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50-263

MAY 7 1969

Honorable Walter F. Mondale
United States Senate

Dear Senator Mondale:

I am pleased to furnish the information you requested in your April 8, 1969 letter concerning possible radioactive pollution from the proposed Monticello Nuclear Generating Unit to be built at Monticello, Minnesota.

I am enclosing a brief report which describes our regulatory review procedure and discusses releases of low level radioactivity in effluents from the Monticello Nuclear Generating Plant. This report is an updated version of a similar report sent to you on June 7, 1968, by Mr. Harold L. Price, Director of Regulation.

Cordially,

(Signed) Glenn T. Seaborg

Chairman

Enclosure:
Report on
Radiological Effects

Distribution:

- Chairman (2)
- Commissioner Ramey
- Commissioner Tape
- Commissioner Johnson
- Commissioner Costagliola
- Congressional Liaison (2)
- H. L. Price
- C. K. Beck
- M. M. Mann
- C. L. Henderson
- R. L. Doan
- H. Shapar
- P. A. Morris
- R. S. Boyd
- D. R. Muller
- N. Blunt
- G. Ertter (DR-2102, GM-33141)
- Pub. Doc. Room
- Docket File
- DR Reading
- RL Reading
- RPB-1 Reading
- Secretary (2)
- (Rewritten at request of L. Rogers)

L. Rogers RPB 4/29/69
cc
[Signature]
4/30

OFFICE ▶	RL:RPB-1	RL:RPB-1	RL:RP	RL	DR	COGR
SURNAME ▶	<i>Blunt/Vassallo</i>	<i>Muller</i>	<i>Boyd</i>	<i>Morris</i>	<i>Price</i>	<i>[Signature]</i>
DATE ▶	4/25/69 4/25/69	4/25/69	4/25/69	4/25/69	5/12/69	5/6/69

Honorable Walter F. Mondale
United States Senate

Dear Senator Mondale:

I am pleased to furnish the information you requested in your April 8, 1969 letter concerning possible radioactive pollution from the proposed Monticello Nuclear Generating Unit to be built at Monticello, Minnesota.

I am enclosing a brief report which describes our regulatory review procedure and the radiological effects to the environs expected as a result of operation of the Monticello Nuclear Generating Plant. This report is an updated version of a similar report sent to you on June 7, 1968, by Mr. Harold L. Price, Director of Regulation.

Cordially,

Chairman

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OFFICE ▶	RL:RPB-1	RL:RPB-1	RL:RP	RL	DR	OCR
	Blunt <i>MB</i>	Muller <i>RCM</i>	Boyd <i>B</i>	Morris <i>M</i>	Price	
SURNAME ▶	Vassallo/eb	Muller	Boyd	Morris	Price	
DATE ▶	4/21/69	4/22/69	4/23/69	4/24/69	4/ /69	4/ /69

Honorable Walter F. Mondale
United States Senate

Dear Senator Mondale:

I am pleased to furnish the information you requested in your April 8, 1969, letter concerning possible radioactive pollution from the proposed Monticello Nuclear Generating Unit to be built at Monticello, Minnesota.

I am enclosing a brief report which describes our regulatory review procedure and the radiological effects to the environs expected as a result of operation of the Monticello Nuclear Generating Plant.

Cordially,

Chairman

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OFFICE ▶	RL:RPB-1	RL:RPB-1	RL:RP	RL	DR	OCR
SURNAME	Blunt/Vassallo	Muller	Boyd	Morris	Price	
DATE ▶	4/18/69	4/18/69	4/ /69	4/ /69	4/ /69	4/ /69

RADIOLOGICAL EFFECTS OF OPERATING

THE MONTICELLO NUCLEAR GENERATING PLANT

The application by Northern States Power Company for a permit to construct the Monticello plant was reviewed from the standpoint of radiological safety by four bodies in the Atomic Energy Commission's process of licensing and regulation, as outlined in the enclosed booklet, "Licensing of Power Reactors." These review groups included the AEC regulatory staff, the Commission's statutory Advisory Committee on Reactor Safeguards (ACRS), and an atomic safety and licensing board which conducted a public hearing in the matter on May 25-26, 1967, at Buffalo, Minnesota. The initial decision of the board, granting a provisional construction permit, was then reviewed by the Commission itself. The construction permit was issued on June 19, 1967. Each of these review bodies concluded that the proposed plant could be constructed and operated without undue risk to the health and safety of the public.

On November 8, 1968, the applicant applied for an operating license. Further safety reviews are now being conducted by the AEC regulatory staff. The ACRS will also review this application and advise the Commission thereon. Further, if an operating license is granted, the plant will be under AEC surveillance and undergo periodic safety inspections throughout its lifetime.

Small amounts of radioactive material are permitted by AEC regulations to be released into the environment at controlled rates and in controlled amounts from a nuclear power plant. This requires a continuous program of monitoring and control to assure that release limits are not exceeded. The release limits in AEC regulations are based on guides developed by the Federal Radiation Council, a statutory body, and approved by the President for the guidance of Federal agencies. These release limits are such that continuous use of air or water at the point of release from the site would not result in exposures exceeding national and international standards for radiation protection of the public. Permissible exposure limits reflected in these standards are well below the level where biological damage has been observed in humans. It is believed that any biological effects that might be produced at such low exposures would be too infrequent, in comparison with the occurrence of similar effects from natural causes, to be observed by epidemiological or other techniques presently available. Thus, the risk to individuals exposed at such levels is so low as to be negligible in comparison with observable risks from natural and other causes.

The concentrations of liquid radioactive effluents released from the plant are further reduced by dilution in the body of water to which they are discharged. A survey of all operating nuclear power plants has shown that the concentrations of radioactivity in liquid releases during 1967 were only a small fraction of the release limits applicable to the radionuclides in the effluent.

In the case of the Monticello plant, the AEC's evaluation concluded that the design and operation of the radiological waste disposal system would preclude harmful effects on the water supplies of Minneapolis and St. Paul, the nearest communities using the Mississippi River for potable water.

MS

OFFICE OF THE CHAIRMAN

50-263

11-3

(Date)

TO: Reg

For appropriate handling

Reply for Chairman's signature

For information: GM _____ Commissioners _____ DR _____

Remarks _____

Julius H. Rubin
For the Chairman

