



Consumers  
Power

**POWERING  
MICHIGAN'S PROGRESS**

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November 21, 1989

Nuclear Regulatory Commission  
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DOCKET 50-155 - LICENSE DPR-6 - BIG ROCK POINT PLANT -  
RESPONSE TO GENERIC LETTER 89-21 STATUS OF UNRESOLVED ISSUE  
(USI) REQUIREMENTS

This letter provides Consumers Power Company's response to Generic Letter 89-21 for Big Rock Point. Consumers Power Company has reviewed and reported on, by use of the attached table, the status of implementation of Unresolved Safety Issues for which a final technical resolution has been achieved and which are applicable to Big Rock Point.

*Kenneth W Berry*

Kenneth W Berry  
Director, Nuclear Licensing

CC Administrator, Region III, USNRC  
NRC Resident Inspector - Big Rock Point

Attachment

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OC1189-0223-NL04

ATTACHMENT

Consumers Power Company  
Big Rock Point Plant  
Docket 50-155

ENCLOSURE 1 FROM GENERIC LETTER 89-21 AND  
REMARKS ON UNRESOLVED SAFETY ISSUE RESOLUTION

November 21, 1989

7 Pages

ENCLOSURE 1UNRESOLVED SAFETY ISSUES FOR WHICH A FINAL TECHNICAL RESOLUTION HAS BEEN ACHIEVED

<u>USI/MP, NUMBER</u>	<u>TITLE</u>	<u>REF. DOCUMENT</u>	<u>APPLICABILITY</u>	<u>STATUS/DATE*</u>	<u>REMARKS</u>
A-1	Water Hammer	SECY 84-119 NUREG-0977, Rev. 1 NUREG-0993, Rev. 1 NUREG-0737 Item I.A.2.3 SRP revisions	ALL	N/A	See Attachment
A-2/ MPA D-10	Asymmetric Blowdown Loads on Reactor Primary Coolant Systems	NUREG-0609 GL 84-04, GDC-4	PWR	N/A	
A-3	Westinghouse Steam Generator Tube Integrity	NUREG-0844 SECY 86-97 SECY 88-272 GL 85-02 (No requirements)	W-PWR	N/A	
A-4	CE Steam Generator Tube Integrity	NUREG-0844, SECY 85-97 SECY 88-272 GL 85-02 (No requirements)	CE-PWR	N/A	
A-5	B&W Steam Generator Tube Integrity	NUREG-0844, SECY 86-97 SECY 88-272 GL 85-02 (No Requirements)	B&W-PWR	N/A	
E A-6	Mark I Containment Short-Term Program	NUREG-0408	Mark I-BWR	N/A	

\* C - COMPLETE  
 NC - NO CHANGES NECESSARY  
 NA - NOT APPLICABLE  
 I - INCOMPLETE  
 E - EVALUATING ACTIONS REQUIRED



<u>USI/MPA NUMBER</u>	<u>TITLE</u>	<u>REF. DOCUMENT</u>	<u>APPLICABILITY</u>	<u>STATUS/DATE*</u>	<u>REMARKS</u>
A-7/ D-01	Mark I Long-Term Program	NUREG-0661 NUREG-0661 Suppl. 1 GL 79-57	Mark I-BWR	N/A	
A-8	Mark II Containment Pool Dynamic Loads	NUREG-0808 NUREG-0487, Suppl. 1/2 NUREG-0802 SPP 6.2.1.1C GDC 16	Mark II-BWR	N/A	
A-9	Anticipated Transients Without Scram	NUREG-0460, Vol. 4 10 CFR 50.62	All	I/12-90	See Attachment
A-10/ MPA B-25	BWR Feedwater Nozzle Cracking	NUREG-0619 Letter from DG Eisenhut dated 11/13/80 GL 81-11	BWR	N/A	See Attachment
A-11	Reactor Vessel Material Toughness	NUREG-0744, Rev. 1 10 CFR 50.60/ 82-25	All	C/2-14-83	See Attachment
A-12	Fracture Toughness of Steam Generator and Reactor Coolant Pump Supports	NUREG-0577, Rev. 1 SRP Revision 5.3.4	PWR	N/A	
A-17	Systems Interactions	Ltr: DeYoung to licensees - 9/77 NUREG-1174, NUREG- 1229, NUREG/CR-3922, NUREG/CR-4261, NUREG/ CR-4470, GL 89-18 (No requirements)	All	N/A	See Attachment
A-24/ MPA B-60	Qualification of Class 1E Safety-Related Equipment	NUREG-0588, Rev. 1 SRP 3.11 10 CFR 50.49 GL 82-09, GL 84-24 GL 85-15	All	C/2-28-86	See Attachment

