



Duquesne Light

Nuclear Construction Division
Robinson Plaza, Building 2, Suite 210
Pittsburgh, PA 15205

2NRC-5-116
(412) 787-5141
(412) 923-1960
Telecopy (412) 787-2629
8-7-85

United States Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Mr. Thomas H. Novak
Assistant Director for Licensing
Office of Nuclear Reactor Regulation

SUBJECT: Beaver Valley Power Station - Unit No. 2
Docket No. 50-412
Final Draft Safety Evaluation Report and Final Environmental
Statement

Gentlemen:

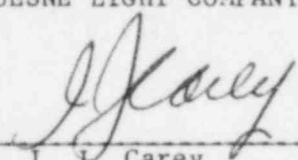
The Final Draft Safety Evaluation Report (FDSER) has been reviewed; and status summaries of open issues, confirmatory issues, and commitment issues and general comments are attached.

Attachment 1 summarizes the status of the Table 1.2 Open Issues and includes references for information previously provided and schedule dates for submittals of additional information. A status of Table 1.4 Confirmatory Issues is included as Attachment 2. A status of Commitment Issues is included as Attachment 3. General Comments on the FDSER are included as Attachment 4.

Upon completing your review of this information, please inform us of the schedule for issuance of the SER. Please advise us also on when you will be issuing the Final Environmental Statement.

DUQUESNE LIGHT COMPANY

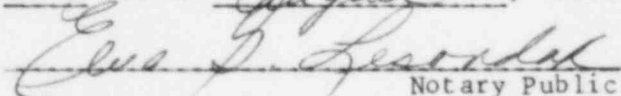
By


J. J. Carey
Vice President

JJS/wjs
Attachment

cc: Mr. B. K. Singh, Project Manager (w/a)
Mr. G. Walton, NRC Resident Inspector (w/a)

SUBSCRIBED AND SWORN TO BEFORE ME THIS
1st DAY OF August, 1985.


Notary Public

ELVA G. LESONDAK, NOTARY PUBLIC
ROBINSON TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES OCTOBER 20, 1986

8508200126 850807
PDR ADOCK 05000412
E PDR

COOL
11

United States Nuclear Regulatory Commission
Mr. Thomas H. Novak
Review of Final Draft Safety Evaluation Report
Page 2

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF BEAVER)

On this 7th day of August, 1985, before me, a
Notary Public in and for said Commonwealth and County, personally appeared
J. J. Carey, who being duly sworn, deposed and said that (1) he is Vice
President of Duquesne Light, (2) he is duly authorized to execute and file
the foregoing Submittal on behalf of said Company, and (3) the statements set
forth in the Submittal are true and correct to the best of his knowledge.

Elva G. Lesondak
Notary Public

ELVA G. LESONDAK, NOTARY PUBLIC
ROBINSON TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES OCTOBER 20, 1986

ATTACHMENT 1

FINAL DRAFT SAFETY EVALUATION REPORT
REVIEW STATUS

TABLE 1.2 OPEN ISSUES

ITEM #	ISSUE	DLC STATUS	LETTER NO. AND DATE	RESPONSE DATE (IF NOT COMPLETE)
1	POSTULATED RUPTURES IN THE PRIMARY COOLANT LOOP (3.9.3.1)	OPEN (SEE GENERAL COMMENT NO. 44)	2NRC-4-174, 10/24/84	
2	PRESERVICE/INSERVICE TESTING (3.9.6)	OPEN	2NRC-4-184, 11/07/84	12/31/85
3	PUMP AND VALVE LEAK TESTING (3.9.6)	CLOSED (SEE GENERAL COMMENT NO. 49)	2NRC-5-055, 03/27/85	
4	ANALYSIS OF COMBINED LOCA AND SEISMIC LOADS (4.2.3.3(4))	CLOSED	2NRC-4-209, 12/18/84 2NRC-5-057, 03/29/85	
5	ICC INSTRUMENTATION (ITEM II.F.2 OF NUREG 0737) (4.4.7)	COMPLETE	2NRC-5-079, 05/31/85	
6	PRESERVICE/INSERVICE INSPECTION PROGRAM(5.2.4.3,5.4.2.2,6.6)	OPEN	2NRC-4-096, 06/29/84	06/30/86
7	OFFSITE ELECTRICAL POWER SYSTEM (8.2)			
	A. SHARING OF OFFSITE CIRCUITS BETWEEN UNITS 1 & 2 (8.2.1.1)	OPEN		08/16/85
	B. INDEPENDENCE BETWEEN ONSITE AND OFFSITE POWER SOURCES (8.2.2.4)	COMPLETE	2NRC-5-017, 02/05/85	
	C. USE OF AUTOMATIC LOAD TAP CHANGER (LTC) (8.2.2.5)	COMPLETE	2NRC-5-017, 02/05/85	
	- COMPLIANCE WITH GDC 5 AND 17			
8	ONSITE POWER SYSTEMS (8.3)			
	A. VOLTAGE ANALYSIS (8.3.1.1)			
	- JUSTIFICATION OF VOLTAGE DROP	COMPLETE	2NRC-5-017, 02/05/85	
	- VOLTAGE AND LOAD ANALYSIS FOR LIGHT-LOAD CASES	CONFIRMATORY		
	- OTHER INCOMPLETE VOLTAGE ANALYSES	CONFIRMATORY		

ITEM #	ISSUE	DLC STATUS	LETTER NO. AND DATE	RESPONSE DATE (IF NOT COMPLETE)
	B. LOAD TESTING OF DG (8.3.1.3)	COMPLETE	2NRC-5-090, 06/12/85	
	C. CAPABILITY OF DG TO ACCEPT DESIGN LOAD AFTER PROLONGED NO-LOAD OPERATION (8.3.1.5)	COMPLETE	2NRC-5-017, 02/05/85	
	D. REPLACEMENT FOR CLASS 1E LOADS (8.3.1.15)	COMPLETE	2NRC-4-017, 02/05/85	
	E. DESIGN QUALIFICATION AND/OR PROTECTION OF CLASS 1E EQUIPMENT FROM NATURAL PHENOMENA (8.3.3.1.2)	COMPLETE	2NRC-4-140, 09/07/84	
	F. PROTECTION OF CLASS 1E EQUIPMENT FROM DYNAMIC EFFECTS (8.3.3.1.3)	COMPLETE	2NRC-5-017, 02/05/85	
	G. SEPARATION OF CONTAINMENT ELECTRICAL PENETRATIONS (8.3.3.3.2)	COMPLETE	2NRC-5-017, 02/05/85	
	H. SEPARATION INSIDE PANELS, CABINETS, OR ENCLOSURES (8.3.3.3.5)	COMPLETE (SEE GENERAL COMMENT NO. 87)	2NRC-5-045, 03/13/85 2NRC-5-101, 06/10/85	
	I. FSAR DESCRIPTION OF PHYSICAL SEPARATION (8.3.3.3.6)	COMPLETE	2NRC-5-002, 01/04/85 2NRC-5-045, 03/13/85 2NRC-5-081, 06/04/85	
	- FIGURES 8.3-18 AND 8.3-23 (8.3.3.3.6)			
	- OTHER FIGURES			
	- CABLE AGING			
	- TEMPERATURE MEASUREMENTS			
	- FUNCTIONAL CAPABILITY			
	- BASIS FOR EXCLUDING CABLES BIGGER THAN #6			
	J. ROUTING OF POWER CIRCUITS IN CABLE SPREADING AREA (8.3.3.3.14)	COMPLETE	2NRC-5-045, 03/13/85	
	K. JUSTIFICATION USE OF SOLID HIGH-HAT COVERS (8.3.3.3.15)	COMPLETE	2NRC-5-081, 06/04/85	
	L. JUSTIFICATION OF 15-FOOT CABLE MARKING INTERVALS (8.3.3.3.16)	COMPLETE (SEE GENERAL COMMENT NO. 89)	2NRC-5-045, 03/13/85	
	M. COMPLIANCE WITH RG 1.63 (8.3.3.7.2)	COMPLETE	2NRC-5-045, 03/13/85	
	- COMPLIANCE WITH IEEE 279-1971			
	- EXCEPTION TO POSITION 1 OF RG 1.63			
9	PRIMARY COMPONENT COOLING WATER (9.2.2.1)	ADD TO TABLE 1.3 (SEE GENERAL COMMENT NO. 93)	2NRC-5-067, 05/06/85	
10	SAFE AND ALTERNATE SHUTDOWN (9.5.1)	OPEN		08/86

ITEM #	ISSUE	DLC STATUS	LETTER NO. AND DATE	RESPONSE DATE (IF NOT COMPLETE)
11	EMERGENCY DIESEL GENERATOR AND SUPPORT SYSTEMS (9.5.4-9.5.8)			
	A. AUXILIARY SUPPORT SYSTEMS (9.5.4.1)			
	- DISCUSSION OF THE TRAINING PROGRAM FOR THE OPERATION AND MAINTENANCE OF THE DGs	COMPLETE	2NRC-5-056, 03/27/85	
	- LOADING OF THE DGs FOLLOWING NO-LOAD OPERATION AND DURING OR AFTER TROUBLESHOOTING	COMPLETE	2NRC-5-038, 03/05/85	
	- CAPABILITY OF THE DGs TO OPERATE UNDER EXTREME SERVICE CONDITIONS	COMPLETE	2NRC-5-056, 03/27/85	
	- VIBRATION OF FLOOR MOUNTED EQUIPMENT	COMPLETE	2NRC-5-038, 03/05/85	
	B. DESCRIPTION OF CONTROL, INSTRUMENTATION, SENSOR, AND ALARM TESTING/CALIBRATION (9.5.4 - 9.5.8)	OPEN		08/16/85
	C. CONFORMANCE TO ANSI N195, RG 1.137, AND TECHNICAL SPECIFICATIONS WITH REGARD TO FUEL OIL QUALITY (9.5.4.2)	OPEN		MEETING NEEDED
	D. PERMISSIBLE LEAKAGE RATES BETWEEN DG COOLING SYSTEM AND OTHER AUXILIARY SYSTEMS (9.5.5)	COMPLETE	2NRC-4-098, 07/24/84	
***	DG ROCKER ARM LUBE OIL PRE-HEATING	COMPLETE	2NRC-5-038, 03/05/85	
	E. DEGRADATION OF DG OPERATION AS A RESULT OF POTENTIAL FIRE IN DG ROOM (9.5.8)	COMPLETE	2NRC-5-056, 03/27/85	
	F. DESCRIPTION OF THE OPERATION OF DG ROOM VENTILATION SYSTEM DURING LOOP (9.5.8)	OPEN		08/16/85
12	TURBINE/GENERATOR BYPASS (10.2 - 10.4)			
	A. INSERVICE INSPECTION PROGRAM FOR THE EXTRACTION VALVES (10.2)	OPEN		08/16/85
	B. USE OF VALVES DOWNSTREAM OF MAIN STEAM ISOLATION VALVES FOR LIMITING BLOWDOWN (10.3.2)	COMPLETE	2NRC-5-056, 03/27/85	
	C. TURBINE BYPASS SYSTEM (10.4.4)			
	- INSERVICE INSPECTION PROGRAM AND ITS FREQUENCY	COMPLETE	2NRC-5-056, 03/27/85	
	- DESCRIPTION OF TURBINE BYPASS CONTROL ROOM INTERLOCK SELECTOR SWITCHES	COMPLETE	2NRC-4-154, 09/25/84	
13	MANAGEMENT AND ORGANIZATION (13.1)	OPEN		
14	CROSS-TRAINING PROGRAM (13.2.1.2)	COMPLETE	CAREY TO R.M. KELLER LETTER 06/13/85	
15	EMERGENCY PREPAREDNESS PLAN (13.3.3)	OPEN	2NRC-5-077, 05/28/85	10/85

