 30 days following the date that the change is received by the licensee. If the permit, in part or in its entirety, is appealed and stayed, the NRC will receive an undocketed copy of the correspondence within 30 days following the date the stay is granted and received by the licensee.

The NRC shall be notified of changes to the effective NPDES Permit proposed by the licensee by providing NRC with an undocketed copy of the proposed change at the same time it is submitted to the permitting agency. The notification of a licensee-initiated change shall include an undocketed copy of the requested revision submitted to the permitting agency. The licensee shall



provide the NRC an undocketed copy of the application for renewal of the NPDES permit at the same time the application is submitted to the permitting agency.

### 3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, or local environmental regulations are not subject to the requirements of Section 3.1.

#### 4.0 Environmental Conditions

##### 4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to plant operation shall be recorded and promptly reported to the NRC within 5 days by telephone, telegraph, or facsimile transmissions followed by a written report. The following are examples: excessive bird impaction events, onsite plant or animal disease outbreaks, mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973, fish kills, increase in nuisance organisms or conditions and unanticipated or emergency discharge of waste water or chemical substances.

No routine monitoring programs are required to implement this condition.

## 5.0 Administrative Procedures

This Section applies to Appendix B, Part 2, non-radiological, only

### 5.1 Review and Audit

The licensee shall provide for review and audit of compliance with the Environmental Protection Plan. The audits shall be conducted independently of the individual or groups responsible for performing the specific activity. A description of the organization structure utilized to achieve the independent review and audit function and results of the audit activities shall be maintained and made available for inspection.

### 5.2 Records Retention

Records and logs relative to the environmental aspects of plant operation shall be made and retained in a manner convenient for review and inspection. These records and logs shall be made available to NRC on request.

Records of modifications to plant structures, systems and components determined to potentially affect the continued protection of the environment shall be retained for the life of the plant. All other records, data and logs relating to this EPP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

### 5.3 Changes in Environmental Protection Plan

Request for change in the Environmental Protection Plan shall include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation of such changes to the Environmental Protection Plan shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the Environmental Protection Plan.

### 5.4 Plant Reporting Requirements

#### 5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC prior to May 1 of each year. The initial report shall be submitted prior to May 1 of the year following issuance of the operating license. The period of the first report shall begin with the date of issuance of the operating license.

The report shall include summaries and analyses of the results of the environmental protection activities required by Section 4.0 of this Environmental Protection Plan for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous non-radiological environmental monitoring reports, and an assessment of the observed impacts of the plant operation on the environment. If harmful effects or evidence of trends towards irreversible damage to the environment are observed, the licensee shall provide a detailed analysis of the data and a proposed course of action to alleviate the problem.

Docket No. 50-346  
License No. NPF-3  
Serial No. 979  
August 18, 1983  
Attachment IV

I. Changes to Davis-Besse Nuclear Power Station Unit 1, Appendix A  
Technical Specifications

A. Time required to Implement. This change is to be effective upon  
NRC approval.

B. Reason for Change (Facility Change Request 83-070).

Corrects a typographical error for the containment isolation  
valves in penetration #74B.

C. Safety Evaluation

(See attached)

D. Significant Hazards Considerations

(See attached)

## SAFETY EVALUATION

This amendment request is to correct a typographical error in the Technical Specification Section 3.6.3.1, Table 3.6-2 for the containment isolation valves in penetration #74B. There are two valves labeled CV5011D where one of which should be CV5010D. Valve CV5011D is located inside containment and CV5010D is located outside of the containment.

The safety function of valves CV5010D and CV5011D is for containment isolation following a LOCA. They are part of the containment gas analyzer system.

Since the proposed change is due to a typographical error, there is no change in system hardware and function, or the system operating procedure.

Based on the above, it is concluded that this change in the Technical Specification does not present any unreviewed safety questions.



