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License Number NPF-3

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United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Subject: Licensing Basis for Service Water System Discharge Flow Path

Ladies and Gentlemen:

The purpose of this letter is to present the licensing basis for the FirstEnergy Nuclear Operating Company (FENOC) Davis-Besse Nuclear Power Station, Unit Number 1 (DBNPS) Service Water (SW) system discharge path. This licensing basis-related issue was raised during an NRC inspection as documented in NRC Inspection Report 50-346/2003-010, dated March 5, 2004 (DBNPS Log Number 1-4527). The inspection report discussed that FENOC had not verified that the 50 psig setpoint for swapping from the non-safety-related SW system discharge flow path to the safety-related SW system discharge flow path was adequate for ensuring adequate flow to certain safety-related components at this higher pressure during design basis accident conditions. Specifically, the inspection report discussed that this setpoint was accepted by FENOC based on non-safety-related piping being capable of performing a safety-related function under design basis accident conditions. This item was characterized as a violation (50-346/2003-010-01) of very low safety significance (Green) within the NRC inspection report.

As noted in the inspection report, however, following the inspection, FENOC performed a probability evaluation of the likelihood of the partial blockage of the non-safety-related piping. This evaluation, which was not reviewed by the NRC inspection team, is enclosed, along with a discussion of the acceptability of the non-safety-related piping and valve configuration as originally licensed by the NRC.

Enclosure 1 addresses the licensing basis in detail for the DBNPS. In summary, the DBNPS licensing basis does not require consideration of a partially blocked non-safety-related SW system discharge flow path in conjunction with a design basis accident, and the SW discharge path may be aligned through its safety-related or non-safety-related flow paths. While this

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licensing basis-related issue was being evaluated, FENOC elected to not utilize the non-safety-related SW system discharge flow paths. Based on the enclosed information, FENOC considers this interim measure to no longer be necessary. Accordingly, the appropriate flow path (safety-related or non-safety-related) will be aligned based on weather conditions and plant operating conditions.

A reply is requested, documenting NRC review, confirming the enclosed accurately represents the DBNPS licensing basis.

If you have any questions or require further information, please contact Mr. Gregory A. Dunn, Manager-Regulatory Affairs, at (419) 321-8450.

Very truly yours,

MKL

Enclosures

cc: Regional Administrator, NRC Region III
J. B. Hopkins, DB-1 NRC/NRR Senior Project Manager
C. S. Thomas, DB-1 Senior Resident Inspector
Utility Radiological Safety Board

FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station, Unit No. 1

Licensing Basis for Service Water System Discharge Flow Path

Issue:

The purpose of this document is to present the licensing basis for the FirstEnergy Nuclear Operating Company (FENOC) Davis-Besse Nuclear Power Station, Unit Number 1 (DBNPS) Service Water (SW) system discharge flow path. This licensing basis-related issue was raised during an NRC inspection as documented in NRC Inspection Report 50-346/2003-010, dated March 5, 2004 (DBNPS Log Number 1-4527). The inspection report discussed that FENOC had not verified that the 50 psig setpoint for swapping from the non-safety-related SW system discharge flow path to the safety-related SW system discharge flow path was adequate for ensuring adequate flow to certain safety-related components at this higher pressure during design basis accident conditions. Specifically, the inspection report discussed that this setpoint was accepted by FENOC based on non-safety-related piping being capable of performing a safety-related function under design basis accident conditions. This item was characterized as a violation (50-346/2003-010-01) of very low safety significance (Green) within the NRC inspection report.

As noted in the inspection report, however, following the inspection, FENOC performed a probability evaluation of the likelihood of the failure of the non-safety-related piping. This evaluation, which was not reviewed by the NRC inspection team, is provided below, along with a discussion of the acceptability of the non-safety-related piping and valve configuration as originally licensed by the NRC.

DBNPS Licensing Basis Summary:

The DBNPS licensing basis does not require consideration of a partially blocked non-safety-related SW system discharge flow path in conjunction with a Loss-of-Coolant Accident (LOCA). Furthermore, a probability evaluation has been completed that demonstrates that a partial blockage of this non-safety-related SW system discharge flow path, in conjunction with a LOCA, is not a credible event.

The following provides a detailed discussion of the DBNPS licensing basis for the SW system discharge path.