ITEM #	ISSUE	DLC STATUS	LETTER NO. AND DATE	RESPONSE DATE (IF NOT COMPLETE)
***	NRR REVIEW OF PGP FOR EOP's			NRR ACTION
16	INITIAL TEST PROGRAM (14)	COMPLETE	2NRC-5-110, 07/29/85	
***	STRUCTURES SYSTEMS AND COMPONENTS COVERED BY QA PROGRAM	COMPLETE	2NRC-5-096, 06/28/85	
17	CONTROL ROOM DESIGN REVIEW (18.1)	OPEN		12/85
18	SAFETY PARAMETER DISPLAY SYSTEM (18.2)	OPEN		12/85

***	ITEM WAS FOUND IN TEXT BUT NOT IN TABLE 1.2.			

ATTACHMENT 2

TABLE 1.4 CONFIRMATORY ISSUES

ITEM #	ISSUE	LETTER NO. /DATE (IF COMPLETE)	RESPONSE DATE (IF NOT COMPLETE)	REMARKS
1	SAFE SHUTDOWN EARTHQUAKE (2.5.2.6)	2NRC-5-027, 02/20/85		SEE GENERAL COMMENT NO. 24
2	OPERATING BASIS EARTHQUAKE (2.5.2.7)	2NRC-5-027, 02/20/85		SEE GENERAL COMMENT NO. 24.
3	STABILITY OF SUBSURFACE MATERIALS AND FOUNDATIONS (2.5.4)		06/30/86	SEE GENERAL COMMENT NO. 28
4	INTERNALLY GENERATED MISSILES (OUTSIDE CONTAINMENT) (3.5.1.1)		*	
5	INTERNALLY GENERATED MISSILES (INSIDE CONTAINMENT) (3.5.1.2)		*	
6	TURBINE MISSILES (3.5.1.3)			SEE GENERAL COMMENT NO. 34
7	ANALYSIS OF PIPE BREAK PROTECTION OUTSIDE CONTAINMENT (3.6.1)		*	
8	FSAR DRAWING OF BREAK LOCATIONS (3.6.2)		*	
9	RESULTS OF JET IMPINGEMENT EFFECTS (3.6.2)		*	
10	SOIL STRUCTURE INTERACTION ANALYSIS (3.7.3)		08/15/86	SEE GENERAL COMMENT NO. 39
11	DESIGN DOCUMENTATION OF ASME CODE COMPONENTS (3.9.3.1)			SEE GENERAL COMMENT NO. 45
12	ITEM II.D.1 OF NUREG 0737 (3.9.3.2)			SEE GENERAL COMMENT NO. 46
13	SEISMIC AND DYNAMIC QUALIFICATION OF MECHANICAL AND ELECTRICAL EQUIPMENT (3.10.1)		07/30/86	WILL BE COMPLETED AT PRE-AUDIT
14	PUMP AND VALVE OPERABILITY ASSURANCE (3.10.2)		07/30/86	WILL BE COMPLETED AT PRE-AUDIT
15	ENVIROMENTAL QUALIFICATION OF MECHANICAL AND ELECTRICAL EQUIPMENT (3.11)		07/30/86	WILL BE COMPLETED AT PRE-AUDIT

ITEM #	ISSUE	LETTER NO. /DATE (IF COMPLETE)	RESPONSE DATE (IF NOT COMPLETE)	REMARKS
16	PEAK PELLETT DESIGN BASIS (4.2.1)		08/31/85	
17	DISCREPENCIES IN THE FSAR (4.2.2)		08/31/85	
18	ROD BOWING ANALYSIS (4.2.3.1(6))	2NRC-4-102, 07/12/84		THIS ITEM SHOULD BE CLOSED
19	FUEL ROD INTERNAL PRESSURE (4.2.3.1(8))		08/31/85	
20	PREDICTED CLADDING COLLAPSE TIME (4.2.3.2(2))		08/31/85	
21	USE OF THE SQUARE-ROOT-OF-THE-SUM-OF-THE-SQUARES METHOD FOR SEISMIC AND LOCA LOAD CALCULATION (4.2.3.3(4))	2NRC-4-209, 12/18/84		THIS ITEM SHOULD BE CLOSED
**	PROVIDE NON-GRID COMPONENT FORCES (4.2.5(7))	2NRC-4-209, 12/18/84		THIS ITEM SHOULD BE CLOSED
22	LOOSE PARTS MONITORING SYSTEM (4.4.4)		09/31/87	AFTER TEST
23	NATURAL CIRCULATION TEST (5.4.7.5)	2NRC-5-018, 02/84		SEE GENERAL COMMENT NO. 71
24	REACTOR COOLANT SYSTEM HIGH POINT VENTS (5.4.12)			SEE GENERAL COMMENT NO. 72
25	BLOWDOWN MASS AND ENERGY RELEASE ANALYSIS METHODOLOGY (6.2.1.1, 6.2.1.3, 6.2.1.4)			SEE GENERAL COMMENT NO. 73, 76
26	CONTAINMENT HEAT REMOVAL SYSTEM (6.2.2)			SEE GENERAL COMMENT NO. 77
27	CONTROL ROOM HABITABILITY (6.4)		08/30/85	SEE GENERAL COMMENT NO. 78
28	DESIGN MODIFICATION OF AUTOMATIC REACTOR TRIP USING SHUNT COIL TRIP ATTACHMENT (7.2.2.3)		06/31/86	
29	AUTOMATIC OPENING OF SERVICE WATER SYSTEM VALVES MOV 113C AND 113D (7.3.3.10)		12/31/85	
30	IE BULLETIN 80-06 CONCERNS (7.3.3.13)		05/31/87	AFTER TEST
31	NUREG 0737 ITEM II.F.1, ACCIDENT MONITORING INSTRUMENTATION POSITIONS (7.5.2.2)	2NRC-4-210, 12/18/84		THIS ITEM SHOULD BE CLOSED
32	BYPASS AND INOPERATIVE STATUS PANEL (7.5.2.4)		04/30/85	
33	REVISION OF THE FSAR -- COLD LEG ACCUMULATOR MOTOR -OPERATED VALVE POSITION INDICATION (7.6.2.4)		12/31/85	

ITEM #	ISSUE	LETTER NO. /DATE (IF COMPLETE)	RESPONSE DATE (IF NOT COMPLETE)	REMARKS
34	CONTROL SYSTEM FAILURE CAUSED BY MALFUNCTION OF COMMON POWER SOURCE OR INSTRUMENT LINE (7.7.2.3)		11/30/85	
35	CONFIRMATORY SITE VISIT			SITE VISIT TO BE SCHEDULED
	A. INDEPENDENCE OF OFFSITE POWER CIRCUITS BETWEEN THE SWITCHYARD AND CLASS 1E SYSTEM (8.2.2.3)			
	B. CONFIRMATION OF THE PROTECTIVE BYPASS (8.3.1.2)			
	C. VERIFICATION OF DG START AND LOAD TESTS (8.3.1.8)			
	D. DG LOAD CAPABILITY QUALIFICATION TEST (8.3.1.9)			
	E. MARGIN QUALIFICATION TEST (8.3.1.10)			
	F. ELECTRICAL INTERCONNECTION BETWEEN REDUNDANT CLASS 1E BUSES (8.3.1.13)			
	G. VERIFICATION OF ELECTRICAL INDEPENDENCE BETWEEN POWER SUPPLIES TO CONTROLS IN CONTROL ROOM AND REMOTE LOCATIONS (8.3.3.5)			
36	VOLTAGE ANALYSIS -- VERIFICATION OF TEST RESULTS (8.3.1.1)		APPROX. 6 MONTHS PRIOR TO FUEL LOAD	
37	DESCRIPTION AND ANALYSIS OF COMPLIANCE WITH GDC 50 (8.3.3.7.1)	2NRC-4-011, 02/09/84		
38	POSTACCIDENT SAMPLING (9.3.2)	2NRC-4-042, 04/18/84 2NRC-4-163, 10/10/84		THIS ITEM IS CLOSED
39	COMPLETION OF PLANT- SPECIFIC CORE DAMAGE ESTIMATE PROCEDURE BEFORE FUEL LOAD (9.3.2.2)		12/31/86	
40	FUEL OIL TANK SEDIMENT CONTROL DURING FILLING OPERATIONS (9.5.4.2)	2NRC-5-056, 03/27/85		THIS ITEM SHOULD BE CLOSED
41	SOLID WASTE PROCESS CONTROL PROGRAM (11.4.2)		03/31/86	THIS ITEM WILL BE ADDRESSED BY THE STOCK EQUIPMENT GENERIC REPORT ON THE PROCESS CONTROL PROGRAM.

ITEM #	ISSUE	LETTER NO. /DATE (IF COMPLETE)	RESPONSE DATE (IF NOT COMPLETE)	REMARKS
42	TMI ACTION PLAN ITEMS			
	A. III.D.1.1 (13.5.2)			
	B. II.K.1.5 AND II.K.1.10 (15.9.2, 15.9.3)			THIS ITEM SHOULD BE CLOSED. DLC COMMITTED TO DO THIS. PROCEDURES DO NOT NEED TO BE SUBMITTED FOR THIS.
	C. II.K.3.5 (15.9.9)			NOTHING IS REQUESTED. ITEM SHOULD BE CLOSED.
	D. II.K.3.17 (15.9.11)			SAME COMMENT AS ITEM 42(B).
	E. II.K.3.31 (15.9.14)	WCAP-10054 / WCAP-10079		SEE INDICATED WCAP's
43	PLANT-SPECIFIC DROPPED ROD ANALYSIS (15.4.3)		01/01/86	
44	QUALITY ASSURANCE PROGRAM (17.5)			THERE IS NO FDSE SECTION 17.5

* HAZARDS ANALYSIS IS SCHEDULED FOR COMPLETION AT THE END OF
1986 AND DOCUMENTED IN EARLY 1987.

** ITEM WAS FOUND IN TEXT BUT NOT IN TABLE 1.4.

ATTACHMENT 3

FINAL DRAFT SAFETY EVALUATION REPORT
COMMITMENT ISSUES

PAGE	SECTION	DESCRIPTION OF COMMITMENT	COMMENTS
2-5	2.2.2	TECH. SPECS. FOR CONTINUOUS COMMUNICATION LINKS WITH CURRENT AND FUTURE LOCAL INDUSTRIES THAT USE TOXIC MATERIALS	BVPS-2 TECH. SPECS. DO NOT INCLUDE THIS REQUIREMENT.
3-15 (CONFIRM. # 7)	3.6.1	AN ANALYSIS WILL BE PROVIDED THAT CONFIRMS THAT SAFETY-RELATED EQUIPMENT IS PROPERLY QUALIFIED FOR THE SUPERHEATED STEAM CONDITION THAT MAY RESULT FROM A POSTULATED STEAMLINE BREAK. THIS SHOULD BE A SEPERATE CONFIRMATORY ITEM.	DLC INTENDS TO UTILIZE THE RESULTS OF THE WOG HELB/SBOC SUBGROUP TO REVIEW IMPACT ON ENVIROMENTAL QUALIFICATIONS.
3-17	3.6.2	THE RESULTS OF THE EVALUATION OF JET IMPINGEMENT EFFECTS WILL BE PROVIDED BY JULY 1985.	AGREE WITH COMMITMENT EXCEPT THAT THE RESULTS ARE SCHEDULED FOR EARLY 1987 SUBMITTAL.
3-17	3.6.2	DRAWINGS SHOWING BREAK LOCATIONS, TYPE OF BREAKS, STRUCTURAL BARRIERS AND RESTRAINTS LIKE THOSE PROVIDED FOR THE FEED-WATER LINES INSIDE AND OUTSIDE CONTAINMENT AND THE MAIN STEAM LINES OUTSIDE CONTAINMENT ARE TO BE PROVIDED BY 07/85.	AGREE WITH COMMITMENT EXCEPT THAT DRAWINGS ARE SCHEDULED FOR EARLY 1987.
3-41	3.10.1	THE APPLICANT COMMITED TO INCORPORATE THE SEISMIC AND ALL OTHER PERTINENT DYNAMICE LOADS, INCLUDING ACCIDENT LOADS, IN THE SEISMIC QUALIFICATION PROGRAMS, ALSO SHOULD INCLUDE FATIGUE CYCLING EFFECTS.	DLC HAS MET WITH THE STAFF ON SEVERAL OCCASIONS AND DISCUSSED THE TYPES OF LOADS INCLUDED IN THE SEISMIC PROGRAM. THE FDSEI IS THE FIRST TIME DLC HAS BEEN REQUESTED TO ADDRESS FATIGUE CYCLING EFFECTS. WE DISAGREE BECAUSE WE ONLY CONSIDER FATIGUE ON CERTAIN EQUIPMENT.
4-11	4.2.3.3(4)	1. CONFIRM COMBINED LOCA/SEISMIC LOADS. 2. PROVIDE NON-GRID COMPONENT FORCES	PROVIDED IN 2NRC-4-209, 12/18/84 PROVIDED IN 2NRC-4-209, 12/18/84