#### SIGNIFICANT HAZARD CONSIDERATION

The attached amendment request to correct a typographical error in the Davis-Besse Technical Specification Table 3.6-2 does not contain a Significant Hazard. The revision only changes a Containment Air Sample Valve Number which is incorrectly labeled. This change is purely an administrative change to the technical specifications which is in accordance with examples of amendments that are considered not likely to involve Significant Hazards Considerations published in the Federal Register.

The granting of the request would not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated 10CFR50.92(C)(1).

This request does not contain increase in the probability or consequences of an accident previously evaluated.

- 2) Create the possibility of a new or different kind of accident previously evaluated 10CFR50.92(C)(2).

All accidents are still bounded by previous analysis and no new accidents are involved.

- (3) Involve a significant reduction in a margin of safety 10CFR50.92(C)(3).

This request will maintain the margins assumed in the accident analysis.

Therefore, based on the attached safety evaluation and the above, the requested amendment does not contain a Significant Hazard.

TABLE 3.6-2

## CONTAINMENT ISOLATION VALVES (Continued)

<u>PENETRATION VALVE NUMBER</u>	<u>NUMBER</u>	<u>FUNCTION</u>	<u>ISOLATION TIME (seconds)</u>
67	CV5090	Hydrogen Dilution System Supply	60
68A	SS235A	Pressurizer Quench Tank Sample	30
68A	SS235B	Pressurizer Quench Tank Sample	30
68B	CV5010B	Containment Air Sample	15
68B	CV5011B	Containment Air Sample	15
69	CV5065	Hydrogen Dilution System Supply	60
71B	CV5010A	Containment Air Sample	15
71B	CV5011A	Containment Air Sample	15
71C	CV1544	Core Flood Tank N2 Fill	10
73B	CV5010C	Containment Air Sample	15
73B	CV5011C	Containment Air Sample	15
74B	<del>CV5011D</del>	Containment Air Sample	15
74B	CV5011D	Containment Air Sample	15
B. CONTAINMENT PURGE AND EXHAUST ISOLATION			
33 ##	CV5005	Containment Vessel Purge Inlet Line	10
33 ##	CV5006	Containment Vessel Purge Inlet Line	10
34 ##	CV5007	Containment Vessel Purge Outlet Line	10
34 ##	CV5008	Containment Vessel Purge Outlet Line	10
C. OTHER			
5 #	SW1366	Containment Air Cooling Units SW Inlet Line	N/A
6 #	SW1368	Containment Air Cooling Units SW Inlet Line	N/A
7 #	SW1367	Containment Air Cooling Units SW Inlet Line	N/A
9 #	SW1356	Containment Air Cooling Units SW Outlet Line	N/A

Docket No. 50-346  
License No. NPF-3  
Serial No. 979  
August 18, 1983  
Attachment V

I. Changes to Davis-Besse Nuclear Power Station Unit 1, Appendix A  
Technical Specifications

A. Time required to Implement. This change is to be effective upon  
NRC approval.

B. Reason for Change (Facility Change Request 82-158).

To provide for a shutdown of the unit, if required, due to  
equipment inoperability that places the plant both outside the  
Limiting Condition for Operation and the applicable Action  
Statement.

C. Safety Evaluation

(See attached)

D. Significant Hazards Considerations

(See attached)

## SAFETY EVALUATION

This amendment request changes two Sections, 3.0.3 and 4.0.3, and adds Section 3.0.5, of the Davis-Besse (DB) Technical Specifications. The safety function of Section 3.0.3 and 3.0.5 is to provide for a shutdown of the unit, if required, due to equipment inoperability that places the plant both outside the Limiting Condition for Operation and the applicable Action Statement.

The DB Technical Specifications currently require the unit to be placed in Hot Standby (Mode 3) within one hour of the time the plant goes outside the bounds of the Action Statement. If the plant is operating at high power levels, it cannot be shutdown in a controlled manner within one hour. Compliance with the one hour requirement, therefore, places a potential challenge to safety that the Technical Specification Limiting Conditions for Operation and the Action Statement are designed to prevent. The B&W STS (Rev. 4), however, allows six hours to reach Mode 3 with the provision that actions be initiated to place the unit in Mode 3 within one hour. Since the six hour time period allows a more orderly shutdown, the potential for challenge to Davis-Besse's safety systems, based on engineering judgement, is lowered, thereby increasing the margin of safety.

