



Duquesne Light

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November 20, 1984

United States Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Mr. Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

SUBJECT: Beaver Valley Power Station - Unit No. 2
Docket No. 50-412
Duquesne Light Company Backfit Status

Gentlemen:

In a recent letter (Mr. T. Novak to E. J. Woolever, dated November 6, 1984), the NRC transmitted to Duquesne Light Company (DLC) a brief discussion of nine backfit requirements which the NRC staff intends to impose on Beaver Valley Power Station - Unit 2 (BVPS-2).

Attachments one through nine provide the DLC positions with respect to the staff's written positions or requirements.

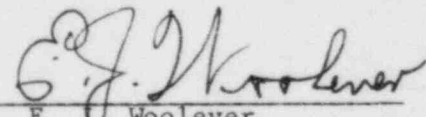
DLC, as evidenced in the individual attachments, perceives the need for further clarification, of the requirements and their justification, in order to facilitate meaningful appeal meetings. In many of the attachments there is no precise statement of the requirements that the reviewers wish to impose. Further, since some of the implied requirements are not consistent with the most recent positions of the staff reviewers, DLC is not certain that the requirement has been sufficiently stabilized to ensure productive discussion of the merits of the issues.

DLC believes that NRR has developed a very workable procedure (Enclosure 2 of GNLR 84-08) to implement the requirements of NRC Manual Chapter 0514. We believe NRR's procedure intends that the appeal meetings provide a forum for evaluating the postulated increase in plant safety to determine whether the new requirement should be imposed. Without a clearly stated requirement and without an outline of the rationale by which the staff concluded that the proposed requirement provides a needed increase in safety, beyond that provided by existing regulations, DLC is unable to formulate and submit the well-defined position which is requisite to productive discussion of these issues.

My staff is available, as required, to expedite the completion of the preparatory steps which will lay the foundation for meaningful discussion of the merits of the staff's proposed requirements.

DUQUESNE LIGHT COMPANY

By


E. J. Woolever
Vice President

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Attachments

cc: Mr. M. Clausen, Technical Assistant (w/a)
Mr. S. Chesnut, Technical Assistant (w/a)
Mr. H. Denton, Director NRR (w/a)
Mr. T. Novak, Assistant Director (w/a)
Mr. B. K. Singh, Project Manager (w/a)
Mr. V. Stello, DEDROGR (w/a)
Mr. J. Tourtellotte, Chairman RRTF (w/a)
Mr. G. Walton, NRC Resident Inspector (w/a)

ISSUE: Review Criteria for Probable Maximum Precipitation (PMP)

BACKFIT ISSUE NO : L-84-16

ATTACHMENT 1 PAGE 1 OF 2
TO DLC RESPONSE
TO NRC LETTER DATED 11/06/84

DLC BACKFIT NO.: 1

<u>05/30/84</u>	<u>11/06/84</u>											
BackFit Identified	NRC Rqmnts Letter	Appeal Filed	Position Statement Submitted	Meeting Agenda Issued	First Appeal Meeting	Minutes Decision Issued	Second Appeal Requested	Meeting Agenda Issued	Second Appeal Meeting	Minutes & Decision Issued	Formal Appeal Request to Dir, NRR	