Background:

As described in Section 9.2.1.1 of the DBNPS Updated Safety Analysis Report, the SW system is designed to serve two functions during plant operation. The first function is to supply cooling water to the component cooling heat exchangers, the containment air coolers, and the turbine plant cooling water heat exchanger during normal operation. The second function is to provide, through automatic valve sequencing, a redundant supply path to the engineered safety features components during an emergency. Only one path, with one SW pump, is necessary to provide adequate cooling during this mode of operation. The SW system also provides a backup source of water to the auxiliary feedwater system and the motor-driven feedwater pump.

The SW discharge from the essential and nonessential headers combine into a common discharge header. This return line is then directed to one of the following locations (see Figure 1):

- During normal summer operation, SW discharge is directed to the Circulating Water (CW) system and used as makeup. This water is directed from the SW return header through valve SW2931, to the suction piping of the CW pumps via a non-seismic line. The SW is used as cooling tower makeup to reduce the amount of water that is removed from and ultimately returned to Lake Erie.
- During normal winter operation, SW discharge is directed to the intake forebay (the Ultimate Heat Sink) to be used as a heat source to prevent icing. This water is directed from the SW return header through valve SW2930 to the forebay. This discharge line is a safety-related seismic line to ensure SW maintains communication with the Ultimate Heat Sink.
- During severe winter conditions, SW discharge can be directed to the SW intake structure for de-icing. The SW discharge is directed from the SW return header through valve SW2929 and through a safety-related, seismic discharge line that discharges directly upstream of the trash racks at the intake structure.
- The SW discharge can also be directed through valve SW2932 to the station effluent collection box via a non-seismic line. This discharge flow path terminates at the collection box where it mixes with other station effluents and is discharged by gravity flow to Lake Erie.

In the event the water supply from Lake Erie to the intake canal is lost during an earthquake, the intake forebay serves as the Ultimate Heat Sink. This is accomplished by closing valves SW2931 and SW2932 to block any path that would lower forebay level, and opening either valve SW2929 or valve SW2930 for a return flow path back to the Ultimate Heat Sink.

Only one SW discharge header valve (SW2929, SW2930, SW2931, or SW2932) is normally open during plant operation. In order to comply with 10 CFR 50, Appendix R requirements, the open valve must have its breaker de-energized to ensure a SW return path is maintained in the event of a fire.

Two of the SW discharge isolation valves have an automatic open feature. Valve SW2930 opens automatically when pressure switch PSH2930 senses a SW discharge header pressure of greater than 50 psig. Valve SW2929 opens automatically when pressure switch PSH2929 senses a SW discharge header pressure of greater than 50 psig for approximately 20 seconds. The purpose of these automatic open features is to ensure flow return to the Ultimate Heat Sink should a seismic event block the non-seismic SW discharge to the CW system.

Licensing/Regulatory Basis:

10 CFR 54.3(a) defines the current licensing basis (CLB) as that set of NRC requirements applicable to a specific plant and the licensee's written commitments for assuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in effect. The CLB includes the NRC regulations contained in 10 CFR Parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 54, 55, 70, 72, 73, 100, and Appendices thereto; orders; license conditions; exemptions; and Technical Specifications. It also includes the plant-specific design-basis information defined in 10 CFR 50.2 as documented in the most recent Final Safety Analysis Report (FSAR) as required by 10 CFR 50.71 and the licensee's commitments remaining in effect that were made in docketed licensing correspondence such as licensee responses to NRC bulletins, generic letters, and enforcement actions, as well as licensee commitments documented in NRC safety evaluations or licensee event reports.

The DBNPS received its Construction Permit (CP) on March 24, 1971, and its Operating License (OL) on April 22, 1977. The Atomic Energy Commission (AEC) codified the General Design Criteria (GDC) in Appendix A to 10 CFR 50, which was published in the Federal Register on February 20, 1971, and became effective ninety days thereafter. Since the CP for the DBNPS was issued prior to the codification of the GDC, the design, performance, and siting criteria for the DBNPS were initially specified in the Preliminary Safety Analysis Report (PSAR). The PSAR was followed by the FSAR and then by the Updated Safety Analysis Report (USAR).

Although the DBNPS criteria are similar to the GDC, they are not identical and, in some instances, were applied in a manner differently than they would be today. It is important to note that the DBNPS FSAR and USAR Appendix 3D, contain information regarding the extent of the committed compliance of the DBNPS design with the GDC. However, while this appendix states the DBNPS design "meets the intent" of this guidance, the DBNPS design may not be entirely consistent with the regulations later issued (i.e., the GDC), or later revisions of the safety and information guides referencing the GDC.