The safety function of Section 4.0.3 is to provide guidance in the determination of equipment/system operability in the event of missed surveillance tests. This amendment adds up to a 12 hour period to allow the missed test to be performed before entry into the shutdown statement is required. This period will help avoid an unnecessary transient on the plant, and therefore, a potential challenge to safety systems. This provision is allowed for surveillance tests of a performance interval of one month or longer. Those tests performed more frequently will be required to be performed within the time interval allotted as discussed in the associated ACTION requirements. Engineering judgement dictates that the relative risk due to potential inoperability of a missed surveillance test is lower than the risk due to a plant shutdown created transient before a surveillance can be performed to confirm the actual condition of the equipment.

The twelve (12) hour time period has been arrived at following a review of various surveillance test procedures along with the normal completion times to perform each of the tests. Examples of surveillance tests are included with completion times:

ST 5031.14	SFRCS Monthly Test	8 hours
ST 5031.19	ARTS Monthly Functional Test	8 hours
ST 5031.03	Containment Pressure to SFAS Calibration	8 hours

In addition to these completion times, a four hour time period was deemed necessary in order to allow for the appropriate off site personnel to be called and arrive on site, calibrate test equipment, prepare test paperwork, set up test prerequisites and plant lineups, and obtain applicable approvals permitting test performance.

Section 3.0.5. to be added to the Davis-Besse (DB) Technical Specifications details the operability and action requirements for systems and equipment

when either its normal or emergency power supply is inoperable. It allows operation to be governed by the time limits of the ACTION statement associated with the Limiting Condition for Operation for the normal or emergency power source, not the individual ACTION statements for each system, subsystem, train, component or device that is determined to be inoperable solely because of the inoperability of its normal or emergency power source. The safety function for this Section 3.0.5 will provide consistent operation and interpretation of the Limiting Condition for Operation for the system affected by a loss of normal or emergency power supply. No new requirements are added, only clarified and simplified.

Therefore, based on engineering judgement, the margin of safety of Davis-Besse will not be decreased by this amendment.

Based on the above, it is concluded that this change in the Technical Specification does not present any unreviewed safety questions.

### SIGNIFICANT HAZARD CONSIDERATION

The attached request is a revision to a previous submittal dated July 1, 1983 (Serial No. 961) and does not contain a significant hazard. Technical Specification Section 3.0.5 is being added to Appendix A. Toledo Edison is adding this section which is part of the Standard Technical Specification. The Limiting Condition for Operation was not part of our original specifications but the intent was part of our operating policy. This part of the request formalizes this action.

Contained within the application is a revision to Section 4.0.3.1 which adds "This applies only to those Surveillance Requirements performed on a monthly or longer periodic interval". The additional time (12 hours) to perform administratively missed surveillances will help avoid an unnecessary transient on the plant and therefore, a potential challenge to the safety system. This provision is allowed for surveillance tests of a performance interval of one month or longer. Those tests performed more frequently will be required to be performed within the time interval allotted as discussed in the associated ACTION requirements.

The granting of the request would not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated 10CFR50.92(C)(1).

No accident or accident analysis is affected by this change. Only the time requirements to enter into a specific mode changing action statement are altered to permit a more orderly shutdown and to eliminate unnecessary transients. The additional time allowed to perform monthly or longer surveillance internal tests does not represent a significant time change.

- 2) Create the possibility of a new or different kind of accident previously evaluated 10CFR50.92(C)(2).

All accidents are still bounded by previous and no new accidents are involved.

- 3) Involve a significant reduction in a margin of safety 10CFR50.92(C)(3).

This request will maintain the margins assumed in the accident analysis.

Therefore, based on the attached safety evaluation and the above, the requested amendment does not contain a Significant Hazard.