	NRC POSITION	DLC POSITION	COMMENTS
PROPOSED REQUIREMENTS	<p>It is the staff contention that HMR 51/52 are the most recently available publications on the subject of PMP east of the 105th meridian. Therefore, they should be used as the basis for review in accordance with procedures cited in SRP 2.4.2 and 2.4.3.</p> <p>It is recognized that the value of PMP cannot be determined probabilistically because of insufficient data. However, a deterministic model can be used.</p>	<p>In FSAR questions dated August 31, 1983, and in Draft SER received March 1, 1984, the NRC stated that DLC should evaluate PMP using HMR 51 and HMR 52. On May 30, 1984, DLC identified this issue as a backfit requirement.</p> <p>In a letter dated October 12, 1984, the NRC requested that DLC answer questions using the FSAR data which had been developed using HMR 33. On November 8, 1984, DLC answered the NRC questions of October 12, 1984, using the HMR 33 data.</p> <p>The NRC position of November 6, 1984, states that HMR 51/ 52 should be used as the basis for review. This appears to conflict with the October 12, 1984, letter. Further, DLC is not certain whether the NRC intends to require DLC to re-perform the PMP analysis using HMR 51/52 or whether the staff intends to use the methodology of HMR 51/52 to review the HMR 33 evaluation.</p>	<p>The NRC's acceptance review found the BVPS-2 license application acceptable for docketing with the PMP evaluation based on HMR-33.</p>
HOW PROPOSED REQUIREMENT WOULD IMPROVE SAFETY	<p>Flooding of safety-related facilities as a result of intense local precipitation (PMP) can occur in two ways: First, by accumulation of rainfall on roofs of safety-related structures which exceeds the design load and design level. The result could be structural failure of the roof allowing flooding of the interior of the facility. Exceeding the design level can also result in leakage through roof hatches and roof ventilators. Interior flooding can result in the loss of safety-related electrical equipment.</p> <p>The second flooding pathway is site flooding which can result in water levels on plant grade which exceed the door sills of safety-related structures. The in leakage from this pathway, as in the case of excessive roof ponding, can ultimately lead to loss of essential electrical equipment.</p>	<p>The roofs of the safety-related structures are designed to support water accumulation at the parapet overflow level. Postulating a greater PMP event results in increased overflow rather than increased accumulation. Therefore, no increase in safety can be demonstrated with respect to roof loading, and plant safety is not compromised.</p> <p>Probable Maximum Precipitation is described in HMR 33 as "synonymous with 'maximum possible precipitation'." Since this is a rainfall which, by definition, cannot be exceeded, increased safety cannot be demonstrated for the use of a higher rainfall intensity. The highest actual rainfall for the Pittsburgh area was 2.09 inches in 1 hour (during 1876). The HMR 33 analysis uses a 1 hour intensity of 9.3 inches/hour. Unless the staff can demonstrate that a storm more severe than the HMR 33 PMP has a probability greater than zero, no increase in safety can be demonstrated for the use of a more severe projection.</p>	

	NRC POSITION	DLC POSITION	COMMENTS
<p>RELATION OF NEW REQUIREMENT TO EXISTING REGULATORY POSITIONS</p>	<p>General Design Criterion 2 (GDC-2), "Design bases for protection against natural phenomena," of 10 CFR 50, Appendix A, requires, in part, that nuclear power plant structures, systems and components be designed to withstand the effects of floods without loss of capability to perform their safety functions.</p> <p>Guidance is also contained in Regulatory Guides 1.59, "Design Basis Floods for Nuclear Power Plants", and 1.102, "Flood Protection for Nuclear Power Plants". These documents state that the appropriate design basis for precipitation induced flooding is the Probable Maximum Flood (PMF) as developed by the Corps of Engineers. This PM criterion has been used by the staff since at least 1970 for requirements of intense local precipitation. This review was incorporated into the Standard Review Plan (SRP) 2.4.2 and 2.4.3.</p> <p>SRP 2.4.2 refers to SRP Section 2.4.3 for PMP estimates, time distribution, etc.</p> <p>SRP 2.4.3 states the following:</p> <p style="padding-left: 40px;">Section VI <u>References</u></p> <p style="padding-left: 40px;">"In addition to the following specific references, Design Memoranda, Civil Works Investigations and research and development reports of the Corps of Engineers and reports of other federal and state agencies relevant to flood estimates at a specific site will be used on an "as-available" basis..."</p> <p>Hydrometeorological Reports (HMR) 51 and 52 were issued jointly by National Oceanic and Atmospheric Administration (National Weather Service) and the U. S. Army Corps of Engineers in June 1978 and August 1982, respectively.</p>	<p>HMR 33 methodology, as suggested by the SRP, was used to demonstrate that BVPS-2 meets GDC 2.</p> <p>BVPS-2 was designed prior to the issuance of HMR 51 and 52.</p> <p>Construction of the BVPS-2 safety related structures reached a significant percentage of completion prior to the issuance of HMR 52.</p> <p>No regulations provide for the use of HMR 51/52.</p> <p>No regulations require update of PMP evaluation methodology.</p>	
<p>SUGGESTED TIME FOR IMPLEMENTATION</p>		<p>DLC is unable to establish a position since no time has been proposed.</p>	

