



## Duquesne Light

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June 15, 1984

United States Nuclear Regulatory Commission  
Washington, DC 20555

ATTENTION: Mr. George W. Knighton, Chief  
Licensing Branch 3  
Office of Nuclear Reactor Regulation

SUBJECT: Beaver Valley Power Station - Unit No. 2  
Docket No. 50-412  
S.E.R. Outstanding Issues Status

Gentlemen:

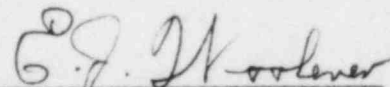
Attachment 1 is a current list, as of June 1, 1984, which provides our understanding of outstanding issues identified in Table 1.2 of the draft Safety Evaluation Report. Attachment 2 is a current list, as of June 1, 1984, which provides our understanding of confirmatory issues identified in Table 1.3 of the draft Safety Evaluation Report. Items identified as "complete" are those for which responses have been provided and no confirmation of status has yet been received from the staff. We consider these items satisfactorily closed unless notified otherwise. In order to permit timely resolution of items identified as "complete" which may not be resolved to the staff's satisfaction, please provide a specific description of the issue which remains to be resolved.

Items identified as "closed" or "confirmatory" are based upon formal or informal communications or agreements with the staff. Please inform us of any differing opinion of status described on the attached list.

Attachment 3 is a current list, as of June 1, 1984, which identifies draft SER sections not provided in the March 1, 1984, issue of the draft SER.

DUQUESNE LIGHT COMPANY

By

  
E. J. Woolever  
Vice President

GLB/wjs  
Attachment

cc: Mr. H. R. Denton, Director NRR (w/a)  
Mr. D. Eisenhut, Director Division of Licensing (w/a)  
Mr. T. Novak, Assistant Director Division of Licensing (w/a)  
Mr. G. Walton, NRC Resident Inspector (w/a)  
Mr. M. Licitra, Project Manager (w/a)

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## ATTACHMENT 1

## OUTSTANDING ISSUES

OUTSTANDING ISSUE	SUBJECT	PROPOSED RESPONSE DATE	STATUS	LETTER NO. AND DATE
1	Potential for flooding from local intense precipitation		1	
2	Flooding from Peggs Run		1	
3	Adequacy of the proposed tech spec for drought conditions	4/30/84	Complete	2NRC-4-049, 4/30/84
4	Adequacy of intake structure silt monitoring program	4/30/84	Complete	2NRC-4-049, 4/30/84
5	Boundaries of the Appalachian Plateau Tectonic Province	4/30/84	Complete	2NRC-4-048, 4/27/84
6	Maximum earthquake	4/30/84	Complete	2NRC-4-048, 4/27/84 2NRC-4-072, 6/1/84
7	Ground motion taking soil properties into consideration	4/30/84	Complete	2NRC-4-048, 4/27/84 2NRC-4-072, 6/1/84
8	Actual earthquake time histories	4/30/84	Complete	2NRC-4-048, 4/27/84 2NRC-4-072, 6/1/84
9	Shallow earthquakes	4/30/84	Complete	2NRC-4-048, 4/27/84
10	Vertical seismic design accelerations	4/30/84	Complete	2NRC-4-048, 4/27/84 2NRC-4-072, 6/1/84
11	Tornado pressure drop rate calculations	4/30/84	Complete	2NRC-4-047, 4/27/84
12	Concrete missile barrier design		Complete	2NRC-4-018, 2/27/84
13	Site-specific response spectra	4/30/84	Complete	2NRC-4-047, 4/27/84 2NRC-4-072, 6/1/84
14	Justification of peak spreading of floor response spectra		Complete	2NRC-4-018, 2/27/84
15	3-component seismic input vs. 2-component input	6/15/84		
16	Soil-structure interaction analysis of containment and intake structure	6/15/84		
17	Significance of the coupling in structural response between mutually orthogonal axes of structures	6/15/84		
18	Deviations of containment design from ASME Code Section III Division 2	6/15/84		
19	Ultimate capacity analysis of containment	6/15/84		
20	Deviations from requirements of ACI 349 code as augmented by Reg. Guide 1.142	4/27/84	Complete	2NRC-4-047, 4/27/84
21	Structural audit action items	4/27/84	Complete	2NRC-4-047, 4/27/84
22	Effects of cracked panel on dynamic modeling and design		Complete	2NRC-4-018, 2/27/84
23	Adequacy of re-assessed safety factors against sliding and overturning of containment, aux. building, and intake structure	4/30/84	Complete	2NRC-4-047, 4/27/84