### 3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

#### 3/4.0 APPLICABILITY

##### LIMITING CONDITION FOR OPERATION

3.0.1 Limiting Conditions for Operation and ACTION requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for each specification.

3.0.2 Adherence to the requirements of the Limiting Condition for Operation and/or associated ACTION within the specified time interval shall constitute compliance with the specification. In the event the Limiting Condition for Operation is restored prior to expiration of the specified time interval, completion of the ACTION statement is not required.

3.0.3 In the event a Limiting Condition for Operation and/or associated ACTION requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the facility shall be placed in at least HOT STANDBY within 1 hour and in COLD SHUTDOWN within the following 30 hours unless corrective measures are completed that permit operation under the permissible ACTION statements for the specified time interval as measured from initial discovery. Exceptions to these requirements shall be stated in the individual specifications.

3.0.4 Entry into an OPERATIONAL MODE or other specified applicability condition shall not be made unless the conditions of the Limiting Condition for Operation are met without reliance on provisions contained in the ACTION statements unless otherwise excepted. This provision shall not prevent passage through OPERATIONAL MODES as required to comply with ACTION statements.

3.0.5 ← insert attached 3.0.5

##### SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance Requirements shall be applicable during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with:

- a. A maximum allowable extension not to exceed 25% of the surveillance interval, and
- b. A total maximum combined interval time for any 3 consecutive tests not to exceed 3.25 times the specified surveillance interval.

### 3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

#### 3/4.0 APPLICABILITY

#### LIMITING CONDITION FOR OPERATION

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3.0.3 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, action shall be initiated within 1 hour to place the unit in a MODE in which the Specification does not apply to placing it, as applicable, in:

1. At least HOT STANDBY within 6 hours,
2. At least HOT SHUTDOWN within the following 6 hours, and
3. At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual Specifications.

### 3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

#### 3/4.0 APPLICABILITY

##### LIMITING CONDITION FOR OPERATION

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3.0.5 When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are OPERABLE, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, within 2 hours action shall be initiated to place the unit in a MODE in which the applicable Limiting Condition for Operation does not apply by placing it as applicable in:

1. At least HOT STANDBY within 6 hours,
2. At least HOT SHUTDOWN within the following 6 hours, and
3. At least COLD SHUTDOWN within the subsequent 24 hours.

This Specification is not applicable in MODES 5 or 6.

### 3/4.0 APPLICABILITY

#### BASES

The specifications of this section provide the general requirements applicable to each of the Limiting Conditions for Operation and Surveillance Requirements within Section 3/4.

3.0.1 This specification defines the applicability of each specification in terms of defined OPERATIONAL MODES or other specified conditions and is provided to delineate specifically when each specification is applicable.

3.0.2 This specification defines those conditions necessary to constitute compliance with the terms of an individual Limiting Condition for Operation and associated ACTION requirement.

3.0.3 This specification delineates the ACTION to be taken for circumstances not directly provided for in the ACTION statements and whose occurrence would violate the intent of the specification. For example, Specification 3.5.1 calls for each Reactor Coolant System core flooding tank to be OPERABLE and provides explicit ACTION requirements when one tank is inoperable. Under the terms of Specification 3.0.3, if more than one tank is inoperable, the facility is required to be in at least HOT STANDBY within 1 hour and in COLD SHUTDOWN within the following 30 hours.

3.0.4 This specification provides that entry into an OPERATIONAL MODE or other specified applicability condition must be made with (a) the full complement of required systems, equipment or components OPERABLE and (b) all other parameters as specified in the Limiting Conditions for Operation being met without regard for allowable deviations and out of service provisions contained in the ACTION statements.

The intent of this provision is to insure that facility operation is not initiated with either required equipment or systems inoperable or other specified limits being exceeded.

Exceptions to this provision have been provided for a limited number of specifications when startup with inoperable equipment would not affect plant safety. These exceptions are stated in the ACTION statements of the appropriate specifications.