<u>05/30/84</u>	<u>11/06/84</u>											
<u>Backfit</u>	<u>NRC Rqmts</u>	<u>Appeal</u>	<u>Position</u>	<u>Meeting</u>	<u>First</u>	<u>Minutes &</u>	<u>Second</u>	<u>Meeting</u>	<u>Second</u>	<u>Minutes &</u>	<u>Formal</u>	
<u>Identified</u>	<u>Letter</u>	<u>Filed</u>	<u>Statement</u>	<u>Agenda</u>	<u>Appeal</u>	<u>Decision</u>	<u>Appeal</u>	<u>Agenda</u>	<u>Appeal</u>	<u>Decision</u>	<u>Appeal</u>	
			<u>Submitted</u>	<u>Issued</u>	<u>Meeting</u>	<u>Issued</u>	<u>Requested</u>	<u>Issued</u>	<u>Meeting</u>	<u>Issued</u>	<u>Request to</u>	<u>Dir, NRR</u>

	<u>NRC POSITION</u>	<u>DLC POSITION</u>	<u>COMMENTS</u>
<u>PROPOSED REQUIREMENTS</u>		<ol style="list-style-type: none"> 1. The NRC staff's proposed requirement is not readily apparent in the November 6, 1984, letter. 2. The fire suppression design for the BVPS-2 cable spreading room meets the requirements of 10CFR50. 	It appears that the NRC staff may intend to elevate the status of SRP 9.5.1 and BTP 9.5-1, which it incorporates by reference, to the level of a requirement. 10CFR 50.34(g) states that compliance with the SRP is not a requirement.
<u>HOW PROPOSED REQUIREMENT WOULD IMPROVE SAFETY</u>	<p>Fire Protection is a "program" based on defense-in-depth. Therefore if any single item in the program would cause a safety problem, then the "defense-in-depth" philosophy has not been met. The ability to extinguish fires using water or CO₂ are acceptable means to put out fires. However, the ability of CO₂ to accomplish this action depends on meeting a certain concentration of CO₂ for a period of time necessary to terminate the fire and prevent reignition. The use of water does have this limitation.</p> <p>Fire in the cable spreading room may damage cable from both safety trains which are normally used to shut down the reactor and maintain it in a safe shutdown condition. A significant fire may, in addition, damage building structures and affect adjacent areas.</p>	<p>CO₂ is a more appropriate suppression medium for the BVPS-2 cable spreading room than is water. DLC does not consider the selection of CO₂ to be a weak link in the defense-in-depth chain. Further, it should be noted that the strength of a defense-in-depth program is based on the total protection of the program rather than on a single "weak link."</p> <p>DLC agrees that both CO₂ and water can effectively extinguish fires.</p> <p>Both water and CO₂ have design requirements which must be considered in the suppression system design. The staff has chosen to label these design requirements as limitations. Water suppression systems have their own set of design requirements which can also be labeled as limitations.</p> <p>BVPS-2 uses covered cable trays and has electrical switchgear located in the fire area in which the cable spreading room is located. DLC will test the cable spreading room CO₂ system prior to fuel load to ensure that system performance is consistent with specification requirements. The NRC is welcome to witness the system testing.</p> <p>Cables from both safety trains are located in the cable spreading room regardless of choice of suppression medium.</p>	

