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UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

Docket No. 50-155

May 2, 1974

Consumers Power Company
ATTN: Mr. Ralph B. Sewell
Nuclear Licensing Administrator
212 West Michigan Avenue
Jackson, Michigan 49201

Gentlemen:

On April 29, 1974, the licensee, Consumers Power Company, requested a temporary change in technical specifications for Facility License DPR-6. The licensee requested that the requirement that the ventilation inlet valve close within 6 seconds be changed to require closure within 10 seconds.

During the refueling outage recently completed, the licensee replaced the 24" containment building ventilation supply valve with a new valve. The old valve was replaced due to increasing leakage across the valve seat. Both the old valve and the new valve are air operated, pressurized to open and to hold open. The valves are closed by spring action. The new valve has a different air operator volume. The air operator is vented through two solenoid valves in series which have 1/4" internal vent passages. The new valve with the larger air operator volume has been tested at the facility and while closure is accomplished within 10 seconds closure within 6 seconds cannot be achieved without undesirable changes in the valve. The licensee proposes to replace the existing solenoid valves during the summer refueling outage with solenoid valves having slightly larger internal vent passages to permit the new ventilation inlet valve to achieve the 6 second closure time. However, delivery of such valves which comply with necessary code requirements cannot be made for several months. Reinstallation of the original ventilation valve is an alternative to making this Technical Specification Change, however this is not desirable due to the leakage across that valve.

The large ventilation valve openings must be provided with rapid closures to prevent the release from containment of radioactive materials in the event of an accident. For the Design Basis Loss of Coolant Accident conditions, which entail a loss of primary coolant to containment followed by release of core fission products to containment and subsequent leakage from containment to the atmosphere, the period before fission products from the core (e.g., on the order to 50-100 seconds) are available for leakage in containment is quite long compared to valve closure times. The change of valve closure time from 6 seconds to 10 seconds does not affect the integrity of containment with respect to containment of core fission products in the event of the loss of coolant accident.

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May 2, 1974

cc w/encls:

Mr. Paul A. Perry, Secretary
Consumers Power Company
212 West Michigan Avenue
Jackson, Michigan 49201

Peter W. Steketee, Esquire
Vander Veen, Freihofer & Cook
Union Bank Building, Suite 950
Grand Rapids, Michigan 49502

Mr. Ronald C. Callen
Michigan Public Service Commission
Law Building
Lansing, Michigan 48913

George C. Freeman, Jr., Esquire
Hunton, Williams, Gay & Gibson
700 East Main Street
Richmond, Virginia 23212

David S. Brollier, Esquire
Hunton, Williams, Gay & Gibson
700 East Main Street
Richmond, Virginia 23212

Charles E. Bayless
Of Counsel
Consumers Power Company
212 West Michigan Avenue
Jackson, Michigan 49201

Anthony Z. Roisman, Esquire
Berlin, Roisman and Kessler
1712 N Street, N. W.
Washington, D. C. 20036

Chairman
County Board of Supervisors
Charlevoix County
Charlevoix, Michigan 49720

Charlevoix Public Library
107 Clinton Street
Charlevoix, Michigan 49720

cc w/encls and copy of CPC filing 4/29/74:

Mr. D. John Beck
Division of Intergovernmental Relations
Executive Office of the Governor
Lewis Cass Building
Lansing, Michigan 48913

Mr. Gary Williams
Federal Activities Branch
Environmental Protection Agency
1 N. Wacker Drive
Chicago, Illinois 60606

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and subsequent leakage before fission products (conds) are available for valve closure times. to 10 seconds does not to containment of core plant accident. C.P. 121

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Entire document previously entered into system under:

ANO 8101100865

No. of pages: 5

During the early seconds following an assumed accident, the containment atmosphere consists of a mixture of air and steam flashed from the primary coolant along with a small amount of fission gases, radioactive fission and corrosion products which were carried by the primary coolant which has flashed into steam.

For small and intermediate sized breaks, the change from 6 seconds to 10 seconds in closure time has an insignificant affect on any release of radioactivity from containment. For large breaks, the pressure may increase toward design limits within 15 or more seconds and the total amount of air and later air and steam that could escape if the upstream check valve does not close, could be nearly double for a 10 second closure time, compared to 6 second closure time. For the first few seconds, containment air of negligible radioactivity would escape but as containment pressure continued to increase and steam air mixing occurred, the amount of radioactivity escaping would be somewhat greater for a 10 second closure time compared to a 6 second closure time. However, this increased amount would represent only a small portion of the radioactivity computed to be released in the course of the accident, less than 1% based on the time required to damage fuel. Accordingly, the increase closure time has a negligible effect on accident consequences.

The change does not otherwise affect facility operation. *JRS*

Based on the above we have concluded that temporary change of the ventilation inlet valve closure time from 6 seconds to 10 seconds does not involve a significant hazards consideration and that there is reasonable assurance that the health and safety of the public will not be endangered by operation in the manner proposed.

Accordingly, Amendment No. 5 to Facility Operating License No. DPR-6 is enclosed revising the Technical Specifications thereto to authorize the requested temporary change relating to inlet ventilation valve closure requirement. A copy of a notice which is being forwarded to the Office of the Federal Register for publication relating to this action also is enclosed for your information.

CPCO notified of our approval 5 PM May 8, 1974 Shee

Sincerely,
Original Signed by
Karl Goller

*TECHNICAL SPECIFICATIONS
1105 (5) APR 20 1974*

Karl R. Goller, Assistant Director
for Operating Reactors
Directorate of Licensing

Original attached to CRP 5/2/74 RUG

Enclosures:

1. Amendment No. 5 to License No. DPR-6
2. Federal Register Notice

OFFICE ▶	L:ORB-2 x7403	L:ORB-2	L:ORB-2	OGC	L:AD/OR's
SURNAME ▶	JShea:esp	R... <i>Shee</i>	DLZiemann	<i>[Signature]</i>	KRGoller <i>KRG signed the original 5/2/74</i>
DATE ▶	5/1/74	5/2/74	5/2/74	5/2/74	5/1/74