3.0.5 insert 3.0.5 (BASES)

Replace  
by attached  
3.0.3  
(BASES)

3.0.3 This specification delineates the ACTION to be taken for circumstances not directly provided for in the ACTION statements and whose occurrence would violate the intent of the specification. For example, Specification 3.5.1 requires each Reactor Coolant System core flooding tank to be OPERABLE and provides explicit ACTION requirements if one tank is inoperable. Under the terms of the Specification 3.0.3, if more than one tank is inoperable, the unit is required to be in at least HOT STANDBY within 6 hours and in at least HOT SHUTDOWN within the following 6 hours. As a further example, Specification 3.6.2.1 requires two Containment Spray Systems to be OPERABLE and provides explicit ACTION requirements if one spray system is inoperable: Under the terms of Specification 3.0.3, if both of the required Containment Spray Systems are inoperable, the unit is required to be in at least HOT STANDBY within 6 hours, in at least HOT SHUTDOWN within the following 6 hours, and in at least COLD SHUTDOWN in the following 24 hours. It is assumed that the unit is brought to the required MODE within the required times by promptly initiating and carrying out the appropriate ACTION statement.



## APPLICABILITY

### BASES

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3.0.5 This specification delineates what additional conditions must be satisfied to permit operation to continue, consistent with the ACTION statements for power sources, when a normal or emergency power source is not OPERABLE. It specifically prohibits operation when one division is inoperable because its normal or emergency power source is inoperable and a system, subsystem, train, component or device in another division is inoperable for another reason.

The provisions of this specification permit the ACTION statements associated with individual systems, subsystems, trains, components, or devices to be consistent with the ACTION statements of the associated electrical power source. It allows operation to be governed by the time limits of the ACTION statement associated with the Limiting Condition for Operation for the normal or emergency power source, not the individual ACTION statements for each system, subsystem, train, component or device that is determined to be inoperable solely because of the inoperability of its normal or emergency power source.

For example, Specification 3.8.1.1 requires in part that two emergency diesel generators be OPERABLE. The ACTION statement provides for a 72-hour out-of-service time when one emergency diesel generator is not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 3.0.5, all systems, subsystems, trains, components and devices supplied by the inoperable emergency power source would also be inoperable. This would dictate invoking the applicable ACTION statements for each of the applicable Limiting Conditions for Operation. However, the provisions of Specification 3.0.5 permit the time limits for continued operation to be consistent with the ACTION statement for the inoperable emergency diesel generator instead, provided the other specified conditions are satisfied. In this case, this would mean that the corresponding normal power source must be OPERABLE, and all redundant systems, subsystems, trains, components, and devices must be OPERABLE, or otherwise satisfy Specification 3.0.5 (i.e., be capable of performing their design function and have at least one normal or one emergency power source OPERABLE). If they are not satisfied, action is required in accordance with this specification.

As a further example, Specification 3.8.1.1 requires in part that two physically independent circuits between the offsite transmission network and the onsite Class IE distribution system be OPERABLE. The ACTION statement provides a 24-hour out-of-service time when both required offsite circuits are not OPERABLE. If the definition of OPERABLE were applied without consideration of Specification 3.0.5, all systems, subsystems, trains, components and devices supplied by the inoperable normal power sources, both of the offsite circuits, would also be inoperable. This would dictate invoking the applicable ACTION statements for each of the applicable LCOs. However, the provisions of Specification 3.0.5 permit the time limits for continued operation to be consistent with the ACTION statement for the inoperable normal power sources instead, provided the



## APPLICABILITY

### BASES

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other specified conditions are satisfied. In this case, this would mean that for one division the emergency power source must be OPERABLE (as must be the components supplied by the emergency power source) and all redundant systems, subsystems, trains, components and devices in the other division must be OPERABLE, or likewise satisfy Specification 3.0.5 (i.e., be capable of performing their design functions and have an emergency power source OPERABLE). In other words, both emergency power sources must be OPERABLE. In other words, both emergency power sources must be OPERABLE and all redundant systems, subsystems, trains, components and devices in both divisions must also be OPERABLE. If these conditions are not satisfied, action is required in accordance with this specification.

