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FROM: The Assistant Secretary of Commerce Washington D. C. 20230 Sidney R. Galler	DATE OF DOC: 6-29-72	DATE REC'D 6-29-72	LTR X	MEMO	RPT	OTHER
TO: Mr. Miller	ORIG 1	CC	OTHER	SENT AEC PDR <input checked="" type="checkbox"/>		
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DESCRIPTION:
Ltr re our 5-26-72 ltr.... furnishing
comments on Draft Enviro Statement.....

ENCLOSURES:

**DO NOT REMOVE
ACKNOWLEDGED**

PLANT NAMES: Monticello

FOR ACTION/INFORMATION			6-30-72	AB
BUTLER(L) W/ Copies	KNIEL(L) W/ Copies	VASSALLO(L) W/ Copies	ZIEMANN(L) W/ Copies	<input checked="" type="checkbox"/> KNIGHTON(ENVIRO) W/ 4 Copies
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INTERNAL DISTRIBUTION

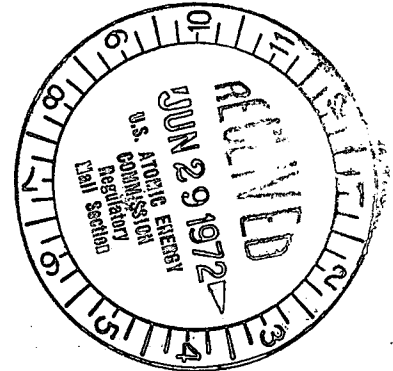
<input checked="" type="checkbox"/> REG FILES	STELLO-L	VOLLMER-L	KARAS-L L/A PWR
<input checked="" type="checkbox"/> AEC PDR	MOORE-L	DENTON-L	MASON-L L/A BWR
<input checked="" type="checkbox"/> REG OPER (2) xxx	LANGE-L	GRIMES-L	BROWN-L L/A PWR
OGC-RM P-506	PAWLICKI-L	GAMMILL-L	WILSON-L L/A PWR
MUNTZING & STAFF	THOMPSON-L	KNIGHTON-ENVIRO	KARI-L L/A BWR
GIAMBUSSO-L	TEDESCO-L	DICKER-ENVIRO	SMITH-L L/A BWR
<input checked="" type="checkbox"/> BOYD-L-BWR	LONG-L	PROJ LDR ENVIRO:	<input checked="" type="checkbox"/> GEARIN-L L/A BWR
DEYOUNG-L-PWR	LAINAS-L		<input checked="" type="checkbox"/> DIGGS-L L/A
MULLER-L-ENVIRO	SHAO-L	SALTZMAN-IND.	TEETS-L L/A
SKOVHOLT-L-OPER	<input checked="" type="checkbox"/> BENAROYA-L	McDONALD-PLANS	<input checked="" type="checkbox"/> WADE-L L/A ENVIRO
KNUTH-L	MORRIS-RO	NUSSBAUMER-FM	BRAITMAN-A/T
MACCARY-L	DUBE-L	SMILEY-FM	<input checked="" type="checkbox"/> HARLESS-ENVIRO
SCHROEDER-L	E. CASE-L	P. COLLINS-L	<input checked="" type="checkbox"/> Ziemann

EXTERNAL DISTRIBUTION

- | | | |
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██████████/BNWL | 1-SAN/LA/NY--PDR |
| 1-DTIE-(LAUGHLIN) | 1-R. CARROLL-OC, GT | 1-CHIEF WATER REACTORS |
| 1-NSIC-(BUCHANAN) | <input checked="" type="checkbox"/> 1-R. CATLIN, A-170, GT | 1-RD....E. HALL F-309 GT |
| 1-ASLB-YORE/SARYE
WOODWARD/H. ST. | 1-CONSULTANT'S
NEWMARK/BLUME/AGBABIAN | |
| 1-C. MILES-C-459, GT | 1-DR. GERALD S. LELLOUCHE | |
| 16 CYS ACRS-HOLDING | BROOKHAVEN NATIONAL LAB | |



June 29, 1972



Mr. Daniel R. Muller
Assistant Director for
Environmental Projects
Directorate of Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Muller:

The draft environmental statement by the U. S. Atomic Energy Commission for the "Monticello Nuclear Generating Plant of the Northern States Power Company", Docket Number 50-263, which accompanied your letter of May 26, 1972, has been received by the Department of Commerce for review and comment.

In order to give you the benefit of the Department's analysis, the following comments are offered for your consideration.

It is evident that without the modified gaseous radioactive waste system which will be put into operation December, 1972; the projected release of radioactive halogens is quite high, resulting in an expected dose to an infant's thyroid of 140 mrem/yr. at the nearest farm due to consumption of milk from this farm. Even with the augmented gaseous radwaste system this infant's thyroid dose is estimated to be 67 mrem/yr. from milk consumption. This major source of I-131 after the augmented system is in operation, however, will be from the turbine building vent rather than from the Main Condenser Air Ejector.