<u>USI/MPA NUMBER</u>	<u>TITLE</u>	<u>REF. DOCUMENT</u>	<u>APPLICABILITY</u>	<u>STATUS/DATE*</u>	<u>REMARKS</u>
A-26/ MPA B-04	Reactor Vessel Pressure Transient Protection	DOP Letters to Licensees 8/76 NUREG-0224 NUREG-0371 SRP 5.2 GL 88-11	PWR	N/A	
A-31	Residual Heat Removal Shutdown Requirements	NUREG-0606 RG 1.113, RG 1.139 SRP 5.4.7	All OLS After 01/79.	N/A	
A-36/ C-10, C-15	Control of Heavy Loads Near Spent Fuel	NUREG-0612 SRP 9.1.5 GL 81-07, GL 83-42, GL 85-11 Letter from DG Eisenhut dated 12/22/80	All	C/6-28-85	See Attachment
A-39	Determination of SRV Pool Dynamic Loads and Pressure Transients	NUREG-080? NUREGs-0763,0783,0802 NUREG-0661 SRP 6.2.1.1.C	BWR	N/A	See Attachment
A-40	Seismic Design Criteria	SRP Revisions, NUREG/ CR-4776, NUREG/CR-0054, NUREG/CR-3480, NUREG/ CR-1582, NUREG/CR-1161, NUREG-1233, NUREG-4776 NUREG/CR-3805 NUREG/CR-5347 NUREG/CR-3509	All	N/A	See Attachment
A-42/ MPA B-05	Pipe Cracks in Boiling Water Reactors	NUREG-0313, Rev. 1 NUREG-0313, Rev. 2 GL 81-03, GL 88-01	BWR	I/9-30-90	See Attachment

<u>USI/MPA NUMBER</u>	<u>TITLE</u>	<u>REF. DOCUMENT</u>	<u>APPLICABILITY</u>	<u>STATUS/DATE*</u>	<u>REMARKS</u>
A-43	Containment Emergency Sump Performance	NUREG-0510, NUREG-0869, Rev. 1 NUREG-0897, R.G.1.8? (Rev. 0), SRP 6.2.2 GL 85-22 No Requirements	All	N/A	See Attachment
A-44	Station Blackout	RG 1.155 NUREG-1032 NUREG-1109 10 CFR 50.63	All	I/6-1-90	See Attachment
A-45	Shutdown Decay Heat Removal Requirements	SECY 88-260 NUREG-1289 NUREG/CR-5230 SECY 88-260 (No requirements)	All	N/A	See Attachment
A-46	Seismic Qualification of Equipment in Operating Plants	NUREG-1030 NUREG-1211/ GL 87-02, GL 87-03	All	I/12-31-90	See Attachment
A-47	Safety Implication of Control Systems	NUREG-1217, NUREG-1218 GL 89-19	All	E/6-31-90	See Attachment
A-48	Hydrogen Control Measures and Effects of Hydrogen Burns on Safety Equipment	10 CFR 50.44 SECY 89-122	All, except PWRs with large dry containments	C/7-17-85	See Attachment
A-49	Pressurized Thermal Shock	PGs 1.154, 1.99 SECY 82-465 SECY 83-288 SECY 81-687 10 CFR 50.61/ GL 88-11	PWR	N/A	



REMARKS ON UNRESOLVED SAFETY ISSUE (USI) RESOLUTIONA-1 Water Hammer

Per SECY 84-119 dated March 3, 1984, this USI does not apply to Big Rock Point because it deals only with Standard Review Plans of new plants at the date of USI A-1 issuance.

A-9 Anticipated Transients Without Scram (ATWS)

This USI resolution included three design-related requirements for BWRs: Alternate Rod Injection (ARI); Liquid Poison Control System (LPCS); and Automatic Recirculation Pump Trip (RPT) under ATWS conditions. An RPT exemption was granted by NRC by letter dated March 20, 1986; the exemption also pointed out that Big Rock's LPCS exceeded the injection capabilities of larger BWRs. An ARI exemption request was submitted to the NRC by letter dated December 29, 1986 and is currently under review. A December 1990 response time is projected.