OUTSTANDING ISSUE	SUBJECT	PROPOSED RESPONSE DATE	STATUS	LETTER NO. AND DATE
24	Through-wall leakage cracks in moderate energy lines in containment	5/15/84	Closed	2NRC-4-4052, 5/8/84
25	Selection of postulated break locations	5/15/84	Closed	2NRC-4-4052, 5/8/84
26	Jet impingement effects	6/29/84	2	2NRC-4-4052, 5/8/84
27	Break exclusion zones	5/15/84	Confirmatory	2NRC-4-4052, 5/8/84
28	Pipe-to-pipe impact	5/15/84	Complete	2NRC-4-4052, 5/8/84
29	Limited break areas	5/15/84	Closed	2NRC-4-4052, 5/8/84
30	Saturated or subcooled water blowdown	5/15/84	Closed	2NRC-4-4052, 5/8/84
31	Design of pipe rupture restraints	5/15/84	Closed	2NRC-4-4052, 5/8/84
32	List of transients	5/15/84	Closed	2NRC-4-4052, 5/8/84
33	Location of systems to be monitored during pre-op testing	6/01/84	Closed	2NRC-4-4052, 5/8/84
34	Criteria used for determining acceptability of vibration levels	5/04/84	Closed	2NRC-4-4052, 5/8/84
35	Vibration monitoring program	5/04/84	Closed	2NRC-4-4052, 5/8/84
36	Combining 3 components of earthquake motion	5/04/84	Complete	2NRC-4-4052, 5/8/84
37	Modes included in seismic analyses	5/15/84	Closed	2NRC-4-4052, 5/8/84
38	Demonstrating seismic qualification	5/15/84	Closed	2NRC-4-4052, 5/8/84
39	Loading combinations, system operating transients, and stress limits	5/15/84	2	2NRC-4-4052, 5/8/84
40	HVAC system design	5/15/84	2	2NRC-4-4052, 5/8/84
41	Design of safety and relief valves	5/15/84	Closed	2NRC-4-4052, 5/8/84
42	Design and construction of ASME Class 1, 2, and 3 component support	5/15/84	Complete	2NRC-4-4052, 5/8/84
43	Preservice and inservice testing of pumps and valves	a-6/84 b-12/84 c-6/85	2	2NRC-4-4052, 5/8/84
44	Effects of rod bow on DNB	6/29/84		
45	Flow measurement capability and procedure	6/29/84		
46	Loose parts detection program report	6/29/84		
47	Documentation of complete ICC system	6/29/84		
48	Preservice inspections program	a-6/84		
49	Compliance with Appendix G 10CFR Part 50	6/29/84	Complete	2NRC-4-049, 4/30/84
50	Compliance with Appendix H 10CFR Part 50	4/30/84	Complete	2NRC-4-049, 4/30/84
51	Pressure temperature limits	4/30/84	Complete	2NRC-4-049, 4/30/84
52			3	
53	Control room habitability	6/01/84		