We note the Atomic Energy staff comment that "The applicant should take appropriate actions as necessary to assure that the release of radioiodine to the atmosphere meets the requirements of the proposed Appendix 1, 10 CFR 50, as formalized". We also note, however, that no filter provisions are described, either present or future, to remove the anticipated radioactive halogens which will be vented from the

turbine building. Thus, no description is given as to how or when the operator of this plant proposes to comply with the above AEC staff statement. We believe that this information should be provided.

With regard to The Site: Ecology of the Site and Environs, we submit that discrimination be made between the benthic organisms in the nearshore and offshore habitats in more detail, indicating which organisms are found in each area and their percent contribution to the total population.

On page II-17, it is stated that population estimates for game fish in table II-4 were adjusted to compensate for differences in sampling programs. We suggest that a description be made of the method used to adjust the population estimates.

On page II-22, it is stated that pre-operational studies did not identify fish spawning areas in the vicinity of the Monticello plant. It would be useful if fish spawning sites could be identified in the continuing study to the extent possible with today's methods.

Under The Plant: Effluent Systems, in the section on "Chemical and Sanitary Wastes", page III-27, any provisions, in addition to covering, that have been made for protecting the retention basin from flooding should be described.

The average residual chlorine concentrations referred to on page III-28 and in Table III-8 of 0.03-0.045 ppm are higher than the value of .0034 ppm which has been found to adversely affect the reproductive potential of Gammarus sp., an important food organism for fish. Gammarus sp. is also present in the Monticello area, as indicated by appendix A (page A-2).

Regarding the section titled Environmental Impact, on page V-16, last paragraph, and on page V-18, second paragraph, residual chlorine concentration of less than 0.05 ppm is referred to and it is concluded that this concentration would not be detrimental. In view of the study on Gammarus cited above, this conclusion requires further substantiation.

Using the one-year record of on-site data as listed in the Final Safety Analysis Report and assuming a 100-m effective plume height for routine (year-round) gaseous releases, we compute the highest annual average concentration to be 1×10^{-7} sec m^{-3} at a distance of 1000 m to the south south-

east of the plant. For a routine ground level releases (i.e., from the turbine building and gland seal) we compute a value of 6×10^{-6} sec m^{-3} at the fenced boundary of the plant 500 m to the south southeast. These values are in close agreement with the Commission's values listed on page V-26 of the statement.

We are unable to evaluate the consequences of postulated accidental releases of radioactivity since neither the assumed meteorological conditions and their probability of occurrence or the resulting relative concentration values (X/Q) are given.

On page V-17, it would be desirable to discuss the potential adverse effects of mechanical stresses on entrained organisms, over and above thermal stress.

On page V-22, second paragraph, the statement is made that for certain fish, ". . .slightly warmer temperatures during the spawning and early life stages may be beneficial". To maintain objectivity, the statement should refer to several recent studies, which tend to indicate that the premature hatching of fish eggs is detrimental to fry survival because their food organisms are not readily available. In this connection, it would be desirable to locate the spawning sites in order to delineate the extent of this problem, inasmuch as only locations within the plume would be affected.

On page V-23, second paragraph, it is stated that the seasonal effect would be to advance the rising vernal temperatures by about two weeks and to retard the autumnal heat loss by about two weeks, thus extending the "Growing season" by about one month. The two-week advance in vernal heat rise would likely change most biological functions in the area by the same factor as "growth". The draft environmental impact statement should address the possibility that premature reproduction of a particular species of fish would be detrimental to the species because of the reduced food supply of drift organisms from upstream areas unaffected by thermal inputs. The radiological program for the Monticello plant appears to be quite extensive. Certain information, however, is lacking. For example, all sampling station locations are not clearly indicated (Table V-7, page V-33). Sediments, plankton-algae-insects, and aquatic vegetation are sampled at five local lakes

and one control lake, but sampling locations for these samples are not indicated for the river. Also, fish are not listed in the table.

Under Adverse Effects, the use of percent river flow utilized in plant operation is, at best, a very rough estimate of loss that should be labeled as such. In addition, much of the adverse impact of the entrainment could be avoided if the plant used a different cooling system that required less water. As such, this is not an effect which cannot be avoided, unless the alternative cooling methods discussed on pages XI-2 through XI-5, are no longer being considered viable alternatives to the present method of operation.

We hope these comments will be of assistance to you in the preparation of the final statement.

Sincerely,

Sidney R. Galler

Sidney R. Galler
Deputy Assistant Secretary
for Environmental Affairs

Regulatory

File Cy.

THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20540

MEMORANDUM FOR THE BOARD OF GOVERNORS
SUBJECT: [Illegible]

1. [Illegible]