At the time 10 CFR 50, Appendix A was published, it was not the intent of the Nuclear Regulatory Commission to make it retroactive to plants that had received their CPs prior to May 21, 1971. This position was supported in a Memorandum from S. J. Chilk

(Secretary) to J. M. Taylor (Executive Director for Operations), September 18, 1992, "SECY-92-223 – Resolution of Deviations Identified During the Systematic Evaluation Program" that stated, in part:

> *The Commission (with all Commissioners agreeing) has approved the staff proposal in Option 1 of this paper in which the staff will not apply the General Design Criteria (GDC) to plants with construction permits issued prior to May 21, 1971. At the time of the promulgation of Appendix A to 10 CFR Part 50, the Commission stressed that the GDC were not new requirements and were promulgated to more clearly articulate the licensing requirements and practice in effect at that time. While compliance with the intent of the GDC is important, each plant licensed before the GDC were formally adopted was evaluated on a plant specific basis, determined to be safe, and licensed by the Commission. Furthermore, current regulatory processes are sufficient to ensure that plants continue to be safe and comply with the intent of the GDC.*

<u>FSAR, Revision 27, April 1977</u>

The following discussions provide information related to the design of the SW discharge flow paths during the FSAR/Operating License review stage. The Operating License was issued based on the NRC's review of the FSAR.

FSAR Appendix 3D provided discussions of conformance with the AEC General Design Criteria. It states that the design of the DBNPS meets the intent of Appendix A, 10 CFR 50, the General Design Criteria for Nuclear Power Plants as published in the Federal Register on February 20, 1971, and as amended in the Federal Register on July 7, 1971.

The FSAR Appendix 3D discussion of GDC 2, "Design Bases for Protection Against Natural Phenomena," stated the following for the DBNPS:

> *Structures, systems and components important to safety are designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, wind tides and seiches without loss of capability to perform their safety functions.*

The FSAR Appendix 3D discussion of GDC-44, "Cooling Water," stated the following:

> *Heat from the component cooling water system is rejected to the service water system which, in turn, rejects heat to the cooling tower via the circulating water system during normal operation, or to the lake during a* [Loss of Coolant Accident] *LOCA. The service water system is fully redundant, including three pumps and two headers. The portion of the system required for station safety is designed to ASME Code, Section III, Nuclear Class 3 and seismic class I.*

FSAR Section 9.2.1.2, "Service Water System - System Description," provided the following information with respect to the SW discharge flow paths:

The combined flow leaving the system is normally returned to the circulating water system as makeup. This flow may also be diverted to the intake structure to prevent icing in winter. All Class I piping which passes through the turbine building is enclosed in a Class I tunnel.

Under normal operating conditions, the service water discharge will be redirected from the cooling tower to the forebay whenever the water level in the forebay drops to elevation 564 feet [International Great Lakes Datum] *IGLD. The cooling tower makeup pumps will be used to supply makeup water to the cooling tower in this mode of operation. This mode of operation will continue until the forebay level increases above elevation 564 feet IGLD.*

If the supply pipe from Lake Erie to the intake structure is lost during an earthquake, the system will use the intake forebay as a reservoir and cooling pond. This is accomplished by motor-operated valves which block the system return flow to the cooling tower and open another return path to the intake forebay. Operation of the system under this condition is as follows:

If a LOCA and seismic event should occur when the forebay level is above elevation 564 feet IGLD, the actions of the operator to ensure the return of service water to the forebay are dependent on the consequences of the seismic event.

a. *If the seismic event causes the blockage of service water as a result of the failure of the nonseismic line to the cooling tower, a pressure switch will cause the intake forebay return line valve to open. Should this valve fail to open, another switch will cause the intake structure deicing line valve to open after a time delay. With the discharge through the deicing line, the water temperature will reach the maximum of 131 F in approximately 13 hours. . . The operator must leave the control room within this 13-hour period to open the intake forebay return line valve manually.*

   Analysis has shown that, with the use of protective clothing and a Scott Air Pack, the doses the operator would receive are within allowable limits at any time greater than 1 hour after the accident.

b. *If the seismic event causes a break in the nonseismic line to the cooling tower without a blockage of the line, the operator must open the intake forebay return line valve and close the cooling tower return line valve from the control room to stop flow out of the break. If the cooling tower return line valve fails to close, the water level in the forebay will drop from elevation 564 to 562 feet IGLD in approximately 3 hours. This time is based on the postulation that all service* *water flow from two-pump operation flows out the break in the cooling tower line. The operator must then leave the control room in this three-hour period to close the cooling tower return line valve manually. This time period is sufficient to close the valve manually under any conditions. Failure of the intake forebay return line valve to open would require action outlined above in paragraph a.*

The service water system is designed to prevent any component failure from curtailing emergency operation.