In MODES 5 or 6, Specification 3.0.5 is not applicable, and thus the individual ACTION statements for each applicable Limiting Condition for Operation in these MODES must be adhered to.

APPLICABILITY

SURVEILLANCE REQUIREMENTS (Continued)

4.0.3 Performance of a Surveillance Requirement within the specified time interval shall constitute compliance with OPERABILITY requirements for a Limiting Condition for Operation and associated ACTION statements unless otherwise required by the specification.

4.0.4 Entry into an OPERATIONAL MODE or other specified applicability condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the stated surveillance interval or as otherwise specified.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2 and 3 components shall be applicable as follows:

a. During the time period:

1. From issuance of the Facility Operating License to the start of facility commercial operation, inservice testing of ASME Code Class 1, 2 and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code 1974 Edition, and Addenda through Summer 1975, except where specific written relief has been granted by the Commission.
2. Following start of facility commercial operation, inservice inspection of ASME Code Class 1, 2 and 3 components and inservice testing of ASME Code Class 1, 2 and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).

- b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda for the inservice inspection and testing activities required by the ASME Boiler and Pressure Vessel Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

Replace  
by attached

4.0.3  
&  
4.0.3-1

2

4.0.3 Failure to perform a Surveillance Requirement within the specified time interval shall constitute a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. Exception to these requirements are stated in the individual Specifications. Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.3.1 If the failure to perform the Surveillance Requirement within the specified time limit is due to an administrative error, the applicable action shall be as follows:

With a piece of equipment or a system inoperable due to a missed Surveillance Requirement, perform the required surveillance within 12 hours from the time of discovery.

This applies only to those Surveillance Requirements performed on a monthly or longer periodic interval.

NOTE: If a Surveillance Requirement is missed due to an administrative error, appropriate reports must be filed even if the surveillance is performed within 12 hours.

Docket No. 50-346  
License No. NPF-3  
Serial No. 979  
August 18, 1983  
Attachment VI

- I. Changes to Davis-Besse Nuclear Power Station Unit 1, Appendix A  
Technical Specifications incorporation of Radiological Effluent  
Technical Specifications (RETS).
  - A. Time required to Implement. This change is to be effective upon  
NRC approval.
  - B. Reason for Change (Facility Change Request 79-114).  
  
Amend the proposed RETS concerning the source check requirement  
prior to using the containment purge vent system.
  - C. Safety Evaluation  
  
(See attached)
  - D. Significant Hazards Considerations  
  
(See attached)

## SAFETY EVALUATION

This amendment request revises the proposed Radiological Effluent Technical Specification (RETS) 4.3.3.10, Table 4.3-16, Item 3, concerning the source check requirement prior to using the containment purge vent system.

The safety function of the purge exhaust radiation monitor is to accurately determine the actual amount of radioactive effluents prior to entering the containment purge exhaust filters. The safety function associated with the source check is to perform a functional check of the radiation monitor by exposing it to a radiation source to determine if the monitor is functioning.

The containment purge exhaust system was originally intended to be used periodically during power operation to purge the containment, and the present Technical Specification requires that a source check be performed prior to using the system for this function. Since containment purging was originally limited to less than 90 hours/year while at power and is now prohibited, this frequency for source checking was adequate. However, the containment purge exhaust system is now continuously used to purge the negative pressure boundary area and the functional check of the radiation monitor prior to using the purge exhaust system is not adequate to determine if the monitor is functioning properly.

The Radiological Technical Specification should be changed to require the source check to be performed as follows:

1. Prior to using the purge exhaust system for containment or negative pressure boundary areas, if it was not performed within the last 30 days.
2. Monthly during the use of the purge exhaust system for containment or negative pressure boundary areas.

The increased frequency in performing the source check of the radiation monitor will increase the probability that the monitor is functioning properly.