PAGE	SECTION	DESCRIPTION OF COMMITMENT	COMMENTS
4-25	4.4.8	PROVIDE INFORMATION ON COMPLIANCE WITH NUREG-0737 II.F.2.	PROVIDED IN 2NRC-5-079, 5/31/85
7-21	7.3.3.10	UPDATE FSAR FIGURE 9.2-4.	PROVIDED IN 2NRC-5-075, 05/20/85
7-32	7.5.2.4	CONFIRM BISI DESIGN IN FSAR.	PROVIDED IN 2NRC-4-103, 07/13/84
9-15	9.2.2.1	THE TECH. SPECS. WILL REQUIRE PERIODIC TEST AND INSPECTIONS TO ENSURE THE AVAILABILITY OF THE SPARE PCCW PUMP.	EVEN STANDARD TECH. SPECS. DO NOT REQUIRE THIS.
9-22	9.3.1	THIRD PARAGRAPH ON PAGE 9-22: FOR THE CONTAINMENT AND INSTRUMENT AIR SYSTEMS, INSTRUMENT AIR QUALITY OF FILTER DISCHARGE WILL BE TESTED ANNUALLY FOR DEWPOINT AND PARTICULATE CONTAMINATION TO ENSURE ADEQUATE OPERATING PERFORMANCE.	DLC HAS NOT MADE THIS COMMITMENT.
9-26	9.3.3	THIRD PARAGRAPH OF SECTION 9.3.3: DRAINAGE FROM THE TURBINE BUILDING IS MONITORED FOR RADIOACTIVITY AND IS PUMPED EITHER TO THE YARD DRAINAGE SYSTEM OR TO THE LIQUID WASTE SYSTEM DEPENDING ON ITS RADIOACTIVITY LEVEL.	THE DRAINAGE FROM THE TURBINE BUILDING CAN BE SAMPLED" AND THEN "CAN BE PUMPED" TO THE YARD DRAINAGE SYSTEM OR THE LIQUID WASTE SYSTEM, BUT NO COMMITMENT HAS BEEN MADE BY DLC TO DO THIS.
9-70	9.5.4.2	FILLING PROCEDURE FOR DIESEL GENERATOR OIL TANKS.	TWO COMMITMENTS REGARDING THE FILLING PROCEDURE FOR D/G WERE NOT MADE.
13-25	13.5.2	NUREG 0737 ITEM III.D.1.1, DLC HAS NOT ADEQUATELY ADDRESSED THIS ITEM.	THIS ITEM IS CONFIRMATORY.
15-3	15.1.2	THE APPLICANT HAS COMMITTED TO PROVIDE A DESCRIPTION IN FSAR SECTION 15.1.2 OF THE TWO SAFETY-GRADE METHODS THAT WILL BE USED TO PROTECT AGAINST STEAM GENERATOR OVERFILL.	DLC AGREED TO DISCUSS THE JANUARY 1985 OVER FEEDWATER EVENT IN THE FSAR. (BV-1)

PAGE	SECTION	DESCRIPTION OF COMMITMENT	COMMENTS
15-11	15.4.6	THIS PROCEDURE* IS ACCEPTABLE WHEN THE PLANT'S TECH. SPEC. REQUIRES LOCKOUT OF ALL PROBABLE SOURCES OF DILUTION WATER WHEN THE PLANT IS IN MODE 6.	DLC AGREED TO ADMINISTRATIVELY CONTROL THE VALVES, NOT LOCK THEM.
15-12	15.4.7	THE APPLICANT HAS STATED THAT THE AVAILABLE INCORE INSTRUMENTATION WILL BE USED "BEFORE" THE START OF A FUEL CYCLE TO SEARCH FOR FUEL LOADING ERRORS.	DLC SAID INCORE FLUX DETECTORS (15.4.7)
15-18	15.6.5.2	THE STAFF WILL REVIEW THE BV-2 TECH. SPECS. RELATIVE TO THE TESTING OF ESF SYSTEMS REEVALUATING SUMP WATER OUTSIDE CONTAINMENT TO ENSURE THAT THE LEAKAGE OUTSIDE CONTAINMENT FOR ALL THESE SYSTEMS IS > .0094 gpm.	NOT REQUIRED FOR BV-1 OR STANDARD TECH. SPECS.
APP. C, PG. 8 TASK A-43		THE STAFF HAS REQUESTED THAT THE APPLICANT PROVIDE A DEBRIS GENERATION AND TRANSPORT ANALYSIS TO JUSTIFY THE 50% SUMP BLOCKAGE ASSUMPTION.	WE NEVER AGREED TO THIS AND STILL DON'T BELIEVE THAT THIS ANALYSIS IS NECESSARY. WE MEET THE SRP CRITERIA.
18-2	18.1	CRDR SUMMARY REPORT TO BE ISSUED 06/01/85.	ACTUAL DATE SHOULD BE 12/02/85.

ATTACHMENT 4

FINAL DRAFT SAFETY EVALUATION REPORT
GENERAL COMMENTS

PAGE	SECTION	DLC COMMENTS
1.	1-7 1.6	THIS SECTION IMPROPERLY IMPLIES THAT DLC MADE MANY DESIGN CHANGES AS A RESULT OF STAFF REVIEW.
2.	2-1 2.1.2	THE BVPS-2 EXCLUSIONARY AREA IS DEFINED BY A 2000 FT. RADIUS AROUND THE BVPS-1 CONTAINMENT BUILDING AND EXTENDING IN PART TO THE NORTH SHORE OF THE OHIO RIVER. (FSAR 2.1.1.3 AND FIG. 2.1-2 AMENDMENT 10)
3.	2-3 2.2.2	DLC IS ENCLOSING AN ADDITIONAL (APPROX.) 400 FT. OF PEGGS RUN IN A CULVERT. PEGGS RUN WILL BE EXPANDED FOR ONLY (APPROX) 500 FT. BEFORE ENTERING THE OHIO RIVER.
4.	2-7 2.3.1	DESIGN BASIS TORNADO 390 MPH ROTATIONAL VELOCITY VS. 290 MPH TANGENTIAL VELOCITY SECTION 3.3.2.
5.	2-10 2.3.4	THERE IS NO CONCLUSION OF RADIATION RELEASE TO 10CFR 100 REQUIREMENTS. THE PARAGRAPH SHOULD HAVE A CONCLUDING STATEMENT THAT STATES THE THE STAFF ASSESMENT OF RELEASE IS OK.
6.	2-14 2.4.2.3.1	HMR 33 ALSO USES THE SMETHPORT STORM IN ITS ANALYSIS.
7.	2-16 2.4.2.3.1 2.4.2.3.2	INFORMATION ON SAFETY-RELATED DOORS AND NOT PARAPETS HAVE BEEN PROVIDED TO THE STAFF IN LETTER 2NRC-5-071, DATED MAY 17, 1985.
8.	2-18 2.4.3.2	AN ADDITIONAL 400 FT. OF PEGGS RUN IS BEING ENCLOSED IN A CULVERT. (REFER TO 2.2.2 COMMENT)
9.	2-27 2.5.1	FIRST PARAGRAPH: UNIT 2 SER-OL SHOULD BE UNIT 1 SER-OL.

	PAGE	SECTION	DLC COMMENTS
10.	2-27	2.5.1	THIRD PARAGRAPH: THE FIRST SENTENCE IS NOT COMPLETELY CORRECT. THE BVPS-2 RESPONSE SPECTRA HAVE THE SHAPE OF THE NEWMARK SPECTRA BUT THEY ARE NOT TRULY NEWMARK SPECTRA. WITH THE EXCEPTION OF THE VALUE OF THE ACCELERATION AMPLIFICATION FACTOR FOR 5% DAMPING, THE AMPLIFICATION FACTORS USED TO DEVELOP THE BVPS-2 SPECTRA WERE NOT THOSE SUGGESTED BY NEWMARK.
11.	2-27	2.5.1	FOURTH PARAGRAPH: THE DATE OF THE REPORT ENTITLED "SITE DEPENDENT RESPONSE SPECTRA, BVPS-2", IS FEBRUARY 1985, NOT DECEMBER 1984. THE DECEMBER 1984 DATE REFERS TO THE DATE THAT DLC INFORMALLY SUBMITTED A DRAFT OF THE REPORT TO THE STAFF. THE CONTENTS OF THIS DRAFT VERSION WERE PRESENTED TO THE STAFF AT A MEETING IN BETHESDA, ON DECEMBER 7, 1984. THE FINAL VERSION OF THE REPORT (FEBRUARY 1985) ALSO ADDRESSES THE QUESTIONS RAISED BY THE STAFF AND THE DISCUSSION THAT OCCURRED DURING THAT MEETING.
12.	2-28	2.5.1	SECOND TO LAST PARAGRAPH: THE ADDITIONAL INFORMATION REQUESTED BY THE STAFF ON THE SITE-SPECIFIC SPECTRA HAS BEEN PROVIDED BY DLC IN THE FEBRUARY 1985 REPORT.
13.	2-28	2.5.1.1	THIRD PARAGRAPH: DLC'S CONCLUSION REGARDING THE WESTERN BOUNDARY OF THE APPALACHIAN PLATEAU TECTONIC PROVINCE (APTP) IS ILLUSTRATED IN FSAR FIGURE 2.5.1-1, NOT FSAR FIGURE 2.5.1-7.
14.	2-29	2.5.1.1	FIFTH PARAGRAPH: THE 1926 EARTHQUAKE WAS EXCLUDED FROM DLC'S INTERPRETATION OF THE APTP AS STATED, BUT ITS EFFECTS ON THE DESIGN EARTHQUAKE WAS CONSIDERED AND DISCUSSED IN THE FEBRUARY 1985 REPORT. IT WAS FOUND TO BE A SHALLOW FOCAL DEPTH EARTHQUAKE AND AS SUCH DOES NOT REPRESENT ANY GREATER SEISMIC HAZARD TO THE SITE THAN THE DESIGN EARTHQUAKE SELECTED. IN FACT, FOR THE SEISMIC HAZARD ANALYSIS PRESENTED IN THE FEBRUARY 1985 REPORT, IT WAS CONSERVATIVELY INCLUDED WITHIN THE APTP AS A NORMAL FOCAL DEPTH EVENT. SINCE THE STAFF CONCURS WITH DLC'S POSITION ON SHALLOW EVENTS, A BRIEF DISCUSSION SEEMS APPROPRIATE AT THIS POINT.
15.	2-33	2.5.2.2	LAST SENTENCE: THE CLEVELAND AREA EARTHQUAKES HAVE BEEN INCLUDED IN THE APTP, BUT IT COULD BE INFERRED FROM THIS SENTENCE THAT THEY WERE NOT. REFER TO FSAR FIGURE 2.5.1-5. ALSO, SEE COMMENTS ON SECTION 2.5.1.1 (FIFTH PARAGRAPH) AND 2.5.2.4.1 CONCERNING THE 1926 EARTHQUAKE.