OUTSTANDING ISSUE	SUBJECT	PROPOSED RESPONSE DATE	STATUS	LETTER NO. AND DATE
54	Inservice inspection of Class 2 and 3 components	a-6/84 c- 6/85		
55	Design modification for automatic reactor trip		Complete	2NRC-4-033, 3/30/84
56	Anticipatory reactor trip on turbine trip	5/25/84		
57	P-4 interlock		Complete	2NRC-4-038, 4/10/84
58	Undetectable failure in online testing circuitry for engineered safeguards relays	6/29/84		
59	Service water system isolation on low header pressure	5/31/84		
60	Normal letdown line relief valve	5/25/84		
61	Switchover from injection to recirculation	5/11/84	Complete	2NRC-4-056, 5/14/84
62	Main feedwater isolation	5/25/84		
63	Control room isolation	6/29/84		
64	Steam generator level control and protection		Complete	2NRC-4-032, 3/28/84
65	IE Bulletin 80-06 concerns	6/29/84		
66	Independence between manual and automatic action	6/29/84		
67	Power lockout for motor-operated valves		Complete	2NRC-4-032, 3/28/84
68	Remote shutdown capability	5/25/84		
69	Emergency response capability		5	
70	Direct indication of relief and safety valve positions	5/18/84		
71	Bypass and inoperable status panel	5/25/84		
72	IE Bulletin 79-27	5/25/84		
73	Reactor coolant system loop isolation interlocks	6/29/84		
74	Primary component cooling water isolation from RCT thermal barriers	6/29/84		
75	PID controller modification	6/29/84		
76	High energy line breaks and consequential control system failures	4/27/84	Complete	2NRC-4-040, 4/30/84
77	Control system failure caused by malfunctions of common power source or instrument line	5/25/84		
78	Procedure to estimate extent of core damage		Complete	2NRC-4-042, 4/18/84
79	Backup post accident sampling through grab samples for inline analyses		Complete	2NRC-4-042, 4/18/84
80	Measuring radionuclide concentrations		Complete	2NRC-4-042, 4/18/84
81	Performance of PASS instrumentation and analytical procedures		Complete	2NRC-4-042, 4/18/84

OUTSTANDING ISSUE	SUBJECT	PROPOSED RESPONSE DATE	STATUS	LETTER NO. AND DATE
82	Fire hazards analysis	5/15/84	Confirmatory	2NRC-4-063, 5/23/84
83	Fire brigade	5/15/84	Confirmatory	2NRC-4-063, 5/23/84
84	Penetration seals	5/15/84	Closed	2NRC-4-063, 5/23/84
85	Safe shutdown		5	
86	Alternate shutdown		5	
87	Hydrogen piping	5/15/84	5	2NRC-4-063, 5/23/84
88	Cable tray suppression	5/15/84	Closed	2NRC-4-063, 5/23/84
89	Power supplies for control room ventilation	5/15/84	5	2NRC-4-063, 5/23/84
90	Fire detection	5/15/84	Confirmatory	2NRC-4-063, 5/23/84
91	Valve supervision	5/15/84	Closed	2NRC-4-063, 5/23/84
92	Reactor coolant pumps and separation of safety-related components in containment	5/15/84	Confirmatory	2NRC-4-063, 5/23/84
93	Control room complex	5/15/84	Confirmatory	2NRC-4-063, 5/23/84
94	Cable spreading room	5/15/84	5	2NRC-4-063, 5/23/84
95	Exemption to 10CFR 70.24(a) and description of alternative to required criticality monitors	6/01/84	6	
96	Types, numbers, specifications for portable and laboratory HP instruments	5/15/84	6	
97	Training/retraining for health physics professionals and verification that contractor training meets 10CFR 19.12 requirements		6	
98	Procedures generation package/TMI I.C.1, short-term accident analysis and procedures revision		7	
99	Physical security	5/16/84	Complete	2NRC-4-051, 5/04/84
100	Initial test program	5/30/84		
101	Radiological consequences of control rod ejection DBA		5	
102	Radiological consequences of a small line break DBA	5/15/84		
103	Radiological consequences of a steam generator tube rupture DBA and review of operator actions and system performance	6/29/84		
104	Radiological consequences of a steamline break outside secondary containment		5	
105	Radiological consequences of a loss of coolant DBA		5	
106	Radiological consequences of a fuel handling DBA		5	
107			3	
108			3	
109			3	