A-10 BWR Feedwater Nozzle Cracking

By letter dated January 16, 1981, CPCo indicated that this USI was not applicable to Big Rock Point. By letter dated June 16, 1981, the NRC agreed that this issue was not applicable and declared the issue closed with regard to Big Rock Point.

A-11 Reactor Vessel Material Toughness

CPCo USI status letter dated February 14, 1983 referenced an NRC endorsement of Big Rock Point's Reactor Vessel Material Surveillance Program in NUREG-0569 by letter dated March 5, 1980. NUREG-0569 concluded that the Charpy upper shelf energy at the vessel material is predicted to be greater than 50 ft-lbs at end of life, therefore the evaluation methodology outlined in Generic Letter 82-26 (NUREG-0744 Rev. 1) was not used.

A-17 Systems Interactions

Generic Letter 89-18 dated, September 6, 1989 required no specific action or written response. CPCo letter dated October 2, 1972 to the NRC stated that Big Rock Point does not have a potential for flooding that would adversely affect safety-related equipment.

A-24 Qualification of Class 1E Equipment

Safety Evaluation Report (SER) dated November 15, 1985 concluded that CPCo's Equipment Qualification Program was in compliance with the requirements of 10 CFR 50.49. A subsequent inspection report 86-013 identified concerns regarding the environmental qualification of certain electrical cables at Big Rock Point. Inspection report 87-015 and NRC letter dated June 12, 1987 resolved those concerns. Big Rock Point Integrated Plan Semi-Annual Update No. 4 dated February 28, 1986 declared all EEQ hardware modifications complete and programmatic processes implemented.

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#### A-36 Control of Heavy Loads, Phases I & II

Consumers Power Company letters dated June 10, July 1, and September 23, 1981, and April 13, 1984 addressed Phases I and II of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants." On May 9, 1984, an SER was issued for Big Rock Point closing Phase I. Generic Letter 85-11 dated June 28, 1985, closed Phase II.

#### A-39 Safety Relief Valve Pool Dynamic Loads and Temperature Limits

Big Rock Point's containment is not a Mark I, Mark II, or Mark III type containment and therefore USI A-39 does not apply.

#### A-40 Seismic Design Criteria

Big Rock Point is covered under USI A-46, "Seismic Qualification of Equipment in Operating Plants", for this item.

#### A-42 Pipe Cracks in Boiling Water Reactors

Big Rock Point's response to Generic Letter 88-01, by letters dated July 25, 1985 and June 23, 1989, is currently under NRC review. Based on the completion time and results of the NRC review, a target implementation date of December 31, 1990 can be predicted.

#### A-43 Containment Emergency Sump Performance

USI A-43 was information only and no licensee actions were required. Consumers Power Company letter dated February 14, 1983 provided Big Rock Point's status on this issue.

#### A-44 Station Blackout

Consumers Power Company letter dated April 17, 1989 provides Big Rock Point's response to Station Blackout Rule 10 CFR 50.63. This letter is currently under NRC review. The letter does not propose any plant modifications, but does commit to completing selected procedure modifications by January 1, 1990. Based on the completion time and results of the NRC review, a target implementation date of December 31, 1990 can be predicted.

#### A-45 Shutdown Decay Heat Removal Requirements

The NRC has decided to subsume A-45 into the IPE portion of the Severe Accident Program.



A-46 Seismic Qualification of Equipment

This issue has been included in the Big Rock Point Integrated Plan as Item BN-014C. Implementation of this issue is to be consistent with the schedule proposed by SQUG. Updates or changes to the plan and schedule for implementation of SQUG commitments at BRP will be reported as part of the Integrated Plan semi-annual updates. SEP Items III-6 and III-7B are currently under NRC review. Based on the completion time and results of the NRC review, a target implementation date of December 31, 1990 can be predicted.

A-47 Safety Implication of Control Systems

NRC letter dated December 1, 1978 provided Consumers Power Company with a Safety Evaluation Report which concluded that a feedwater trip on high reactor level is not necessary to assure safe operation of the Big Rock Point plant. Consumers Power Company response to Generic Letter 89-19 is due March 1990. Based on the completion time and results of the NRC review, a target implementation date of December 31, 1990 can be predicted.

A-48 Hydrogen Control

NRC letter dated October 5, 1984 to Consumers Power Company concluded that installation inside the containment of post-accident hydrogen monitoring equipment is not required for Big Rock Point. In addition, NRC letter dated July 17, 1985 provided Big Rock Point with an exemption from the requirement to install high point vents on the reactor coolant system.