	PAGE	SECTION	DLC COMMENTS
16.	2-33	2.5.2.4.1	<p>DLC DISAGREES THAT THE 1926 EVENT IS WITHIN THE APTP. THIS PARTICULAR EVENT WAS CONSIDERED TO BE A SHALLOW FOCAL DEPTH EVENT BY NUTTLI, WITH AN M(b) OF 3.4 AND NOT 4.7.</p> <p>THE APRIL 9, 1900 EVENT HAS ALSO BEEN DESIGNATED AS A SHALLOW EVENT BY NUTTLI, WITH AN M(b) OF 3.8.</p> <p>THE HIGHEST INTENSITY, BUT NORMAL FOCAL DEPTH EVENT IN HE APTP IS JULY 13, 1935, INTENSITY VI (MM) EARTHQUAKE IN BLAIR COUNTY, PA.</p> <p>PERHAPS IT SHOULD BE STATED THAT THE APPLICANT USED AN EMPIRICAL CORRELATION TO ESTIMATE M(b) AS 4.75 FROM THE MAXIMUM INTENSITY VI (MM).</p>
17.	2-34	2.5.2.5	ITEM (1): 100 FEET SHOULD BE 115 FEET.
18.	2-34	2.5.2.5	LAST PARAGRAPH: REPORT DATE SHOULD BE FEBRUARY 1985 INSTEAD OF DECEMBER 1984. SEE COMMENT ON SECTION 2.5.1 (FOURTH PARAGRAPH) CONCERNING THIS REPORT.
19.	2-35	2.5.2.5.1	LAST PARAGRAPH: SEE ABOVE COMMENT.
20.	2-35	2.5.2.6	<p>FIRST PARAGRAPH: SEE COMMENT ON SECTION 2.5.1 (THIRD PARAGRAPH) CONCERNING THE NEWMARK SPECTRA.</p> <p>ITEM (1): THE 1926 EARTHQUAKE IS A SHALLOW EARTHQUAKE. CURRENTLY AVAILABLE EMPIRICAL EQUATIONS, DEVELOPED FROM THE DATA BASE OF NORMAL FOCAL DEPTH EVENTS, MAY NOT BE APPROPRIATE FOR PREDICTING THE PEAK ACCELERATIONS OF SHALLOW EARTHQUAKES. REFER TO APPENDIX 2 OF THE FEBRUARY 1985 REPORT.</p> <p>ITEM (2): THE CLEVELAND EVENT OF 1900 WAS DESIGNATED A SHALLOW EVENT BY NUTTLI WITH AN M(b) OF 3.8.</p>
21.	2-36	2.5.2.6	<p>SECOND PARAGRAPH OF ITEM (3): THE INTENSITY VIII EVENT, 160 MILES FROM BVPS-2 ATTENUATES TO AN INTENSITY V AT BVPS-2, NOT AN INTENSITY VI.</p> $ \begin{aligned} I(R) &= I_0 + 3.7 - 0.0011R - 2.7 \log_{10}(R) \\ &= 8 + 3.7 - 0.0011(160 \times 1.609) - 2.7 \log_{10}(160 \times 1.609) \\ &= 4.9(5) \end{aligned} $ <p>THIRD PARAGRAPH OF ITEM (3): ADD THE WORD SITE BETWEEN THE WORDS "HORIZONTAL" AND "ACCELERATION" IN LAST PORTION OF SENTENCE.</p>
22.	2-38	2.5.2.6.2	SECOND PARAGRAPH: THIS PARAGRAPH SHOULD BE REVISED TO REFLECT THE NRC STAFF REVIEW OF THE VELOCITY CONTRAST ANALYSES PRESENTED IN THE FEBRUARY 1985 REPORT.

	PAGE	SECTION	DLC COMMENTS
23.	2-38 2-39	2.5.2.6.3	<p>IT SHOULD BE NOTED THAT THE DECEMBER 1984 REPORT THAT WAS DISCUSSED AT THE DECEMBER 7, 1984, MEETING WAS A DRAFT VERSION OF THE REPORT. THE FINAL VERSION, DATED FEBRUARY 1985, SHOULD ALSO BE REFERENCED HERE.</p> <p>THE ADDITIONAL STUDIES REQUESTED BY THE NRC STAFF RELATED TO THE SITE-SPECIFIC SPECTRA WERE PROVIDED IN THE FEBRUARY 1985 REPORT.</p>
24.	2-39	2.5.2.7	<p>IT IS SUGGESTED THAT THE CONFIRMATORY ITEM DISCUSSED HERE ("OPERATING BASIS EARTQUAKE") BE COMBINED WITH THE CONFIRMATORY ITEM IN SECTION 2.5.2.6.3 UNDER THE TITLE "SITE-SPECIFIC RESPONSE SPECTRA."</p>
25.	2-42	2.5.4.1.2	<p>FIRST PARAGRAPH OF ITEM (2): IT SHOULD BE NOTED THAT THE STIFF CLAY LENS MENTIONED HERE WAS REMOVED FROM WITHIN THE CONTAINMENT AREA AND REPLACED WITH COMPACTED STRUCTURAL FILL.</p>
26.	2-43	2.5.4.1.2	<p>LAST PARAGRAPH OF ITEM (2): THE BRIEF DESCRIPTION OF THE SOIL PROFILE NEAR THE MAIN INTAKE IS NOT ENTIRELY CORRECT. REFER, FOR EXAMPLE, TO FSAR FIGURES 2.5.4-54 AND 58. THE SILTY CLAYS TO THE SOUTH OF THE STRUCTURE AND WITHIN THE EXCAVATION FOR THE BVPS-1 AND BVPS-2 SWS PIPELINES WERE REMOVED AND REPLACED WITH COMPACTED FILL. SIMILIARY, EAST AND WEST OF THE STRUCTURE, WITHIN THE LIMITS OF THE WING WALLS AND ANCHOR WALLS, THE UPPER SOILS WERE ALSO REMOVED AT LEAST TO THE LEVEL OF THE ANCHORS AND REPLACED.</p> <p>THE STATEMENT CONCERNING THE SUSCEPTIBILITY OF SOILS AROUND THE INTAKE TO LIQUEFACTION SHOULD BE EXPANDED TO DEMONSTRATE THAT THE PROBLEM HAS BEEN ADDRESSED AND RESOLVED. THIS COULD BE DONE, FOR EXAMPLE, BY CROSS-REFERENCING SECTION 2.5.4.3.4.</p>
27.	2-47	2.5.4.2.2	<p>FIRST PARAGRAPH ON PAGE 2-47: THE PROPERTIES OF COMPACTED STRUCTURAL FILL WERE NOT DETERMINED BY LABORATORY TESTING. REFER TO FSAR 2.5.4.5.2 FOR DETAILS.</p>
28.	2-48 (CONFIRM. # 3)	2.5.4.3.3	<p>LAST TWO PARAGRAPHS: IN THE RESPONSE TO DRAFT SER OPEN ITEM 176, WHICH WAS PROVIDED IN DLC LETTER 2NRC-4-159, DATED OCTOBER 3, 1984, DLC STATED THAT AN EVALUATION OF THE EFFECT OF DIFFERENTIAL SETTLEMENTS ON BURIED PIPELINES AT THE SOIL-STRUCTURE INTERFACE WAS BEING CONDUCTED. DIFFERENTIAL MOVEMENTS BETWEEN ARBITRARY POINTS ALONG THE PIPELINE AWAY FROM THE CONSTRAINT OF THE STRUCTURE PENETRATION ARE NOT CONSIDERED TO BE A PROBLEM. BURIED STEEL PIPELINES ARE CONSIDERED TO BE FLEXIBLE ENOUGH TO MOVE WITH THE SOIL WITHOUT CAUSING UNDUE STRESS IN THE PIPE.</p> <p>ALSO, A BETTER TITLE FOR THIS CONFIRMATORY ISSUE WOULD BE "DIFFERENTIAL SETTLEMENTS OF BURIED PIPES".</p>
29.	2-51	2.5.4.5	<p>SEE COMMENT ON SECTION 2.5.4.3.3 (LAST TWO PARAGRAPHS) CONCERNING THE CONFIRMATORY ITEM ON DIFFERENTIAL SETTLEMENTS OF BURIED PIPELINES.</p>

	PAGE	SECTION	DLC COMMENTS
30.	2-52	2.5.5.3	LAST PARAGRAPH: THE REFERENCED LETTER DATE SHOULD BE AUGUST 17, 1984, INSTEAD OF AUGUST 12, 1984.
31.	3-3	3.2.2	FIRST PARAGRAPH: DLC HAS RECEIVED INFORMAL APPROVAL FROM THE NRC MECHANICAL BRANCH (MEB) TO IMPLEMENT A PROPOSED PROGRAM FOR SAFETY CLASS 2 AND 3 INSTRUMENT TUBING. THE MEB HAS INDICATED THAT FORMAL APPROVAL WOULD BE PROVIDED IN THE NEAR FUTURE. THIS PROGRAM TAKES ALTERNATIVES TO THE ASME CODE AS DESCRIBED IN DLC LETTER 2NRC-5-113, DATED 07/31/85.
32.	3-4	3.3.2	FIRST PARAGRAPH: WITH RESPECT TO THE TORNADO PRESSURE DROP RATE, BVPS-2 IS CONSISTENT WITH RG 1.76 AND WASH-1300 AS DISCUSSED IN THE RESPONSE TO NRC Q451.2.
33.	3-12	3.5.1.2	THE FIRST SENTENCE OF THE PARAGRAPH ON FAN BLADE MISSILES SHOULD STATE THAT THE METHOD OF BLADE ATTACHMENT HAS BEEN INVESTIGATED TO ENSURE THAT BLADE LOCKNUT TORQUE AND BLADE TIP ANGLE MEET THE MANUFACTURER'S SPECIFICATION.
34.	3-12 (CONFIRM # 6)	3.5.1.3	DLC INTENDS TO STUDY THE RESULTS OF THE PROBABILISTIC ANALYSIS TO BE PERFORMED USING WESTINGHOUSE METHODOLOGIES AS RECENTLY APPROVED BY THE NRC BEFORE MAKING A FINAL DECISION ON A MAINTENANCE PROGRAM. REFER TO THE RESPONSE TO Q251.2 IN AMENDMENT 3 DATED OCTOBER 1983.
35.	3-15	3.6.1	A COMMITMENT HAS NOT BEEN MADE TO PROVIDE AN ANALYSIS THAT CONFIRMS THAT SAFETY-RELATED EQUIPMENT IS PROPERLY QUALIFIED FOR THE SUPERHEATED STEAM CONDITION THAT MAY RESULT FROM A POSTULATED STEAMLINE BREAK. DLC INTENDS TO UTILIZE THE RESULTS OF THE WOG/SBOC SUBGROUP TO REVIEW IMPACT ON ENVIRONMENTAL QUALIFICATIONS. THE RESULTS OF THE HAZARDS ANALYSES ARE SCHEDULED FOR COMPLETION AT THE END OF 1986 AND DOCUMENTED IN EARLY 1987.
36.	3-16	3.6.2	THE DEFINITION OF BREAK EXCLUSION ZONE AND THE DESIGN BASIS ARE SOMEWHAT DIFFERENT THAN THOSE OUTLINED IN SRP 3.6.2. REFER TO T1.9-2, PAGES 12 AND 12# OF 93 OF AMENDMENT 10 DATED MAY 1985.
37.	3-17	3.6.2	THE CRITERIA FOR POSTULATING INTERMEDIATE BREAK LOCATIONS IS 3.0 S(n) INSTEAD OF 2.45(n). REFER TO T1.9-2, PAGES 12 AND 12# OF 93 OF AMENDMENT 10 DATED MAY 1985. DLC LETTER 2NRC-5-042, DATED MARCH 12, 1985 REQUESTED THE ELIMINATION OF ARBITRARY INTERMEDIATE PIPE BREAKS FOR CERTAIN PIPING SYSTEMS. THE NRC APPROVED THIS REQUEST ON MAY 21, 1985.