<u>OUTSTANDING ISSUE</u>	<u>SUBJECT</u>	<u>PROPOSED RESPONSE DATE</u>	<u>STATUS</u>	<u>LETTER NO. AND DATE</u>
110			3	
111			3	
112	Technical specifications		8	
113	Detailed control room design review	6/01/85		
114	Safety parameter display system	8/01/84		
115	Snowpack load on roofs	6/29/84		
116	Extreme temperatures for site area	6/29/84		
117	Affects of relocation of met. tower	6/29/84		
118	Long term diffusion estimates	6/29/84		
119	Deviations to R.G. 1.52	6/29/84		
120	Containment vacuum system exhaust iodine removal capability	6/29/84		
121	Evaluation of RWSI failure		5	
122	Water leakage into safety-related equipment cubicles			
123	Testing of functional capability for water-tight seals			
124	Accessibility of intake structure for safe shutdown			
125	Adequacy of water stops for construction joints			
126	Flooding due to failure of non-seismic Category 1 equipment			
127	Fan blade missile			
128	Missile barrier for turbine driven auxiliary feedwater pump missiles			
129	Pressurized container missiles			
130	Temperature and pressure sensor missiles			
131	Tornado missile protection for auxiliary building			
132	Tornado missile protection of main steam vent panels			
133	Postulated pipe breaks outside containment			
134	Fuel pool maximum heat loads			
135	Light load handling system			
136	Handling of heavy loads			
137	Marine growth in standby service water system			
138	Verification of instrument air quality in compressed air systems			
139	Equipment and floor drainage system			
140	Conformance with Regulatory Guide 1.95			



<u>OUTSTANDING ISSUE</u>	<u>SUBJECT</u>	<u>PROPOSED RESPONSE DATE</u>	<u>STATUS</u>	<u>LETTER NO. AND DATE</u>
141	Conformance with Regulatory Guide 1.78			
142	Seismic Category 1 requirements for compressed air system			
143	Environmental qualification and accessibility of essential equipment housed in fuel building			
144	Safety classification of motor control centers			
145	Air exhaust radiological monitoring system			
146	Protection of emergency switchgear room ventilation system			
147	Supplementary leak collection and release system requirements for safe shutdown			
148	Water hammer test of condensate and feedwater system			
149	Auxiliary feedwater system, TMI Item II.E.1.1			
150	Seismic qualification of equipment			
151	Pump and valve operability assurance program			
152	Environmental qualification of equipment			
153	Analysis of combined LOCA and seismic loads			
154	Testing and inspection of new fuel			
155	On-line detection method to monitor fuel rod failures			
156	Underclad cracking of forgings in reactor vessel			
157	Review of structures, systems, and components under Quality Assurance Program			
158	PORV setpoint values			
159	RHR operation requirements outside control room			
160	RHR overpressure protection system			
161	Qualification of RHR pumps inside containment			
162	Natural circulation test			
163	Programs and procedures for containment sump operation			
164	Review of off-site emergency plans (FEMA)			
165	On-site emergency planning			

NOTES:

- <sup>1</sup>Currently evaluating letter from T. M. Novak to E. J. Woolever dated April 11, 1984
- <sup>2</sup>Supplemental submittal to be provided
- <sup>3</sup>Not provided in draft SER
- <sup>4</sup>Further resolution being discussed informally
- <sup>5</sup>Staff action only
- <sup>6</sup>Responses informally provided and accepted at RAB meeting (5/1/84)
- <sup>7</sup>No response required
- <sup>8</sup>DLC is currently arranging a management meeting with NRC to discuss this item
- <sup>a</sup>PSI PROGRAM
- <sup>b</sup>PSI PROCEDURES FOR VALVES & PUMPS
- <sup>c</sup>ISI PROGRAM



## ATTACHMENT 2

## CONFIRMATORY ISSUES

OUTSTANDING ISSUE	SUBJECT	STATUS	LETTER NO. AND DATE
1	Operating basis earthquake	Complete	2NRC-4-047, 4/27/84 2NRC-4-072, 6/1/84
2	Stress and strain levels of key structural elements	Complete	2NRC-4-047, 4/27/84
3	Floor response spectra accounting for 3-component earthquake input		
4		*	
5	Examination of steam generators		
6		*	
7	Main FW isolation		
8	CR isolation on high radiation signal		
9	Automatic opening of service water system valves		
10	Accident monitoring instrumentation positions		
11	Cold leg accumulator MOV position indication		
12	Table 1.9-2 by-product, source, and special nuclear material descriptions nine months prior to fuel loading Q471.14b		
13	Verification that cobalt use in primary system has been minimized Q471.10		
14	Containment high range radiation monitors six months prior to fuel loading Q471.14a		
15	Verify that RMS airborne radioactivity monitors		
16	Quality assurance program requirements		
17	Peak pellet design basis		
18	Specification of fuel parameters		
19	Rod bowing analysis		
20	Fuel rod internal pressure		
21	Cladding collapse time		
22	Use of austenitic stainless steels		