In summary, the FSAR, which was later reviewed by the NRC staff in order to issue an Operating License to the DBNPS, provided specific descriptions of the non-seismic line to the cooling tower. These descriptions stated that a pressure switch would effect a swapover, opening valves to a seismically qualified line if a seismic event had caused a blockage in the non-seismic line. It is important to note that a partial blockage scenario due to a seismic event or passive failure was not described in the FSAR. It is also important to note that the FSAR only described scenarios involving a LOCA which required swapover of the SW discharge flow path due to blockage or a breakage of the non-seismic line. It did not describe that a swapover was necessary for a LOCA scenario which did not involve blockage or a breakage of the non-seismic line, i.e., SW discharge could continue via the non-seismic line.

Operating License Safety Evaluation Report

The DBNPS Operating License Safety Evaluation Report (OL SER) was issued by the NRC as NUREG-0136, dated December 1976, and followed by Supplement No. 1. As discussed in Section 1.1 of the OL SER, the NRC staff performed a safety review of the FSAR in preparing the OL SER. As discussed above, the FSAR did not assume a partial blockage of the non-seismic line in conjunction with a LOCA.

The NRC stated in Section 9.3.1, "Service Water System," that based on its review of the SW system design, it was concluded that GDC-44 was met and the design was acceptable. The NRC stated that the SW system would supply cooling water to meet cooling requirements during normal operation, shutdown, and during and after a postulated LOCA. The NRC also stated that the SW system would provide makeup water to the main condenser cooling tower. Accordingly, the DBNPS Operating License was issued without requiring the assumption of partial blockage of the non-seismic SW system discharge flow path in conjunction with a LOCA (this assumption was not required to be addressed by GDC-44).

Updated Safety Analysis Report (USAR)

A review of the USAR was performed to identify information different from that discussed above for the FSAR. No pertinent differences were noted.

Regulatory Information:

As previously mentioned, NRC Inspection Report 50-346/2003-010 discussed that FENOC had not verified that the setpoint for swapping from the non-safety-related SW system discharge flow path to the safety-related SW system discharge flow path was adequate. Specifically, the inspection report discussed that an inadequate setpoint was accepted by FENOC based on the non-safety-related piping being capable of performing a safety-related function under design basis accident conditions. NRC Inspection Report 50-346/2003-010 states that this issue was previously identified in NRC Inspection Report 50-346/2002-014.

NRC Inspection Report 50-346/2002-014 (DBNPS Log Number 1-4359), dated February 26, 2003, describes the issue in further detail. The inspection report states:

> *The service water system discharges into one of four paths. Two of these paths (cooling tower makeup and the collection box) were not seismically qualified and provisions were made in the design of the system to automatically divert flow to the seismically qualified discharge lines (intake forebay and intake structure) in the event of obstruction of one of the non-seismic lines. The setpoint for the swapover is 50 psig. The inspectors asked licensee personnel for the calculational bases for this setpoint. Licensee personnel could not locate an analysis.*
>
> *Not having an analytical basis is of concern for two reasons. First, the plant could have experienced a seismic event which did not fully obstruct the discharge path for service water such that pressure would have been slightly less than the 50 psig setpoint and flow would have been choked down. This extent of flow reduction should have previously been evaluated to demonstrate the ability of the service water system to provide sufficient cooling capability to survive a safe shutdown earthquake. Second, a passive failure causing a similar flow reduction as above could have gone undetected during an event which required design service water flow and design service water flow would not have been demonstrated to be available. A suitable analysis which demonstrates acceptability in these conditions was needed. The inspectors determined that the failure to have an analysis which demonstrates acceptability of conditions with service water discharge header pressure elevated higher than normal and up to the swapover setpoint could affect the design function of the service water system.*