	PAGE	SECTION	DLC COMMENTS
38.	3-18	3.7.1	SECOND PARAGRAPH: REFER TO FSAR SECTION 1.8 FOR CLARIFICATIONS ON BVPS-2 POSITION ON RG 1.61, CONCERNING DAMPING VALUES FOR SEISMIC CATEGORY I STRUCTURES.
39.	3-19	3.7.3	FIFTH PARAGRAPH: THIS PARAGRAPH SHOULD BE UPDATED TO REFLECT THE RESULTS OF THE NRC'S SSI ANALYSIS AUDIT THAT OCCURRED AT SWEC, IN BOSTON, MA, ON JUNE 19 AND 20, 1985.
40.	3-24	3.8.3	FIRST FULL PARAGRAPH ON PAGE 3-24: IN THE SECOND SENTENCE, IT WOULD BE MORE APPROPRIATE TO USE THE WORDING "MEETING THE INTENT" RATHER THAN JUST "MEETING."
41.	3-24	3.8.4	SECOND PARAGRAPH: THE LAST TWO SENTENCES CORRECTLY INDICATE THAT THE STRUCTURAL AUDIT ACTION ITEMS RELATED TO THIS FDSEAR SECTION HAVE BEEN RESOLVED. HOWEVER, THE FIRST TWO SENTENCES NEED TO BE CLARIFIED TO REFLECT THIS.
42.	3-25 3-27	3.8.4 3.8.5	NINTH PARAGRAPH ON PAGE 3-25 AND SECOND PARAGRAPH ON PAGE 3-27: SEE COMMENT ON SECTION 3.8.3 CONCERNING THE WORDING "MEETING THE INTENT".
43.	3-27	3.8.6	FIRST PARAGRAPH: DATE FOR BEGINNING OF STRUCTURAL AUDIT WAS JANUARY 31, 1984, AND NOT JANUARY 30, 1984 AS INDICATED. LAST PARAGRAPH: REPLACE THE WORDS "RESULTING FROM" WITH THE WORDS "PROVIDED BY THE APPLICANT IN RESPONSE TO".
44.	3-33 (OPEN ITEM # 1)	3.9.3.1	THE NRC IS NOW PURSUING A CHANGE TO GDC-4 THROUGH THE RULEMAKING PROCESS. THE NRC IS PRESENTLY CONSIDERING GRANTING BVPS-2 A LIMITED EXEMPTION FOR THE FIRST TWO CYCLES OF OPERATION.
45.	3-33 (CONFIRM. # 11)	3.9.3.1	DESIGN DOCUMENTATION WAS REVIEWED BY THE STAFF AND NRC CONSULTANTS AT THE MEB AUDIT HELD APRIL 3-5, 1984 (2NRC-4-052, DATED MAY 7, 1984). ADDITIONAL DESIGN REPORTS WERE SUBSEQUENTLY TRANSMITTED TO THE CONSULTANTS (2DLC-07192, DATED MAY 25, 1984). ADEQUATE INFORMATION ON THE DESIGN BASIS HAS BEEN PROVIDED AND THIS ITEM SHOULD BE CLOSED.
46.	3-35 (CONFIRM. # 12)	3.9.3.2	THE BVPS-2 PLANT-SPECIFIC RESPONSE IS COVERED IN SECTION 5.4.13.4 IN AMENDMENT 4 DATED DECEMBER 1983. THIS ITEM SHOULD BE CLOSED.

	PAGE	SECTION	DLC COMMENTS
47.	3-36	3.9.3.3	LAST SENTENCE ON PAGE 3-36 SHOULD END WITH THE FOLLOWING WORDS AFTER THE WORD COMBINED, "BY THE THE SQUARE ROOT OF THE SUM OF THE SQUARES(IN ACCORDANCE WITH NUREG-0484, REV.1)."
48.	3-39	3.9.6	THE INSERVICE TESTING PROGRAM APPLIES TO CERTAIN SAFETY-RELATED PUMPS AND VALVES. REFER TO SECTIONS 3.9B.6.1 AND 3.9B.6.2.
49.	3-39 (OPEN ITEM #3)	3.9.6	THE NRC HAS DIRECTED DLC TO WRITE THE UNIT 2 TECH. SPECS. TO THE UNIT 1 TECH. SPECS. INSTEAD OF THE STANDARD TECH. SPECS. DLC LETTER 2NRC-5-055 DATED MARCH 27, 1985 ACCORDINGLY SUBMITTED A DRAFT TECH. SPEC. FOR PRESSURE ISOLATION VALVES. THIS ITEM SHOULD BE CLOSED. ALSO, IT SHOULD BE LISTED AS PIV LEAK TESTING.
50.	3-41	3.10.1	THE NRC STATES: "THE APPLICANT SHOULD SUBMIT FSAR AMENDMENTS TO DOCUMENT THE RESOLUTION OF THE IDENTIFIED FSAR DISCREPENCIES." THE NRC REFERS TO FSAR DISCREPENCIES BUT HAS NOT IDENTIFIED ANY IN THE FDSER.
51.	3-42	3.10.2	THE STAFF HAS CONCLUDED THAT THE APPLICANT'S QUALIFICATION PROGRAM MEETS THE REQUIREMENTS OF IEEE 323-1974. BVPS-2 IS REQUIRED TO MEET IEEE 323-1971.
52.	3-43	3.10.2	THE STAFF IDENTIFIED A NEW CONCERN RELATING TO PREOPERATIONAL TESTING. MANY OF THE SYSTEM PREOPERATIONAL TEST ARE TO BE MONITORED VISUALLY RATHER THAN BY CALIBRATED INSTRUMENTATION. BECAUSE OF THIS THE APPLICANT SHOULD PROVIDE JUSTIFICATION THAT PREOPERATIONAL TEST RESULTS WILL VALIDATE THE QUALIFICATION OF THE SYSTEM, COMPONENT AND SUPPORTS. THE CONCERN IS DIRECTLY RELATED TO FSAR OPEN ITEM # 2 AND WILL BE ADDRESSED BY THE RESPONSE TO THIS OPEN ITEM.
53.	3-44	3.11.3	PART (K) OF SECTION 50.49 STATES THAT THE APPLICANT IS NOT REQUIRED TO REQUALIFY ELECTRICAL EQUIPMENT TO MEET 50.49 IF THE STAFF HAS PREVIOUSLY REQUIRED QUALIFICATION TO NUREG-0588. PART (K) DOES STATE THAT REPLACEMENT EQUIPMENT SHOULD BE UPGRADED WHERE POSSIBLE TO 50.49. IT APPEARS THAT THE STAFF IN 3.11.3 IS NOW REQUIRING BVPS-2 TO ADDRESS THE REQUIREMENTS OF 50.49. IN THE PREVIOUS SECTION 3.11.2 THE STAFF STATED THAT BVPS-2 IS TO BE QUALIFIED TO NUREG-0588, CAT. II.

	PAGE	SECTION	DLC COMMENTS
54.	3-44	3.11.3	THE ITEMS REQUIRED IN THIS SECTION THAT DLC IS EXPECTED TO PROVIDE PRIOR TO THE AUDIT HAVE ALL BEEN PREVIOUSLY SUBMITTED OR DISCUSSED WITH THE STAFF. THE INFORMATION BEING REQUESTED IS IDENTICAL TO FSAR QUESTION 270.2, DATED SEPTEMBER 22, 1983. DLC MET WITH THE NRC ON DECEMBER 19, 1983 TO PRESENT OUR RESPONSE TO Q270.2 AND TO NOTIFY THE STAFF THAT DLC WOULD BE PREPARING AND SUBMITTING A SEPERATE SUBMITTAL FOR EQ. DURING THIS DECEMBER MEETING DLC IDENTIFIED WHERE THE NEEDED INFORMATION COULD BE FOUND IN THE FSAR AND SUBSEQUENT SEPERATE EQ SUBMITTAL. ON JUNE 26, 1984 DLC MET WITH THE STAFF TO FORMALLY SUBMIT THE EQ REPORT AND TO EXPLAIN ITS CONTENTS. EXCEPT FOR ITEMS 2, 5 AND 6 (FDSE 3-44 THRU 3-46) THE INFORMATION THE NRC REQUESTED WAS INCLUDED IN THE EQ REPORT. ON NOVEMBER 1, 1984 DLC SUBMITTED THE MECHANICAL EQ REPORT FULLY SATISFYING ITEM 6. THE FACT THAT THE FDSE 3 HAS NOT RECOGNIZED ANY OF THIS INFORMATION IMPLIES THAT NO WORK HAS BEEN DONE IN THE EQ AREA SINCE SEPTEMBER 22, 1983.
55.	4-1	4.1	CORE THERMAL POWER SHOULD BE "2652" NOT "2660".
56.	4-6	4.2.3.1(7)	"STAINLESS SHOULD BE "STAINLESS"
57.	4-9	4.2.3.2(5)	FSAR SECTIONS 4.2.3.2(4) AND 4.2.3.2(a) ARE NOT IN THE BVPS-2 FSAR.
58.	4-15	4.3.2.1	SECOND SENTENCE: " THE CAOC BAND HAS BEEN CHANGED FROM + OR - 5 +0+3, 12, (CHANGE IN) I ... " DOESN'T MAKE SENSE.
59.			Comment Deleted.
60.			Comment Deleted.
61.	4-20	4.4.1	REFERENCED FSAR SECTIONS SHOULD BE 4.4.1.1, 4.4.1.2, 4.4.1.3 AND 4.4.1.4 INSTEAD OF 4.4.1(1), 4.4.1(2) 4.4.1(3) AND 4.4.1(4).
62.	4-24	4.4.6	FDSE 3 STATES " THE APPLICANT HAS NOT REQUESTED N-1 LOOP OPERATION." DLC HAS APPLIED FOR N-1 LOOP OPERATION AS PART OF THE LICENSE APPLICATION.
63.	4-27	4.6	CRDM ... COOLING "CORES" SHOULD BE "COILS."