ISSUE: Fire Suppression in the Cable Spreading Room

BACKFIT ISSUE NO.: L-84-10

ATTACHMENT 2 PAGE 2 OF 2
TO DLC RESPONSE
TO NRC LETTER DATED 11/06/84

DLC BACKFIT NO.: 17

	NRC POSITION	DLC POSITION	COMMENTS
RELATION OF NEW REQUIREMENT TO EXISTING REGULATORY POSITIONS	<p>The applicable Standard Review Plan (NUREG-0900) Section 9.5.1, paragraph II.2 identifies an acceptable level of safety for fire protection that will meet the requirements of §50.48, GDC 3 and 5. In order to meet the above requirements, the following specific criteria have to be met:</p> <p>"Branch Technical Position (BTP) CMEB 9.5-1 as it relates to the design provisions given to implement the fire protection program."</p> <p>The BTP CMEB 9.5-1 at paragraph C.7.c (page 9.5.1-45) states:</p> <p>"C. Cable Spreading Room</p> <p>The primary fire suppression in the cable spreading room should be an automatic water system such as closed-head sprinklers, open-head deluge system, or open directional water system...."</p>	<p>None of the regulations pertaining to fire protection for nuclear power plants specify the suppression mediums to be used.</p> <p>Although the BTP 9.5-1 paragraph cited in the November 6, 1984, NRC letter expresses a preference for water, other parts of the same BTP address design considerations for gas suppression systems used in cable spreading rooms.</p> <p>At least 14 operating plants along with several NTOL's use gas systems as the primary fire suppression systems in cable spreading rooms. Since these plants have not been required to obtain exemptions to Title 10, DLC must conclude that water suppression is not required by existing regulations.</p>	<p>The SRP identifies an acceptable means for meeting the requirements which underlie the SRP. However, 10CFR50.34(g) states, "The SRP is not a substitute for the regulations, and compliance is not a requirement."</p>
SUGGESTED TIME FOR IMPLEMENTATION		DLC is unable to establish a position since no time has been proposed.	

ISSUE: Steam Generator Level

BACKFIT ISSUE NO.: L-84-13

ATTACHMENT 3
TO DLC RESPONSE
TO NRC LETTER DATED 11/06/84

DLC BACKFIT NO.: 9

<u>05/30/84</u>	<u>11/06/84</u>	<u>Appeal</u>	<u>Position</u>	<u>Meeting</u>	<u>First</u>	<u>Minutes &</u>	<u>Second</u>	<u>Meeting</u>	<u>Second</u>	<u>Minutes &</u>	<u>Formal</u>
<u>Backfit</u>	<u>NRC Rqmnts</u>	<u>Filed</u>	<u>Statement</u>	<u>Agenda</u>	<u>Appeal</u>	<u>Decision</u>	<u>Appeal</u>	<u>Agenda</u>	<u>Appeal</u>	<u>Decision</u>	<u>Appeal</u>
<u>Identified</u>	<u>Letter</u>		<u>Submitted</u>	<u>Issued</u>	<u>Meeting</u>	<u>Issued</u>	<u>Requested</u>	<u>Issued</u>	<u>Meeting</u>	<u>Issued</u>	<u>Request to</u>
											<u>Dir, NRR</u>

	<u>NRC POSITION</u>	<u>DLC POSITION</u>	<u>COMMENTS</u>
PROPOSED REQUIREMENTS	The design of the protection system for feedwater isolation on high steam generator level should be modified in conformance with Section 4.7 of IEEE-STD-279 as required by 10 CFR 50.55a(h). Otherwise, the safety analysis presented in Section 15 of the FSAR should be revised to demonstrate that the consequences of steam generator overfill are not safety significant and that operator response to such events at any power level is not required in less than ten minutes.	A large number of plants are currently operating with the standard Westinghouse 3 channel SG level control/protection system. Many of these plants received CP's after January 1, 1971, and are, therefore, subject to 10CFR50.55(h). Since these plants have not been required to obtain exemptions to 10CFR50.55(h), DLC must conclude that 10CFR50.55(h) does not require a fourth SG level channel. The hi-hi level trip is not required for protection from the excessive feedwater transient. The hi-hi steam generator level function is assumed in FSAR Chapter 15 only for the analysis of "feedwater system malfunctions causing an increase in feedwater flow." This analysis satisfies all applicable safety criteria, as the minimum DNBR remains above the protection limit and the minimum DNBR occurs prior to turbine trip (see FSAR Figure 15.1-2 and Table 15.1-1).	
HOW PROPOSED REQUIREMENT WOULD IMPROVE SAFETY	With the present design a single failure of a steam generator level channel could cause the feedwater control system to demand feedwater flow and also leave the steam generator high level feedwater isolation system unable to meet the single failure criterion.	The event postulated by the staff is extremely improbable. Additionally, DLC has provided responses which demonstrate that the operator has sufficient information and time to respond. The staff has not demonstrated that the postulated improvement to safety warrants this new requirement.	
RELATION OF NEW REQUIREMENT TO EXISTING REGULATORY POSITIONS		This position has not been provided by the NRC, therefore, DLC is unable to formulate a complete position.	
SUGGESTED TIME FOR IMPLEMENTATION		DLC is unable to establish a position since no time has been proposed.	