NRC Inspection Report 50-346/2003-010 described a new evaluation that had been performed to address this issue, as documented in the corrective action process (Condition Report 02-07802). The Inspection Report provided the following discussion of the new evaluation:

> *The new evaluation documented a vendor calculation which showed that with the 50 psig setpoint, there would be inadequate flow to certain safety related components under design basis conditions. The new evaluation also concluded that the setpoint was adequate if a failure of the non-seismically qualified discharge piping did not have to be postulated during a loss of coolant event. Relying upon this latter conclusion, the licensee determined that the 50 psig setpoint was acceptable. The team did not agree with the licensee's reliance on non-seismically qualified piping to ensure that safety related components had adequate flow. Therefore, the team determined that the revised evaluation still did not address the* [Safety System Diagnostic Inspection] *SSDI violation in that the calculational basis for the 50 psig issue still did not exist.*

NRC Inspection Report 50-346/2003-010 also provided the following information regarding further activities that were underway at the conclusion of the inspection:

> *Following the inspection, the licensee performed a PRA study on the likelihood of failure of the non-safety-related piping and then applied the results of this analysis to justify the issue described in* [Condition Report] *CR 02-07802. As this analysis was performed significantly after the end of the inspection, it was not reviewed by the team, and the team was not able to evaluate the impact of this analysis on the licensing basis of the plant.*

In summary, the NRC inspection report postulated a partial blockage of the non-seismic, non-safety-related SW system discharge flow path. The FSAR and USAR had previously assessed other failures of this flow path (complete blockage or breakage), but did not consider a partial blockage. Accordingly, the postulation of a partial blockage represents a new NRC staff position affecting the design of plant systems after issuance of the Operating License.

A summary of the probability evaluation referred to in the Inspection Report is provided in the following section.

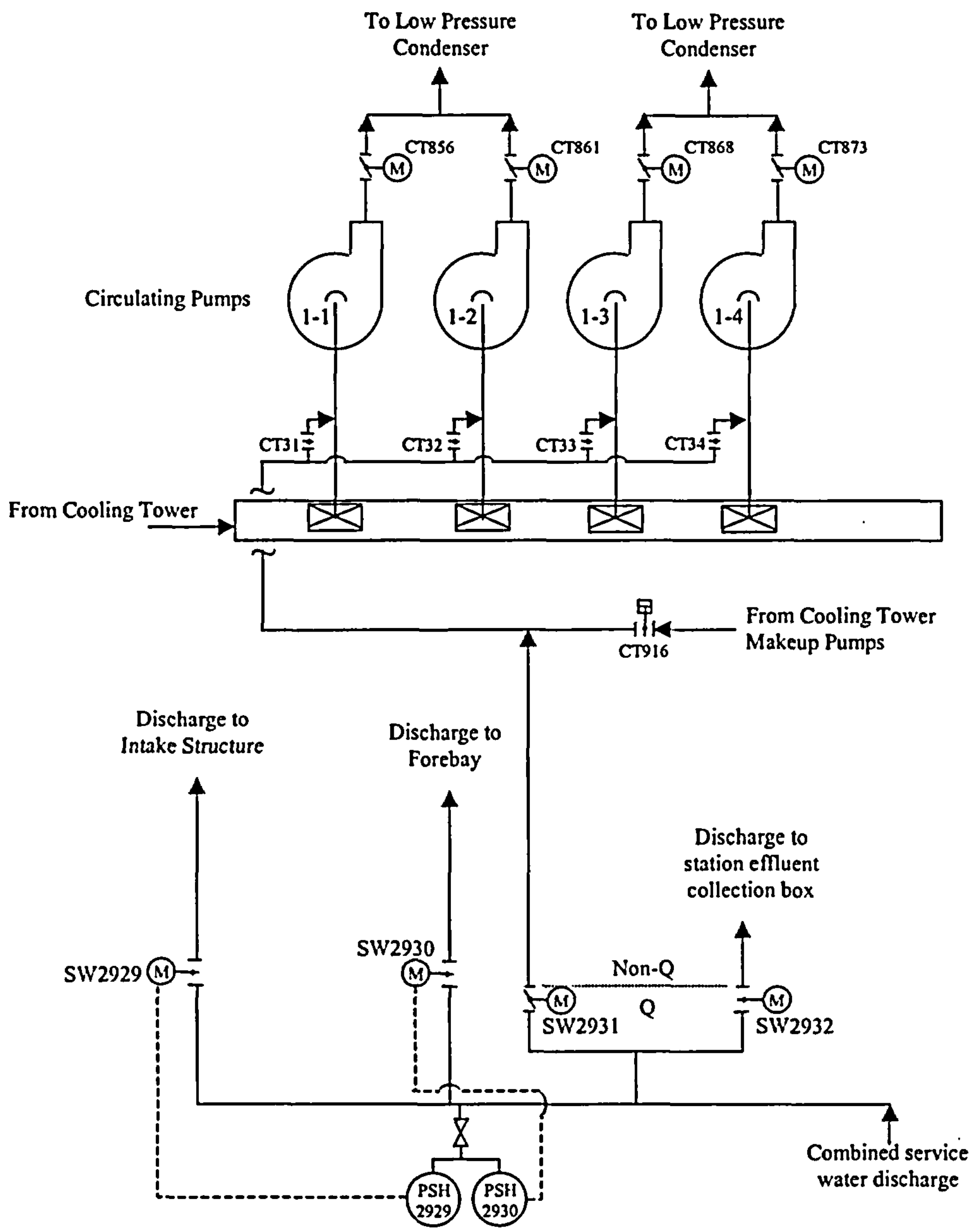
Probability Evaluation:

An evaluation of the failure probability of the two non-seismic SW return lines (through valves SW2931 and SW2932), concurrent with a LOCA, was performed. This evaluation included consideration of partial blockage of the piping and valve failures. The results of this evaluation indicate that the failure probability is 4E-13/yr for the SW2932 flowpath and 7E-14/yr for the SW2931 flowpath. Therefore, failure of the non-seismic SW return lines concurrent with a LOCA is not considered to be a credible event. Details of this evaluation are provided in Enclosure 2.

Conclusion:

Based on the review and evaluation of the DBNPS licensing basis as presented above, it is concluded that the DBNPS licensing basis does not require consideration of a partially blocked non-safety-related SW system discharge path in conjunction with a LOCA. In addition, based on a probability evaluation, failure of the non-seismic SW return lines due to a seismic event or passive failure concurrent with a LOCA is not considered to be a credible event. Accordingly, the 50 psig setpoint for pressure switches PSH2929 and PSH2930 to initiate a swapover from the non-safety-related discharge flow path to the safety-related SW discharge flow path provides adequate assurance that the SW system design function will be performed under all credible conditions, and is acceptable under the DBNPS licensing basis.

Figure 1
Simplified Service Water Discharge Arrangement
- For Information Only-



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Probability Evaluation for Service Water Return Non-Seismic Flow Paths

General Notes:

1. The flow paths discussed in this evaluation are shown on Enclosure 1 Figure 1.

2. This evaluation will not consider failure of seismic piping and valves, for example, SW2931 and SW2932.

3. Failure rate data is available for manual gate valves. However, all of the valves considered in this evaluation are butterfly valves (Ref. 4). The use of failure rate data for manual gate valves is conservative. An internal failure of a butterfly valve is not likely to result in flow isolation, as could happen with a gate valve.

Potential Failure Modes for SW2931:

1. Failure of piping such that the line is pinched.

2. Failure of manual Cooling Tower valve(s) to remain open.

   Cooling Tower (CT) valves CT31, CT32, CT33, and CT34 are manual butterfly valves. During normal operation, two of these four valves (one per Circulating Water loop) may be open. This evaluation assumes that two open valves fail to remain fully open, e.g., failure of CT31 and CT33, or failure of CT32 and CT34.

3. Failure of air-operated valve CT916 to remain closed.

   CT916 is a fail-closed valve (Ref 5). If this valve failed to remain closed, there would be no effect because the flow path through the CT31/CT33 and CT32/CT34 valves would still be open and therefore there would be no restriction in flow.

4. Silting or other flow restriction of the lines.

   Based upon flow conditions and the size of the lines (24-inch nominal diameter and greater)(Refs. 3 through 7), the possibility of a significant flow restriction in the flow path is not a reasonable consideration. Since the potential probability is significantly lower than valve failure or pipe failure, it is not considered further.