	PAGE	SECTION	DLC COMMENTS
64.	4-27	4.6	... ALL THE FANS ARE SEISMIC CATEGORY 1" SHOULD READ "ALL FANS ARE SEISMICALLY DESIGNED" (SECTION 9.4.8.1.3 WILL BE UPDATED TO REFLECT THIS).
65.	5-4	5.2.2.2	THE PORV SETPOINT CURVE WILL BE DEVELOPED ALONG WITH THE APPROPRIATE TECHNICAL SPECIFICATIONS. THIS SHOULD BE LISTED AS A CONFIRMATORY ITEM.
66.	5-5	5.2.2.2	THE UNIT 2 TECH. SPECS. WILL FOLLOW THE UNIT 1 TECH. SPECS. THIS AREA OF THE UNIT 1 TECH. SPECS. IS STILL UNDER NRC REVIEW.
67.	5-8	5.2.4.1	THIS SECTION SHOULD BE INCLUDED WITH OTHER SECTIONS LISTED UNDER OPEN ITEM 6.
68.	5-9 6-32 (OPEN ITEM 6)	5.2.4.3 6.6.1	ON JANUARY 31, 1985, DLC SUBMITTED AN ALTERNATE PLAN FOR THE PRESERVICE EXAMINATION OF ASME CLASS 2 PIPING WELDS. ON MAY 20, 1985, THE NRC APPROVED THE METHODOLOGY OF THE PLAN.
69.	5-9 6-33 6-33 6-34 (OPEN ITEM # 6)	5.2.4.3 6.6.2 6.6.3 6.6.1	NRC COMMENTS ON THE PSI PROGRAM WERE RECEIVED IN JUNE 1985. THE PSI PROGRAM DOCUMENT IS NOW SCHEDULED FOR COMPLETION AT THE END OF 1985.
70.	5-18 (OPEN ITEM # 6)	5.4.2.2	SINCE DLC HAS COMMITTED TO PERFORM THE PRESERVICE/INSERVICE EXAMINATIONS OF THE STEAM GENERATOR TUBES IN ACCORDANCE WITH R.G. 1.83, REV. 1, THIS SHOULD NOT BE AN OPEN ITEM.
71.	5-23	5.4.7.5	DLC HAS NOT AGREED TO REFERENCE DIABLO CANYON TEST RESULTS BECAUSE IT IS A FOUR LOOP PLANT AND DLC CAN NOT SAY IT IS APPLICABLE TO OUR THREE LOOP BVPS-2 PLANT. DLC HAS REFERENCED THE THREE LOOP NORTH ANNA TEST RESULTS, WHICH IS APPLICABLE TO BVPS-2. BECAUSE THE STAFF WILL ONLY ACCEPT DIABLO CANYON TEST RESULTS, THIS ITEM SHOULD BE CONSIDERED OPEN.
72.	5-26 (CONFIRM. # 24)	5.4.12	OPERABILITY REQUIREMENTS FOR THE VENT SYSTEM WILL NOT BE INCLUDED IN THE TECH. SPECS. AS STATED IN SECTION 5.4.15.4, INSERVICE INSPECTION WILL BE CONDUCTED IN ACCORDANCE WITH SECTION 6.6. OPERATING PROCEDURES WILL ADDRESS THIS SYSTEM. THIS ITEM SHOULD NOT BE CONFIRMATORY. IT SHOULD BE EITHER OPEN OR CLOSED.

	PAGE	SECTION	DLC COMMENTS
73.	6-5 (CONFIRM. #25)	6.2.1.1	SEE COMMENT ON PAGE 6-8, SECTION 6.2.1.3.
74.	6-6	6.2.1.2	THE FOLLOWING WORDS IN THE LAST SENTENCE OF THE FIFTH PARAGRAH SHOULD BE DELETED "CONTINGENT ON THE ACCEPTABILITY OF THE MECHANICALLY CONSTRAINED LIMIT ON THE PIPE BREAK SIZE (SEE SECTION 3.6)." THE DESIGN BASIS FOR THE REACTOR CAVITY WILL NOT BE CHANGED BY THE GDC-4 EXEMPTION.
75.	6-6	6.2.1.2	AS DESCRIBED IN DLC LETTER 2-NRC-4-132, DATED AUGUST 22, 1984, THE SATAN-V PROGRAM, RATHER THAN SATAN-VI PROGRAM, WHICH IS DESCRIBED IN WCAP-8312A WAS EMPLOYED IN THE SUB-COMPARTMENT ANALYSES. ALSO SEE AMENDMENT 9, DATED DECEMBER 1984.
76.	6-8 (CONFIRM. # 25)	6.2.1.3	AS DESCRIBED IN DLC LETTER 2-NRC-4-132, DATED AUGUST 22, 1984, WESTINGHOUSE PROVIDED ADDITIONAL INFORMATION TO THE NRC IN LETTER NS-EPR-2948, DATED AUGUST 14, 1984. DLC REQUESTS THE SCHEDULE FOR COMPLETION OF THE NRC REVIEW.
77.	6-12 (CONFIRM. # 26)	6.2.2	A MORE DESCRIPTIVE TITLE OF THIS ITEM IS "CONTAINMENT SUMP 50% BLOCKAGE ASSUMPTION." AS INDICATED IN RESPONSE TO Q480.26 IN AMENDMENT 6 DATED APRIL 24, 1984, R.G. 1.82 INDICATES THAT AN ASSUMED 50% BLOCKAGE IS CONSERVATIVE. IF THE STAFF POSITION IS THAT 50% BLOCKAGE ASSUMPTION HAS TO BE JUSTIFIED AS DISCUSSED IN THE DRAFT DOCUMENTS CITED IN THE QUESTION RESPONSE, THIS ISSUE SHOULD BE INCLUDED ON TABLE 1.3. OTHERWISE, THIS ITEM SHOULD BE CLOSED.
78.	6-28	6.4	SECOND TO LAST PARAGRAPH: THE RESPONSE TO THIS CONFIRMATORY ITEM (WHICH WAS FORMERLY DRAFT SER OPEN ITEM 53) PROVIDED IN DLC LETTER 2NRC-4-158, DATED OCTOBER 3, 1984, STATED THAT DLC WOULD PROVIDE THE RESULTS OF ANALYSES BEING PERFORMED ON THE EXISTING CONTROL ROOM HABITABILITY SYSTEMS IF THESE ANALYSES INDICATED THAT GDC 19 WAS MET. THE RESPONSE FURTHER STATED THAT DLC WOULD PERFORM ANY NECESSARY PLANT DESIGN CHANGES TO ENSURE COMPLIANCE WITH GDC 19. IF SUCH PLANT DESIGN CHANGES ARE NECESSARY, DLC WILL PROVIDE A DESCRIPTION OF THESE CHANGES, BUT ANALYSES OR THE RESULTS OF ANALYSES WILL BE PROVIDED ONLY IF REQUESTED BY THE NRC.
79.	6-28	6.4	FIRST PARAGRAPH AFTER ITEM(11): IN THE LAST SENTENCE THE WORDING SHOULD BE "... THE CONTROL ROOM ENVELOPE REMAINS ISOLATED ..." INSTEAD OF "... IS ISOLATED ...".
80.	6-32	6.6	THE METHODOLOGY FOR THE PRESERVICE EXAMINATION OF ASME CLASS 2 PIPING AS DESCRIBED IN DLC LETTER 2NRC-5-014, DATED JANUARY 31, 1985, HAS BEEN FOUND ACCEPTABLE BY THE NRC. NRC COMMENTS ON THE PSI PROGRAM WERE RECEIVED IN JUNE 1985 AND THE COMPLETED PROGRAM IS SCHEDULED FOR THE END OF 1985.

	PAGE	SECTION	DLC COMMENTS
81.	7-12	7.3.1	"LOW Tavg. (2/3) COINCIDENT WITH REACTOR TRIP" IS LISTED [(5)(C)] AS AN ESFAS, BUT IT IS NOT (CHAPTER 15 TAKES NO CREDIT FOR THIS).
82.	7-13	7.3.1	SERVICE WATER ISOLATION (8)(A) IS FROM CI"A" NOT SAFETY INJECTION.
83.	7-14	7.3.2.2	210 SECONDS SHOULD BE 628 SECONDS (FSAR PAGE 6-48a).
84.	7-22	7.3.3.12	THIS SECTION LIST S/G LEVEL CONTROL AND PROTECTION AS OPEN, BUT TABLE 1.2 DOES NOT LIST THIS AS OPEN. DLC BELIEVES IT TO BE CLOSED.
85.	7-35	7.6.1.2	VALVE POSITION INDICATION FOR THE ACCUMULATOR ISOLATION VALVES IS PROVIDED FROM BOTH THE VALVE MOTOR-OPERATED LIMIT SWITCHES AND THE VALVE STEM SWITCHES.
86.	8-6	8.3.1.3	DLC DID NOT COMMIT TO USE ACTUAL PLANT LOADS AND LOADING SEQUENCES TO PERFORM THIS TEST. SIMULATED LOADS AND/OR SEQUENCES CAN BE USED. THIS COMMITMENT WAS LATER WITHDRAWN AND REPLACED BY A DIFFERENT RESPONSE FOLLOWING REJECTION BY PSB IN A MEETING ON DECEMBER 14, 1984. THE LATEST RESPONSE IS IN LETTER 2NRC-5-090, DATED JUNE 12, 1985.
87.	8-15	8.3.3.3.5	CABLE SEPERATION INSIDE PANELS , CABINETS OR ENCLOSURES HAS BEEN JUSTIFIED BY DLC IN A MANNER FOUND ACCEPTABLE BY THE NRC STAFF AND DOCUMENTED IN OTHER RECENT SERs. IT IS NOT CLEAR WHETHER THE MOST CURRENT DLC SUBMITTAL WAS CONSIDERED IN THE PREPERATION OF THE FDSEr. THIS ITEM SHOULD BE CLOSED BASED UPON THE CURRENT SUBMITTAL OR IT SHOULD BE INCLUDED ON TABLE 1.3.
88.	8-18	8.3.3.3.10	THE LAST SENTENCE OF THIS PARAGRAPH IS UNCLEAR REGARDING THE TYPE OF BARRIER. DLC UNDERSTANDS "BARRIER" TO BE "FIRE BARRIER".
89.	8-19	8.3.3.3.16	FREQUENCY OF CABLE IDENTIFICATION MARKINGS HAS BEEN JUSTIFIED BY DLC IN A MANNER FOUND ACCEPTABLE BY THE STAFF AND DOCUMENTED IN OTHER RECENT SERs. IT IS NOT CLEAR WHETHER THE MOST CURRENT DLC SUBMITTAL WAS CONSIDERED IN THE PREPARATION OF THE FDSEr. THIS ITEM SHOULD BE CLOSED BASED UPON THE THE CURRENT SUBMITTAL OR IT SHOULD BE INCLUDED ON TABLE 1.3.
90.	9-2	9.1.1	NO METAL DECKING WILL BE USED IN THE NEW FUEL AREA. THE FSAR WILL BE CHANGED TO REFLECT THIS DESIGN CHANGE.

	PAGE	SECTION	DLC COMMENTS
91.	9-3	9.1.2	THE FIRST FULL PARAGRAPH SHOULD STATE THAT THE SPENT FUEL POOL LINER IS SEISMIC CATEGORY II AS INCORPORATED IN SECTION 9.1.2.3, AMENDMENT 10. THE FOLLOWING SHOULD ALSO BE ADDED: ACCORDINGLY, THE SPENT FUEL POOL LINER IS DESIGNED AND CONSTRUCTED SO THAT IT WOULD REMAIN INTACT FOLLOWING AN SSE AND IS DESIGNED NOT TO FAIL IN A MANNER WHICH COULD AFFECT SAFETY-RELATED COMPONENTS.
92.	9-9	9.1.4	THE FOURTH PARAGRAPH SHOULD BE REVISED TO REFLECT THAT THE APPLICANT HAS PERFORMED ANALYSES WHICH SHOW THAT THERE IS NO ADVERSE SAFETY IMPACT IF A HANDLING TOOL OR A FUEL ASSEMBLY AND ITS HANDLING TOOL ARE DROPPED ONTO THE FUEL RACKS. THIS INFORMATION WAS PROVIDED IN ATTACHMENT 2 TO LETTER 2NRC-5-022, DATED FEBRUARY 13, 1985. ACCORDINGLY, THERE IS NO NEED TO INCORPORATE A LIFT HEIGHT RESTRICTION IN THE TECH. SPECS. AND THE STATEMENT THAT THIS WILL BE REQUIRED SHOULD BE DELETED.
93.	9-15	9.2.2	DLC SUBMITTED A REPORT PREPARED BY WESTINGHOUSE WHICH SHOWS THAT LOSS OF COMPONENT COOLING WATER TO THE REACTOR COOLANT PUMPS FOR 20 MINUTES WILL NOT RESULT IN MULTIPLE LOCKED ROTORS. REFER TO LETTER 2NRC-5-067, DATED MAY 6, 1985. IT APPEARS THIS ITEM BELONGS ON TABLE 1.3.
94.	9-23 THRU 9-26	9.3.2.2	CONFIRMATORY ITEM 38 (POSTACCIDENT SAMPLING) LISTED IN FDSEI TABLE 1.4 IS CLOSED. THE ONLY REMAINING CONFIRMATORY ITEM RELATED TO THE POSTACCIDENT SAMPLING SYSTEM IS CONFIRMATORY ITEM 39 (PLANT SPECIFIC CORE DAMAGE ESTIMATE PROCEDURE.)
95.	9-26	9.3.3	THIRD PARAGRAPH: SECOND SENTENCE SHOULD STATE THAT DRAINAGE FROM THE TURBINE BUILDING "CAN BE SAMPLED" FOR RADIOACTIVITY AND "THEN CAN BE" PUMPED EITHER TO ...
96.	9-29	9.4.1	THIRD PARAGRAPH: THE ENTIRE CONTROL ROOM VENTILATION SYSTEM IS LOCATED IN ONE SEISMIC CATEGORY I MISSILE-, FLOOD-, AND TORNADO-PROTECTED STRUCTURE (THE CONTROL BUILDING).
97.	9-29 9-30	9.4.1	<p>LAST SENTENCE ON PAGE 9-29 (CONTINUING TO TOP OF PAGE 9-30): THE EXISTING DESIGN OF THE CONTROL ROOM HABITABILITY SYSTEMS DOES NOT PROVIDE FOR REDUNDANT, AUTOMATIC, CATEGORY I RADIATION ISOLATION EQUIPMENT. HOWEVER, AS DISCUSSED IN DLC'S RESPONSE TO CONFIRMATORY ITEM 27 (CONTROL ROOM HABITABILITY, FDSEI TABLE 1.4), ANALYSES ARE BEING PERFORMED TO DETERMINE THE ADEQUACY OF THE EXISTING DESIGN AND ANY NECESSARY PLANT DESIGN CHANGES WILL BE PERFORMED. (SEE COMMENT ON SECTION 6.4 (SECOND TO LAST PARAGRAPH ON PAGE 6-28)).</p> <p>FOLLOWING MANUAL OR CHLORINE ISOLATION, OUTSIDE AIR DAMPERS REMAIN CLOSED AND THE FILTRATION SYSTEM IS NOT AUTOMATICALLY ACTIVATED.</p>