ISSUE: Air Dryers for Emergency Diesel Generator

BACKFIT ISSUE NO.: L-84-12

ATTACHMENT 4 PAGE 1 OF 2
TO DLC RESPONSE
TO NRC LETTER DATED 11/06/84

DLC BACKFIT NO.: 4

<u>06/15/84</u>	<u>11/06/84</u>											
Backfit Identified	NRC Rqmnts Letter	Appeal Filed	Position Statement Submitted	Meeting Agenda Issued	First Appeal Meeting	Minutes & Decision Issued	Second Appeal Requested	Meeting Agenda Issued	Second Appeal Meeting	Minutes & Decision Issued	Formal Appeal Request to Dir, NRR	

	NRC POSITION	DLC POSITION	COMMENTS
PROPOSED REQUIREMENTS	Standard Review Plan (SRP) Section 9.5.6 requires installation of air dryers to prevent moisture accumulation in the emergency diesel generator's air start system.	The Standard Review Plan is not a requirement. (10CFR50.34 states, "The SRP is not a substitute for the regulations, and compliance is not a requirement.")	
HOW PROPOSED REQUIREMENT WOULD IMPROVE SAFETY	The air start system designed for Beaver Valley 2, which does not have air dryers, will not preclude corrosion and buildup of corrosion products within the system. The prevention of corrosion products is necessary because both experience and staff study NUREG/CR-0660 has identified moisture in air start systems as the single greatest cause of EDG unreliability. This could compromise the EDG meeting its safety function.	Operating history of diesel generators at BVPS-1 has shown that proper maintenance and operating practices will allay the corrosion concern. The NUREG/CR 0660 study evaluated licensee event reports issued from 1969 through 1977 when the industry was less experienced with the operation of diesel generators. This aspect of the report is outdated and current industry data and practices must now be considered. A more recent study by the Institute for Nuclear Power Operations used 450 diesel-related LER's issued since January 1980 to analyze failure data. This study shows that only 5 percent of the more recent failures were due to moisture. At BVPS-1, there have been no moisture-related failures resulting in LER's for the eight years since the implementation of revised operating and maintenance practices. Moisture in air start systems is clearly not the single greatest cause of EDG unreliability at BVPS or in the industry as a whole. The staff has failed to demonstrate that addition of air dryers will provide a substantial increase in overall plant safety.	

ISSUE: Air Dryers for Emergency Diesel Generator

BACKFIT ISSUE NO.: L-84-12

ATTACHMENT 4 PAGE 2 OF 2
 TO DLC RESPONSE
 TO NRC LETTER DATED 11/06/84

DLC BACKFIT NO.: 4

	NRC POSITION	DLC POSITION	COMMENTS
RELATION OF NEW REQUIRE- MENT TO EXISTING REGULATORY POSITIONS	<p>The design of the Emergency Diesel Engine Starting System (EDESS) is acceptable if the integrated design of the system is in accordance with GDC 17. The Power Systems Branch review of the EDESS includes those system features necessary to assure reliable starting of the emergency diesel engine to conform with the requirements of GDC 17.</p>	<p>GDC 17 requires that onsite electric power supplies have sufficient independence, redundancy, and testability to perform their safety functions assuming a single failure. This is accomplished at BVPS-2 by providing independent and redundant diesel generators. BVPS-2 exceeds GDC 17 and the SRP acceptance criteria by providing two air starting systems for each diesel.</p> <p>DLC has determined that at least two operating plants do not use air dryers in the diesel air start systems. Since DLC is not aware that those plants have been required to obtain exemptions to Title 10, we must conclude that this is further evidence that no basis exists in regulation for requiring air dryers.</p>	
SUGGESTED TIME FOR IMPLEMENTA- TION		<p>DLC is unable to establish a position since no time has been proposed.</p>	