This change does not affect the setpoints established for this radiation monitor and it does not adversely affect its safety functions.

Based on the above, it is concluded that this change in the Radiological Technical Specification does not present an unreviewed safety question.

### SIGNIFICANT HAZARD CONSIDERATION

The attached amendment request for a change to the Radiological Effluent Technical Specification (RETS) does not contain a Significant Hazard. The requested changes are to the RETS (which is under review by the NRC) to revise Table 4.3-16, Item 3 name change and the period for source check to reflect the present operating conditions.

The containment purge exhaust system was originally intended to be used periodically during power operation to purge the containment, and the present Technical Specification requires that a source check be performed prior to using the system for this function. However, the containment purge exhaust system is now continuously used to purge the negative pressure boundary area and the functional check of the radiation monitor prior to using the purge exhaust system is not adequate to determine if the monitor is functioning properly. The increase frequency in performing the source check of the radiation monitor is an increase in the surveillance requirements.

The granting of the request would not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated 10CFR50.92(C)(1).

No accident or accident analysis is adversely affected by this request. The increased surveillance will have a positive impact on equipment operability.

- 2) Create the possibility of a new or different kind of accident previously evaluated 10CFR50.92(C)(2).

All accidents are still bounded by previous analysis and no new accidents are involved.

- 3) Involve a significant reduction in a margin of safety 10CFR50.92(C)(3).

This request will maintain the margins assumed in the accident analysis.

Therefore, based on the attached safety evaluation and the above, the requested amendment does not contain a Significant Hazard.

TABLE 4.3-16

RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>CHANNEL FUNCTIONAL TEST</u>
1. Waste Gas Decay System				
a. Noble Gas Activity Monitor	P <sup>(1)</sup>	P	R <sup>(5)</sup>	Q <sup>(3)</sup>
b. Effluent System Flow Rate	P <sup>(1)</sup>	N/A	R	Q
2. Waste Gas System				
a. Oxygen Monitor <i>and Negative Pressure Boundary,</i>	D <sup>(2)</sup>	N/A	Q <sup>(6)</sup>	N/A
3. Containment Purge Vent System				
a. Noble Gas Activity Monitor	D <sup>(1)</sup>	M <sup>(1)(7)</sup> P	R <sup>(5)</sup>	Q <sup>(3)</sup>
4. Station Vent Stack				
a. Noble Gas Activity Monitor	D <sup>(1)</sup>	M	R <sup>(5)</sup>	Q <sup>(4)</sup>
b. Iodine Sampler	W <sup>(1)</sup>	N/A	N/A	N/A
c. Particulate Sampler	W <sup>(1)</sup>	N/A	N/A	N/A
d. System Effluent Flow Rate Measurement Device	D <sup>(1)</sup>	N/A	R	N/A
e. Sampler Flow Rate Measurement Device	W <sup>(1)</sup>	N/A	R	N/A



TABLE 4.3-16 (Continued)

TABLE NOTATION

- (1) During radioactive waste gas releases via this pathway.
- (2) During additions to the waste gas surge tank.
- (3) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if the instrument indicates measured levels above the alarm/trip setpoint.
- (4) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if the instrument indicates measured levels above the alarm/trip setpoint.
- (5) The initial CHANNEL CALIBRATION for radioactivity measurement instrumentation shall be performed using one or more of the reference standards certified by the National Bureau of Standards or using standards that have been obtained from suppliers that participate in measurement assurance activities with NBS. These standards should permit calibrating the system over its intended range of energy and rate capabilities. For subsequent CHANNEL CALIBRATION, sources that have been related to the initial calibration should be used, at intervals of at least once per eighteen months. This can normally be accomplished during refueling outages. For high range monitoring instrumentation, where calibration with a radioactive source is impractical, an electronic calibration may be substituted for the radiation source calibration.
- (6) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:
  1. One volume percent oxygen, balance nitrogen; and
  2. Four volume percent oxygen, balance nitrogen.
- (7) *Prior to use if not performed within the last 30 days*