Calculation for SW2931:

Using the failure rate for a manual gate valve from Reference 1, 4.46E-8/hr, the valve failure frequency is as follows:

Valve Failure Frequency = (CT31 and CT33) or (CT32 and CT34)
= (2) x (4.46E-8/hr x 4.46E-8/hr)
= 4.0E-15/hr

The frequency of a spontaneous pinched pipe will be conservatively considered to be the same as that for a pipe rupture. From Reference 2, the pipe rupture failure rate is 5.78 E-10/hr-section. A pinched pipe is assumed for those pipe sections which are underground. The only piping underground is a short section of 36-HBD-28 (Refs. 3 and 8). Therefore, there is only one section to consider:

Pinched Pipe Frequency = (5.78E-10/hr-section) x (1 section)
= 5.78E-10/hr

Using a 24-hour mission time, assuming any failure prior to the initiating event would be detected on operator rounds, or by control room annunciators, computer point alarms, or gauges and instruments, the probability of failure is therefore:

Probability of failure = (Pipe pinch + valve failure) x (24 hrs)
= (5.78E-10/hr + 4.0E-15/hr) x (24 hr)
= 1.39E-8

The event also requires a concurrent design basis LOCA. These two events are independent and thus this is an "AND" event. From Reference 9, the frequency of a Large Break LOCA is 5.0E-6/yr. Therefore, the frequency of a Large Break LOCA combined with a SW2931 pipe return failure is:

LOCA Frequency x Pipe Failure Probability = 5.0E-6/yr x 1.39E-8
= 6.94E-14/yr

Potential Failure Modes for SW2932:

This flow path consists of 30-inch diameter piping. There are no valves in this piping downstream of SW2932, therefore, there are not any valve failures to consider. Based upon flow conditions and the size of the lines, the possibility of a significant flow restriction in the SW return flow path is not a reasonable consideration. Therefore, the failure rate depends completely upon the pinched pipe frequency.

Calculation for SW2932:

There are six underground piping sections (Refs. 3 through 8). The pipe failure rate (Ref. 2), mission time, and LOCA frequency (Ref. 9) are the same as assumed for SW2931.

Pinched Pipe Frequency = (5.78E-10/hr –section) x (6 sections)
= 3.47E-9/hr

Pinch Pipe Probability = 3.47E-9/hr x (24 hr)
= 8.32E-8

LOCA Frequency x Pipe Failure Probability = 5.0E-6/yr x 8.32E-8
= 4.13E-13/yr

Summary:

Since the SW2931 and SW2932 flow paths are not open at the same time, the frequency of interest is the highest one, i.e., the frequency associated with SW2932, 4.13E-13/yr. An event with a frequency of this magnitude is not credible.

References:

1. DBNPS PSA Specific Plant Data Notebook, Vol. 9, Manual Valves, Revision 2.

2. EPRI TR-102266, Pipe Failure Study Update, April 1993.

3. Circulating Water System (Makeup and Blowdown) Drawing HL-212B, Rev 6.

4. P&ID M-012D, Rev 18, Circulating Water System.

5. P&ID M-012E, Rev 16, Screen Wash and Cooling Tower Makeup System.

6. P&ID M-041C, Rev 26, Service Water System for Containment Air Coolers.

7. Discharge System Re-Routing of Discharge Pipes, Drawing C-20 Rev 14.

8. Drawing M241B, Rev 14, Piping Isometric, Service Water System Valve Room and Tunnel.

9. NUREG/CR-5750, Rates of Initiating Events at U.S. Nuclear Power Plants, 1987-1995, February 1999.

Docket Number 50-346
License Number NPF-3
Serial Number 3040
Enclosure 3

COMMITMENT LIST

THE FOLLOWING LIST IDENTIFIES THOSE ACTIONS COMMITTED TO BY THE DAVIS-BESSE NUCLEAR POWER STATION (DBNPS) IN THIS DOCUMENT. ANY OTHER ACTIONS DISCUSSED IN THE SUBMITTAL REPRESENT INTENDED OR PLANNED ACTIONS BY THE DBNPS. THEY ARE DESCRIBED ONLY FOR INFORMATION AND ARE NOT REGULATORY COMMITMENTS. PLEASE NOTIFY THE MANAGER – REGULATORY AFFAIRS (419-321-8450) AT THE DBNPS OF ANY QUESTIONS REGARDING THIS DOCUMENT OR ANY ASSOCIATED REGULATORY COMMITMENTS.

COMMITMENTS	DUE DATE
None.	N/A