ISSUE: Motor Operated Accumulator Isolation Valve

BACKFIT ISSUE NO.: L-84-14

ATTACHMENT 5
TO DLC RESPONSE
TO NRC LETTER DATED 11/06/84

DLC BACKFIT NO.: 5

<u>06/15/84</u>	<u>11/06/84</u>											
Backfit	NRC Rqmnts	Appeal	Position	Meeting	First	Minutes &	Second	Meeting	Second	Minutes &	Formal	
Identified	Letter	Filed	Statement	Agenda	Appeal	Decision	Appeal	Agenda	Appeal	Decision	Appeal	
			Submitted	Issued	Meeting	Issued	Requested	Issued	Meeting	Issued	Request to	Dir, NRR

	NRC POSITION	DLC POSITION	COMMENTS
PROPOSED REQUIREMENTS		No requirement is evident in the NRC letter dated November 6, 1984. DLC is, consequently, unable to establish a position on the proposed requirement.	
HOW PROPOSED REQUIREMENT WOULD IMPROVE SAFETY	The staff's concern is how power will be removed from the above valve motor to meet the single failure criterion of 10 CFR 50 Appendix A and what procedures will be in place to verify that power is removed.	No improvement to safety is evident in the NRC position of November 6, 1984.	
RELATION OF NEW REQUIREMENT TO EXISTING REGULATORY POSITIONS	Branch Technical Position 18 in SRP B.1 requires prevention of undesirable mechanical motion of valve or fluid system components to prevent spurious activation and loss of their system function.	DLC letters 2NRC-4-082, dated June 15, 1984, and 2NRC-4-076, dated June 8, 1984, describe BVPS-2 design and administrative controls. These features meet the requirements of 10CFR50 and through the guidance of BTP-18 meet those of IEEE-279.	
SUGGESTED TIME FOR IMPLEMENTATION		DLC is unable to establish a position since no time has been proposed.	

ISSUE: Spent Fuel Pool Heat Load

BACKFIT ISSUE NO.: L-84-11

ATTACHMENT 6
TO DLC RESPONSE
TO NRC LETTER DATED 11/06/84

DLC BACKFIT NO.: 22

<u>06/15/84</u>	<u>11/06/84</u>											
Backfit Identified	NRC Rqmnts Letter	Appeal Filed	Position Statement Submitted	Meeting Agenda Issued	First Appeal Meeting	Minutes & Decision Issued	Second Appeal Requested	Meeting Agenda Issued	Second Appeal Meeting	Minutes & Decision Issued	Formal Appeal Request to Dir, NRR	

	NRC POSITION	DLC POSITION	COMMENTS
PROPOSED REQUIREMENTS	The full storage capability of the pool is 1088 fuel assemblies. The applicant should provide the results of an analysis which shows the capability of the cooling system for 1088 assemblies assuming successive refueling discharges.	The BVPS-2 fuel pool cooling system satisfies the requirements of GDC-44. This has been established by providing the evaluation which SRP 9.1.3 recommends for demonstrating compliance with GDC-44.	
HOW PROPOSED REQUIREMENT WOULD IMPROVE SAFETY	Overheating of the pool could result in the release of radioactivity from the stored fuel assemblies and possibly to the site environs.	DLC agrees that overheating of the fuel pool is undesirable. This statement, however, provides no justification for additional analyses. The NRC has not demonstrated that the acceptance criteria of SRP 9.1.3 does not reasonably preclude undue risk to the health and safety of the public.	
RELATION OF NEW REQUIREMENT TO EXISTING REGULATORY POSITIONS	The spent fuel pool cooling system must satisfy the requirements of General Design Criterion 44 which states in part "The system safety function shall be to transfer the combined heat load of these structures, systems, and components (i.e., those important to safety) under normal operating and accident conditions."	The new staff request is a change of interpretation of the following: 1. <u>10CFR50.34(g)</u> : The SRP was issued to establish criteria that the NRC staff intends to use in evaluating whether an applicant/licensee meets the Commission's regulations. 2. <u>Introduction to NUREG 0800 (SRP)</u> : Each section is written to provide the complete procedure and all acceptance criteria for all of the areas of review pertinent to that section. 3. <u>NRR Office Letter No. 2</u> : The Standard Review Plan represents the most definitive basis available for specifying NRC's design criteria and design guidelines for an "acceptable level of safety" for light water reactor facility reviews.	See Attachment #10 (NRR Office Letter No. 2).
SUGGESTED TIME FOR IMPLEMENTATION		DLC is unable to establish a position since no time has been proposed.	