\*Not provided in Draft SER

# ATTACHMENT 3

## DRAFT SER SECTIONS AND DATES PROVIDED

Section	Date	Section	Date	Section	Date	Section	Date	Section	Date
2.1.1		5.2.1		8.4.8		10.4.7	05/22/84	15.3.3	
2.1.2		5.2.2	06/01/84	9.1.1	05/22/84	10.4.9	05/22/84	15.3.4	
2.1.3		5.2.3	06/01/84	9.1.4	05/22/84	11	05/04/84	15.4.5	
2.1.4		5.2.5	05/22/84	9.1.5	05/22/84	11.1	05/04/84	15.4.6	
2.2.1		5.4.1		9.2.1	05/22/84	11.1.2		15.5.1	
2.2.2		5.4.7	06/01/84	9.2.2	05/22/84	11.2.1	05/04/84	15.5.2	
2.2.3		5.4.11	05/22/84	9.2.3	05/22/84	11.2.2	05/04/84	15.7.1	
2.3.1	05/04/84	6.2.1		9.2.4	05/22/84	11.3.1	05/04/84	15.7.2	
2.3.2	05/04/84	6.2.2		9.2.5	05/22/84	11.3.2	05/04/84	15.7.3	05/04/84
2.3.3	05/04/84	6.2.3		9.2.6	05/22/84	11.3.3	05/04/84	15.9.1	
2.3.4	05/04/84	6.2.4		9.3.1	05/22/84	11.4.1		15.9.2	
2.3.5	05/04/84	6.2.5		9.3.3	05/22/84	11.4.2		15.9.3	
2.4.13		6.2.6		9.4.1	05/22/84	11.5.1	05/04/84	15.9.4	
2.5.4		6.3.1	06/01/84	9.4.2	05/22/84	11.5.2	05/04/84	15.9.5	
2.5.5		6.3.2	06/01/84	9.4.3	05/22/84	13.1.1		15.9.6	
2.5.6		6.3.3	06/01/84	9.4.4	05/22/84	13.1.2		15.9.7	
3.2.1		6.3.4	06/01/84	9.4.5	05/22/84	13.3.1	06/01/84	15.9.8	
3.2.2		6.3.5	06/01/84	9.4.6	05/22/84	13.3.2	06/01/84	15.9.9	
3.4.1	05/22/84	6.3.6	06/01/84	9.5.2		13.4		15.9.10	
3.5.1	05/22/84	6.5.1	05/04/84	9.5.3		13.5.1		15.9.11	
3.5.2	05/22/84	6.5.3		9.5.4		15.1.2		15.9.12	
3.6.1	05/22/84	8.2.1		9.5.5		15.1.3		15.9.13	
3.10.1	05/18/84	8.2.2		9.5.6		15.1.4		15.9.14	
3.10.2	05/18/84	8.2.3		9.5.7		15.1.5		17.1	06/01/84
3.11.1	05/18/84	8.2.4		9.5.8		15.2.1		17.2	06/01/84
3.11.2	05/18/84	8.3.1		10.2.3		15.2.2		17.3	06/01/84
3.11.3	05/18/84	8.3.2		10.3.1		15.2.3		17.4	06/01/84
4.2.1	06/01/84	8.4.1		10.3.2		15.2.4		19	
4.2.2	06/01/84	8.4.2		10.3.6	06/01/84	15.2.5		20	
4.2.3	06/01/84	8.4.3		10.4.1		15.2.6		21	
4.2.4	06/01/84	8.4.4		10.4.2	05/04/84	15.2.7		22.1	
4.2.5	06/01/84	8.4.5		10.4.3	05/04/84	15.2.8		22.2	
4.5.1	06/01/84	8.4.6		10.4.4		15.3.1		22.3	
4.5.2	06/01/84	8.4.7		10.4.5	05/22/84	15.3.2		23	