

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
CONSUMERS POWER COMPANY	)	Docket No. 50-155
	)	
(Big Rock Point Plant)	)	

EXEMPTION

I.

The Consumers Power Company (the licensee) is the holder of Facility Operating License No. DPR-6 which authorizes the operation of the Big Rock Point Plant, located in Charlevoix County, Michigan. This license provides, among other things, that it is subject to all rules, regulations and Orders of the Commission now or hereafter in effect.

II.

Section 50.44(c)(3)(iii) of 10 CFR requires, among other things, that high point vents be provided for the reactor coolant system. At the Big Rock Point Plant, the emergency condenser is the highest point in the reactor coolant system. Section 50.44(c)(3)(iii) requires that these vents be provided by the end of the first scheduled outage beginning after July 1, 1982.

By letter dated April 19, 1983, the licensee requested an exemption to 10 CFR 50.44(c)(3) (iii) such that the required schedule for installation of the high point vents would be extended for the Big Rock Point Plant. Big Rock Point is nearing the end of the 1983 refueling outage, the first scheduled

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outage beginning after July 1, 1982. The licensee also asked for an exemption from the requirement to install high point vents on the emergency condenser. The requested schedular exemption would allow time for resolution of the requested exemption from installation of high point vents. This exemption deals only with the requested schedular exemption.

The licensee gave the following explanation of why high point vents on the emergency condenser should not be required for Big Rock Point based on the unique design of the plant.

"10 CFR 50.44(c)(3)(iii) and NUREG-0737, Item II.B.1 require that remotely operated high point vents be provided for systems required to maintain adequate core cooling following small-break LOCA's if the accumulation of non-condensable gases would cause the loss of function of these systems, eg, isolation condensers. At Big Rock Point, the emergency condenser is used for heat removal in the case of loss of the normal condenser, eg, a loss of off-site power. However, the emergency condenser is not used, nor is any credit taken for its use, following core uncover and actuation of the reactor depressurization system (RDS).... A small-break LOCA results in actuation of the RDS. For accidents that result in generation of non-condensable gases, the RDS would vent these gases to the containment building. The RDS and post-incident system provide the heat removal capability in this situation. The emergency condenser is not needed, nor it it designed to be used during core damage situations in which the RDS is actuated."

The staff is reviewing the information presented by the licensee. The need for high point vents on the emergency condenser at Big Rock Point is one of the issues the staff will address in the expanded Systematic Evaluation Program Integrated Assessment for Big Rock Point. Therefore, the staff concludes that the schedule requiring installation of these vents at Big Rock Point should be extended until the end of the first scheduled outage which begins after completion of the Integrated Assessment for Big Rock Point and is of sufficient length to allow installation. If the staff concludes in the Integrated Assessment that installation of these vents is not warranted at Big Rock Point, an exemption will be promulgated at that time.

Preliminary results from our ongoing review of the Big Rock Point Probabilistic Risk Assessment show that because of the unique plant design, no accident sequences leading to evolution of non-condensibles would be significantly affected by use of high point vents. Therefore, the probability of such an accident occurring in the time allowed by the schedule extension is extremely small. Second, information from the PRA indicates that there would no acute fatalities from a core melt accident at Big Rock Point because of the small core inventory of radioactivity and the low population density near the site. The consequences of the accident (low probability as discussed above) which might occur during the extension are quite small.

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Therefore, the staff concludes that an exemption to 10 CFR 50.44 (c)(3)(iii) should be granted such that the schedule for installation of high point vents on the emergency condenser is extended until the end of the first scheduled outage after the completion of the Integrated Assessment.

### III.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. Therefore, the Commission hereby grants an exemption from the requirement of 10 CFR 50.44(c)(3)(iii) that high point vents be installed on the emergency condenser by the end of the first scheduled outage which starts after July 1, 1982. This exemption extends the schedule for installation to the end of the first scheduled outage which begins after the completion of the SEP Integrated Assessment of Big Rock Point and is of sufficient length to allow installation.

The NRC staff has determined that the granting of this exemption will not result in any significant environmental impact and that pursuant to 10 CFR 51.5(d)(4), an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with this action.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert A. Purple, Deputy Director  
Division of Licensing

Dated at Bethesda, Maryland  
this 12 day of August 1983.