Class IE Power for Lighting and
ISSUE: Communications Systems

BACKFIT ISSUE NO.: L-84-15

ATTACHMENT 7
TO DLC RESPONSE
TO NRC LETTER DATED 11/06/84

DLC BACKFIT NO.: 15

<u>06/25/84</u>	<u>11/06/84</u>											
<u>Backfit</u>	<u>NRC Rqmnts</u>	<u>Appeal</u>	<u>Position</u>	<u>Meeting</u>	<u>First</u>	<u>Minutes &</u>	<u>Second</u>	<u>Meeting</u>	<u>Second</u>	<u>Minutes &</u>	<u>Formal</u>	
<u>Identified</u>	<u>Letter</u>	<u>Filed</u>	<u>Statement</u>	<u>Agenda</u>	<u>Appeal</u>	<u>Decision</u>	<u>Appeal</u>	<u>Agenda</u>	<u>Appeal</u>	<u>Decision</u>	<u>Appeal</u>	<u>Request to</u>
			<u>Submitted</u>	<u>Issued</u>	<u>Meeting</u>	<u>Issued</u>	<u>Requested</u>	<u>issued</u>	<u>Meeting</u>	<u>Issued</u>	<u>Request to</u>	<u>Dir, NRR</u>

	NRC POSITION	DLC POSITION	COMMENTS
PROPOSED REQUIREMENTS	The staff requires that under a design basis seismic event, the applicant's design should provide adequate communications between the control room and necessary plant safety related areas and adequate lighting in these areas to enable operator to perform the necessary safety functions.	"Adequate" communications and lighting are not sufficiently defined to support preparation of a DLC position.	
HOW PROPOSED REQUIREMENT WOULD IMPROVE SAFETY	These requirements are necessary for operators and other plant personnel to carry out their duties during emergencies. These duties involve many actions which are tied to safety system functioning.	Since the requirement is ambiguous, it cannot be demonstrated how overall plant safety would be improved.	
RELATION OF NEW REQUIREMENT TO EXISTING REGULATORY POSITIONS	Standard Review Plan (SRP) 9.5.2 "Communication Systems" requires a capability of the system to provide effective intra-plant communications and effective plant-to-offsite communications during normal plant operations and during transients, fire, and accident conditions, including loss of offsite power. The SRP further states "the communication system is acceptable if the integrated design of the system will provide effective communication between plant personnel in all vital areas during normal plant operation and during the full spectrum of accident or incident conditions (including fire) under maximum potential release level." SRP 9.5.3 "Lighting Systems" requires the lighting systems to meet the following: "(1) a capability of the normal lighting systems(s) to provide adequate lighting during all plant operating conditions, and (2) a capability of the emergency lighting system to provide adequate lighting during all plant operating conditions, including fire, transients and accident conditions, and the effect of loss-of-offsite power on the emergency lighting system".	The Standard Review Plan is not a requirement. In addition, the Standard Review Plan acceptance criteria section states, "There are no general design criteria or regulatory guides that directly apply to the safety-related performance requirements for the lighting system."	
SUGGESTED TIME FOR IMPLEMENTATION		DLC is unable to establish a position since no time has been proposed.	