	PAGE	SECTION	DLC COMMENTS
98.	9-30	9.4.1	FIRST PARAGRAPH ON PAGE 9-30: THE AIR CONDITIONING SYSTEM RUNS CONTINUOUSLY IN THE RECIRCULATION MODE. FOR 60 MINUTES AFTER ISOLATION ON A CIB, NO OUTSIDE AIR IS ADMITTED TO THE CONTROL ROOM THROUGH THE HVAC SYSTEM. DURING THIS PERIOD, COMPRESSED AIR BOTTLES PROVIDE PRESSURIZATION. 60 MINUTES AFTER THE CIB SIGNAL, THE EMERGENCY FILTRATION SYSTEM AND ONE OF TWO EMERGENCY CONTROL ROOM AIR SUPPLY FANS ARE AUTOMATICALLY ACTIVATED.
99.	9-30	9.4.1	SECOND PARAGRAPH: THE LAST TWO SENTENCES SHOULD BE REPLACED WITH THE FOLLOWING: "THE SMOKE DETECTORS WILL ALARM LOCALLY AND ANNUNCIATE IN THE CONTROL ROOM. INTAKE DAMPERS MAY BE MANUALLY CLOSED. PURGING OF SMOKE IS ACCOMPLISHED BY RUNNING THE VENTILATION SYSTEM IN A 100% EXHAUST MODE."
100.	9-30	9.4.2	THE SPENT FUEL POOL AREA AND THE DECONTAMINATION BUILDING HAVE INDIVIDUAL VENTILATION SYSTEMS.
101.	9-31	9.4.2	THE THIRD PARAGRAPH SHOULD BE MODIFIED TO INDICATE THAT THE EXHAUST PORTION OF THE SPENT FUEL POOL AREA VENTILATION SYSTEM IS CONNECTED TO THE SLCRS; THE SLCRS VENTILATION EQUIPMENT ROOM IS LOCATED ON TOP OF THE AUXILIARY BUILDING WHICH IS NOT REQUIRED TO BE PROTECTED AGAINST TORNADOES. SECTION 9.4.6 OF THE SER SHOULD BE REFERENCED.
102.	9-33	9.4.3	THE FIRST PARAGRAPH SHOULD BE MODIFIED TO INDICATE THAT THE AUXILIARY BUILDING VENTILATION SYSTEM EXHAUSTS TO THE SLCRS; THE SLCRS VENTILATION EQUIPMENT ROOM IS LOCATED ON TOP OF THE AUXILIARY BUILDING WHICH IS NOT REQUIRED TO BE PROTECTED AGAINST TORNADOES. SECTION 9.4.6 OF THE SER SHOULD BE REFERENCED.
103.	9-35	9.4.5.2.1	THE FIRST SENTENCE IS CORRECT IF THE WORDS "UNITS 1 AND UNIT 2" ARE CHANGED TO "UNIT 2". AS IT IS PRESENTLY WRITTEN IT COULD BE MISINTERPRETED TO MEAN THAT THERE ARE ONLY THREE CUBICLES AND THAT EACH HAS A UNIT 1 AND A UNIT 2 PUMP.
104.	9-36	9.4.5.2.1	THE LAST SENTENCE OF THE FIRST PARAGRAPH SHOULD BE DELETED BECAUSE THE UNIT HEATERS ARE NOT CONNECTED TO THE EMERGENCY BUSES. HEATING OF THE INTAKE STRUCTURE IS NOT SAFETY-RELATED.
105.	9-36	9.4.5.2.2	A LOCAL ALARM IS ALSO PROVIDED ON THE PANEL LOCATED IN THE ALTERNATE INTAKE STRUCTURE FOR INDICATION OF HIGH OR LOW SPACE TEMPERATURE.
106.	9-39	9.4.5.6	THE SECOND SENTENCE OF THE FIRST FULL PARAGRAPH SHOULD STATE THAT THE A/C UNITS ARE POWERED BY REDUNDANT CLASS 1E POWER SOURCES.

	PAGE	SECTION	DLC COMMENTS
107.	9-39	9.4.5.7	DURING NORMAL OPERATION, THE CABLE VAULT AND ROD CONTROL AREA VENTILATION SYSTEM COOLING CAPACITY IS SUPPLEMENTED BY TWO NON-SAFETY RELATED AIR CONDITIONING UNITS.
108.	9-42	9.5.1.1	ALTERNATE SHUTDOWN CAPABILITY HAS BEEN PROVIDED FOR THE CONTROL ROOM, CABLE SPREADING ROOM, CABLE TUNNEL, WEST COMMUNICATIONS ROOM AND INSTRUMENT AND RELAY ROOM.
109.	9-43	9.5.1.1	THE STAFF IS SPEEING OF A NEED TO EVALUATE THE IMPACT OF FLOODING AND TTHE INADVERTANT OPERATION OF FIRE PROTECTION ON SAFETY-RELATED EQUIPMENT. THE EVALUATION HAS ALREADY BEEN DONE AND THE RESULTS WERE SUBMITTED TO THE NRC IN LETTER 2NRC-5-054, DATED MARCH 27, 1985.
110.	9-44	9.5.1.3	THE AIR COMPRESSORS DEDICATED TO SUPPLY BREATHABLE AIR FOR REPLENISHING AIR EXHAUSTED FROM AIR BOTTLES IS LOCATED IN THE BVPS-1 TURBINE BUILDING. BVPS-1 SHOULD BE ADDED TO MAKE IT CLEAR THERE IS NO COMPRESSOR FOR THAT PURPOSE IN THE UNIT 2 PLANT.
111.	9-44	9.5.1.3	THE FIRE BRIGADE IS NOT SHARED BETWEEN UNIT 1 AND UNIT 2. HOWEVER, 3 OF THE FIVE DEDICATED MEMBERS ARE COMMON TO BOTH UNITS WITH THE REMAINING TWO BEING SPECIFIC TO EITHER UNIT 1 OR UNIT 2. THE FIRE BRIGADE ROOM AND ITS EQUIPMENT IS SHARED BY BOTH UNITS.
112.	9-45	9.5.1.4	<p>FIRST PARAGRAPH: THE FIRE DAMPERS DO NOT HAVE (UL) LABELS. THESE DAMPERS WERE ALL PURCHASED AS UL-RATED DAMPERS. IN MOST CASE THE UL LABEL WAS REMOVED DUE TO THE INSTALLED CONFIGURATIONS, WHICH WERE PREVIOUSLY UL TESTED. THE NRC WAS INFORMED OF THIS DEVIATION AND JUSTIFICATION WAS PROVIDED BY LETTER 2NRC-5-054, DATED MARCH 27, 1985.</p> <p>FIRST PARAGRAPH: TWO 1.5 HOUR FIRE RATED DAMPERS WERE PLACED IN SERIES IN COMMON SLEEVES TO PROVIDE THE EQUIVALENT 3-HOUR RATED DAMPER. THIS DEVIATION/JUSTIFICATION WAS SUBMITTED TO THE NRC IN LETTER 2NRC-5-054, DATE MARCH 27, 1985.</p> <p>FOURTH PARAGRAPH: TRANSFORMERS INSTALLED INSIDE BUILDINGS ARE AIR COOLED OF THE DRY TYPE ONLY. BVPS-2 DOES NOT HAVE JUST AIR COOLED OR NONCOMBUSTIBLE LIQUID TYPE TRANSFORMERS.</p> <p>FIFTH PARAGRAPH: THIRD SENTENCE SHOULD BE CHANGED TO READ; "THE TURBINE BUILDING SOUTH EXTERIOR WALL ADJACENT TO THE TRANSFORMER IS 2 HOUR RATED."</p>

	PAGE	SECTION	DLC COMMENTS
113.	9-46	9.5.1.4	<p>THE SECOND AND THIRD PARAGRAPHS ARE INCORRECT. FIRST, ALL AREAS CONTAINING CABLE TRAYS ARE PROVIDED WITH AN EARLY WARNING SMOKE DETECTION SYSTEM. HOWEVER, THERE ARE THREE FIRE AREAS WHERE THE REQUIREMENTS OF SECTION C.5.e OF BTP CMEB 9.5-1 ARE EXCEEDED AND AUTOMATIC FIRE SUPPRESSION IS NOT PROVIDED.</p> <ol style="list-style-type: none"> 1. REACTOR CONTAINMENT (RC-1) 2. AUXILIARY BUILDING (PA-3) 3. AUXILIARY BUILDING (PA-4) <p>THESE AREAS HAVE BEEN LAID OUT SUCH THAT ALL TRAYS CAN BE EFFECTIVELY REACHED BY A HOSE STREAM AND CONTAIN EARLY WARNING SMOKE DETECTION. SAFE SHUTDOWN ANALYSIS IS PROVIDED FOR THESE AREAS AND THE REST IN THE FPER. (SEE 2NRC-5-054, DATED MARCH 27, 1985)</p>
114.	9-50	9.5.1.4	<p>THERE ARE MORE FIRE AREAS THAN THE ELECTRICAL EQUIPMENT AREAS IN THE AUXILIARY BUILDING THAT HAVE TOTAL FLOODING CARBON DIOXIDE SYSTEMS (i.e., DIESEL GENERATOR, MAIN STEAM, CABLE SPREADING, SERVICE BUILDING, ETC.). DLC RECOMMENDS THIS SECTION BE REWRITTEN TO STATE; "TOTAL FLOODING CARBON DIOXIDE SYSTEMS ARE PROVIDED FOR AREAS LISTED IN TABLE 1 OF THE APPLICANTS FIRE PROTECTION EVALUATION REPORT."</p>
115.	9-52	9.5.1.6	<p>SECOND PARAGRAPH: THE DETECTION SYSTEMS IN THE EMERGENCY DIESEL GENERATOR ROOMS IS AN ULTRAVIOLET FLAME DETECTOR SYSTEM NOT A SMOKE SYSTEM. IT IS HOWEVER STILL AN EARLY WARNING SYSTEM.</p>
116.	9-53	9.5.1.8	<p>THE CABLE SPREADING ROOM IS NOT AN OPEN ITEM IT IS A BACKFIT.</p>
117.	9-59	9.5.2	<p>THE TEXT REFERS TO REQUESTED ADDITIONAL INFORMATION, BUT DOESN'T DESCRIBE ANYTHING THAT'S MISSING. IT WOULD SEEM THAT THE REFERENCE SHOULD BE DELETED.</p>
118.	9-60	9.5.3.3	<ol style="list-style-type: none"> 1. THE FDSEER STATES THAT DLC WAS REQUESTED TO SUBMIT A TABULATION OF HAZARD LEVELS IN ACCESS PATHS FOR SAFE SHUTDOWN. THIS INFORMATION HAS NOT BEEN REQUESTED. 2. THE FDSEER STATES THAT DLC WAS REQUESTED TO IDENTIFY VITAL AREAS AND ACCESS ROUTES TO THE AREAS WHERE EMERGENCY LIGHTS ARE NEEDED FOR SAFE SHUTDOWN. THE ACTUAL QUESTION REQUESTS A TABULATION OF VITAL AREAS REQUIRING EMERGENCY LIGHTING FOR SAFE SHUTDOWN AND AREAS REQUIRING LIGHTING FOR PERSONNEL EVACUATION. 3. IT IS UNCLEAR WHETHER THE FOURTH PARAGRAPH IS AN OPEN ITEM OR CLOSED BY THE MARCH 27, 1985 LETTER DISCUSSED ON THE FOLLOWING SER PAGE. IT IS NOT INCLUDED ON TABLE 1.2.