ISSUE: Alarm for Rocker Arm Lube Oil Reservoir

BACKFIT ISSUE NO.: L-84-17

ATTACHMENT 8
TO DLC RESPONSE
TO NRC LETTER DATED 11/06/84

DLC BACKFIT NO.: 2

06/25/84 11/06/84

Backfit Identified	NRC Rqmnts Letter	Appeal Filed	Position Statement Submitted	Meeting Agenda Issued	First Appeal Meeting	Minutes & Decision Issued	Second Appeal Requested	Meeting Agenda Issued	Second Appeal Meeting	Minutes & Decision Issued	Final Appeal Request to Dir, NRR
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	NRC POSITION	DLC POSITION	COMMENTS
PROPOSED REQUIREMENTS	To satisfy this, the staff requires monitoring of lube oil level in the reservoir tank or other means to assure the presence of a sufficient supply of lube oil. We would accept a sight glass level indicator for this purpose.	<ol style="list-style-type: none"> 1. Low pressure alarm warns operator. 2. System design provides a reliable means of automatic make-up to rocker arm reservoir. 3. BV-2 design is similar to other plants where this manufacturer's design has proven reliable. 	
HOW PROPOSED REQUIREMENT WOULD IMPROVE SAFETY	Lube oil level is monitored because loss of lube oil level in the reservoir tank would subject the rocker arm assembly to severe wear and/or to possible engine failure while operating under load or to a dry start when starting from a standby mode, and thus compromise the EDG availability to meet its safety function.	Staff has not demonstrated that low pressure alarm in conjunction with auto make-up valve does not provide sufficient reliability or that level switches or sight glasses increase safety.	
RELATION OF NEW REQUIREMENT TO EXISTING REGULATORY POSITIONS	Standard Review Plan (SRP) 9.5.7 "Emergency Diesel Engine Lubrication System" requires that the diesel engine be provided with a dedicated lube oil system design which includes measures to provide lubrication to the diesel engine wearing parts during standby conditions and/or normal and emergency starts.	<p>Proposed requirement exceeds the scope of SRP which:</p> <ol style="list-style-type: none"> 1. is guidance not requirement 2. does not suggest a level switch <p>At least eight other plants have the same diesel. A survey is still in progress but it appears that the results will demonstrate that other plants, both operating and NTOL:</p> <ol style="list-style-type: none"> 1. have the same diesel 2. do not have low level switches/alarms 3. did not require exemptions to Title 10 <p>Therefore, DLC expects to conclude that there is no basis in regulation for this request.</p>	See Attachment #10 (NRR Office letter #2).
SUGGESTED TIME FOR IMPLEMENTATION		DLC is unable to establish a position since no time has been proposed.	

ISSUE: Diesel L.O. Fill Procedure

Not
 BACKFIT ISSUE NO.: Available
 DLC BACKFIT NO.: 32

ATTACHMENT 9
 TO DLC RESPONSE
 TO NRC LETTER DATED 11/06/84

09/14/84	11/06/84											
Backfit Identified	NRC Rqmnts Letter	Appeal Filed	Position Statement Submitted	Meeting Agenda Issued	First Appeal Meeting	Minutes & Decision Issued	Second Appeal Requested	Meeting Agenda Issued	Second Appeal Meeting	Minutes & Decision Issued	Formal Appeal Request to Dir, NRR	

	NRC POSITION	DLC POSITION	COMMENTS
PROPOSED REQUIREMENTS	The staff requires that operating procedures be either located or posted in the D/G rooms.	This requirement has no basis in regulation. This requirement is not consistent with the method of handling procedures for other safety related evolutions. This requirement would not be consistent with DLC administrative controls which ensure the use of controlled copies of <u>approved</u> procedures.	
HOW PROPOSED REQUIREMENT WOULD IMPROVE SAFETY	If operating procedures are not located or posted in the D/G room, lubricating oil might be incorrectly added to the D/G without consulting the procedures and thus potentially compromise the availability of the D/G and its safety functions.	The NRC staff has neither demonstrated that locating procedures in the D/G room improves plant safety nor that posting increases the probability of using a current approved procedure.	
RELATION OF NEW REQUIREMENT TO EXISTING REGULATORY POSITIONS	Standard Review Plan (SRP) 9.5.7 "Emergency Diesel Engine Lubrication System" requires the system to be designed to preclude the entry of deleterious material into the system due to operator error or extreme natural phenomena during recharging or normal operation. (See also IE Circular 80-05)	IE Circular 80-05 recommends that the procedure be available in the D/G room. The SRP recommends that diesel lube oil be kept free of foreign material. Neither the SRP nor IEC 80-05 require posting of procedures. At least two operating plants do not keep this procedure in the D/G room. Since no exemption to Title 10 requirements was required of these plants, DLC must conclude that no basis exists in regulation for this requirement.	
SUGGESTED TIME FOR IMPLEMENTATION		DLC is unable to establish a position since no time has been proposed.	