	PAGE	SECTION	DLC COMMENTS
119.	9-63	9.5.4.1	THE FDSEI IMPLIES THAT THE DIESEL ENGINE MEETS A QA PROGRAM DESCRIBED IN SECTION 17 OF THE SER FOR ACTIVITIES WHICH TOOK PLACE DURING BVPS-2 CONSTRUCTION. THIS IS NOT TRUE. THE EMERGENCY DIESEL GENERATORS WERE PROCURED AND INSTALLED TO A QA PROGRAM ADDRESSED IN THE PSAR AND CPSEI. THEY WILL BE MAINTAINED AND OPERATED IN ACCORDANCE WITH THE QA PROGRAM IN THE FDSEI WHEN IT IS IMPLEMENTED SHORTLY BEFORE FUEL LOADING.
120.	9-63	9.5.4.1	THIS SECTION INCORRECTLY STATES THAT GDC 4 IS NOT MET FOR THE D/G AIR STARTING SYSTEM.
121.	9-67	9.5.4.1	CONCERNS FOUND DURING THE STAFF REVIEW OF THE D/G IN REGARD TO GDC 21 SHOULD BE INCLUDED AS PART OF TABLE 1.3.
122.	9-68 9-72 9-75 9-78 9-82	9.5.4.2 9.5.5 9.5.6 9.5.7 9.5.8	R.G. 1.26 ISSUE HAS BEEN ADDRESSED IN LETTER 2NRC-5-098, DATED JULY 9, 1985.
123.	9-76	9.5.6	CAPITALIZE "LOOP"
124.	10-10	10.4.1	THE FIRST LINE ON THIS PAGE CONTAINS AN OBVIOUS EXCERPT FROM THE SHOREHAM SER. OTHER SECTIONS PREPARED BY THE SAME INDIVIDUAL SHOULD BE REVIEWED TO ASSURE THAT NO SIGNIFICANT STAFF CONCERNS HAVE BEEN ACCIDENTLY OMITTED BY INCLUSION OF OTHER SER EXCERPTS. DLC FOUND NO OTHER EXAMPLES, BUT IS NOT IN A POSITION TO IDENTIFY MISSING CONCERNS WHICH ARE UNKNOWN TO THEM.
125.	10-11	10.4.2	THE THIRD PARAGRAPH IMPLIES THAT A MONITOR IS LOCATED ATOP THE COOLING TOWER. IT SHOULD BE CHANGED TO INDICATE THAT A MONITOR IS IN THE LINE WHICH DISCHARGES ATOP THE TOWER.
126.	10-20	10.4.9	EDITORIAL
127.	11-6	11.3.1.5	CONTAINMENT VACUUM SYSTEM EXHAUST DOES NOT MEET R.G. 1.140.
128.	11-7	11.3.2	NO IODINE REMOVAL CREDIT WAS ALLOWED.

	PAGE	SECTION	DLC COMMENTS
129.	12-7	12.3.4.1	THE NUMBER OF AREA MONITORS IN FSAR 12.3.4.1 IS GREATER THAN IN THE FDSEER AND THE NUMBER OF AREAS IS ALSO GREATER. THIS IS PROBABLY DUE TO RECENT FSAR AMENDMENTS.
130.	12-9		THE MANAGER, NUCLEAR SAFETY AND LICENSING IS LOCATED ONSITE.
131.	13-3		THE DESCRIPTION OF LOSS OF COOLANT CONTROL MANIPULATIONS IS NOT CONSISTENT WITH THE MARCH 28, 1980 DENTON LETTER OR DLC SUBMITTAL.
132.	14-3		1. THE LISTED "CHANGES TO THE INITIAL TEST PROGRAM" WERE IN MANY CASES MERELY CHANGES TO ITS DESCRIPTION. 2. THE SIMULTANEOUS CLOSURE OF MSIV's AT 100% POWER TEST WILL LIKELY BE CHANGED IN AMENDMENT 11 TO A LESS SEVERE TEST WITH APPROPRIATE ANALYSIS AND JUSTIFICATION.
133.	15-2	15.0	"THE TRANSIENTS ANALYZED ARE PROTECTED BY THE FOLLOWING REACTOR TRIPS: (9) HIGH STEAM GENERATOR WATER LEVEL." DLC DISAGREES THAT HIGH S/G WATER LEVEL TRIP PROVIDES ANY PROTECTION OR ANY CREDIT IS TAKEN FOR THAT TRIP. IT IS ONLY REFERENCED IN SECTION 15.1.2 AS A CONVENIENT PLACE TO STOP THE TRANSIENT FOR EXCESSIVE FEEDWATER FLOW.
134.	15-6	15.2-6	THIS SECTION STATES: "THE EMERGENCY FEEDWATER COMES FROM THE PPDW TANK WHICH, FSAR SECTION 10.4.9.1 STATES, CONTAINS SUFFICIENT WATER TO REDUCE THE HOT LEG TEMPERATURE TO 3350 DEGREES FAHRENHEIT." THIS IS NOT TRUE. DLC IS PLANNING TO REVISE THIS STATEMENT THAT THE VOLUME IN THE PPDW TANK CAN NOT COOL DOWN THE PLANT TO 350 DEGREES FAHRENHEIT.
135.	16-1	16.0	THE STAFF WILL USE THE THEN-CURRENT VERSION OF "STANDARD TECH. SPECS. FOR WESTINGHOUSE PWR - NUREG 0452." THIS IS FALSE BASED ON NRC LETTER TO J.J. CAREY, DATED 09/18/84.
136.	17-1 17-2 17-4	17.2 17.2 17.2	DUE TO THE REORGANIZATION, FIGURE 17.1 HAS CHANGED AS WELL AS THE RESPONSIBILITIES OF ORGANIZATIONS INVOLVED IN SAFETY-RELATED ACTIVITIES. CHAPTER 17 HAS BEEN DRAFTED AND IS BEING SUBMITTED TO NRR UNDER SEPERATE COVER.
137.	17-2	17.2	THE NRC STAFF EVALUATION STATES THAT THE QA MANAGER HAS THE AUTHORITY TO REPORT QUALITY MATTERS TO ANY LEVEL NECESSARY WITHIN THE APPLICANT'S ORGANIZATION OR TO ESTABLISH CORRECTIVE ACTION. OUR PROGRAM STATES THAT THE QA MANAGER HAS THE AUTHORITY TO REPORT QUALITY MATTERS TO ANY LEVEL NECESSARY WITHIN DLC IN ORDER TO ESTABLISH EFFECTIVE CORRECTIVE ACTION.

	PAGE	SECTION	DLC COMMENTS
138.	17-2	17.2	THE EVALUATION STATES THAT THE QA AND QC PERSONNEL HAVE SUFFICIENT AUTHORITY AND ORGANIZATIONAL FREEDOM FROM PRESSURE OF COST AND SCHEDULE TO ... CONTROL FURTHER PROCESSING, DELIVERY, OR INSTALLATION OF NONCONFORMING ITEMS AND ENSURE PROPER DISPOSITIONING HAS OCCURRED. OUR PROGRAM STATES THAT WE CONTROL FURTHER PROCESSING, DELIVERY, OR INSTALLATION OF NONCONFORMING ITEMS UNTIL PROPER DISPOSITIONING HAS OCCURRED.
139.	17-2	17.3	THE EVALUATION FOR AUDITS STATES THAT AUDITS ARE PERFORMED IN ACCORDANCE WITH PRE-ESTABLISHED WRITTEN CHECKLISTS. OUR PROGRAM ALLOWS AUDITS TO BE PERFORMED IN ACCORDANCE WITH WRITTEN PROCEDURES OR CHECKLISTS. "PRE-ESTABLISHED" IS DEFINED TO MEAN "PREPARED BEFORE THE START OF THE AUDIT ENTRANCE MEETING."
140.	17-2	17.3	THE EVALUATION STATES THAT THE INSPECTIONS ARE PERFORMED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH PROCEDURES AND INSTRUCTIONS APPROVED BY THE QA/QC ORGANIZATIONS. MAINTENANCE PROCEDURES WHICH CONTAIN INSPECTION REQUIREMENTS ARE REVIEWED BY THE OSC ON WHICH THE OQC HAS A MEMBER. THE EVALUATION SHOULD STATE, "...PROCEDURES AND INSTRUCTIONS REVIEWED BY THE QA/QC ORGANIZATION" SINCE THE QA/QC ORGANIZATION DOES NOT PROVIDE THE FINAL APPROVAL FOR ISSUANCE.
141.	17-3	17.3	THE EVALUATION FOR AUDITS FURTHER STATES THAT "FOLLOW UP AUDITS ARE PERFORMED TO DETERMINE THAT NONCONFORMANCE AND DEFICIENCIES ARE EFFECTIVELY CORRECTED AND THAT THE CORRECTIVE ACTION PRECLUDES RECURRENCES." OUR PROGRAM STATES THAT "FOLLOW UP ACTION, INCLUDING REAUDIT OF DEFICIENT AREAS, WILL BE TAKEN AS NECESSARY ...". THE EVALUATION SHOULD STATE, "FOLLOW UP ACTION WHICH MAY INCLUDE AUDITS IS PERFORMED ...".
142.	18-2	18.1	FDSEER STATES THAT THE CRDR SUMMARY REPORT WILL BE SUBMITTED JUNE 1, 1985. ACTUAL SUBMITTAL DATE IS DECEMBER 2, 1985.
143.	18-2	18.1	IN RESPONSE TO THE TWO CONCERNS LISTED IN THE SECOND TO LAST PARAGRAPH: 1. THERE WAS A HUMAN FACTORS SPECIALIST DIRECTLY INVOLVED IN THE VALIDATION AND VERIFICATION TASKS WHICH WERE DIRECTLY ASSOCIATED WITH THE TASK ANALYSIS. THE VALIDATION TASK CONSISTED OF WALK THROUGHS OF EOP'S WHILE VERIFICATION DETERMINED AVAILABILITY AND SUITABILITY OF REQUIRED INSTRUMENTATION AND CONTROLS. 2. THE SELECTED EVENT SEQUENCES (SCENARIOS) COVERED MOST EMERGENCY OPERATIONS. THOSE NOT COVERED WERE EVALUATED INDEPENDENTLY TO ENSURE THAT ALL EMERGENCY OPERATIONS WERE COVERED.