

NORTHERN STATES POWER COMPANY

414 NICOLLET MALL  
MINNEAPOLIS, MINNESOTA 55401

LAW DEPARTMENT

DONALD E. NELSON  
VICE PRESIDENT AND  
GENERAL COUNSEL  
ARTHUR R. RENQUIST  
ARLAND O. DRUSVEN  
GENE R. SOMMERS  
RALPH S. TOWLER  
DAVID G. MCGANNON  
JOSEPH D. BIZZANO, JR.  
ATTORNEYS

TELEPHONE 330-6000

AREA CODE 612

68-263

PDR

December 9, 1969

Mr. Howard Shapar  
Assistant General Counsel  
U. S. Atomic Energy Commission  
Washington, D. C. 20545

Re: Northern States Power Company  
v. State of Minnesota et al.

Dear Howard:

The Federal Court case is proceeding routinely toward trial, possibly in January.

The Court has asked Northern States Power Company to file a brief with the Court establishing the Court's jurisdiction in this case. Although attorneys for the State of Minnesota conceded such jurisdiction in the State's Answer, the Court is under a duty to assure itself of the fact that it does have such jurisdiction. The Court has also asked counsel to attempt to stipulate to as many of the material facts as the parties are able to agree upon by such stipulation. Thus far, counsel for the Company and the State of Minnesota have stipulated that the adequacy or inadequacy of the AEC or State limits upon the emission of radiation from the Monticello nuclear Generating Plant to protect public health and safety is not an issue in this case. The Court has not yet signed and returned the Order based upon this stipulation.

In preparing other phases of our testimony for trial, we believe that the United States Atomic Energy Commission, or representatives thereof, could make a material contribution in support of the Company's position in this case if one or more representatives of the Atomic Energy Commission could

Rec'd Off. Dir. of Reg.

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Mr. Howard Shapard

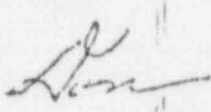
December 9, 1969

Page 2

act as witnesses at the time of trial. I am enclosing a memorandum which describes in general terms the type of testimony which would be most helpful if it were presented by individuals from the Atomic Energy Commission.

I shall very much appreciate your reviewing the enclosed memorandum and then referring it to the proper person for decision as to whether we may anticipate the assistance of the Atomic Energy Commission in providing witnesses who will be prepared to present the testimony outlined in the enclosed memorandum.

Very truly yours,



DONALD E. NELSON

Enclosure

MEMORANDUM

TO: DEN  
FROM: EJS  
RE: Testimony Needed from AEC

As you know, the State's answer raises the defense that there is no "conflict" between the Minnesota Pollution Control Agency and the United States Atomic Energy Commission restrictions applicable to this plant. As you also know, the United States Supreme Court has said in several opinions that, in the absence of an unequivocal expression by Congress, it will decline to hold that Congress has entirely pre-empted a certain regulatory area absent a showing that there is actual (or at least potential) conflict between the State and federal regulatory schemes. Therefore, we believe we should be prepared to demonstrate (1) the degree of the differences between PCA and AEC requirements and (2) the potential or actual conflict.

We will have testimony from non-AEC expert witnesses that an attempt to comply with the PCA permit would require the addition of certain buildings and equipment, including the following.

- (1) A different gaseous radioactive waste system, including a charcoal filter, possibly in duplicate;
- (2) A different liquid radioactive waste system consisting of evaporators, condensers, additional tankage, and a low level shielded laboratory. The laboratory and additional tankage would be necessary because of the PCA's apparent insistence that NSP attempt to measure

individual radioisotope concentration at extremely low levels. We understand that such measurements would require laboratory techniques which would make necessary the accumulations of liquid waste for a period of several days while the chemical analysis was being carried out. In addition, it appears that detection of certain radioisotopes at low levels (such as Strontium 90) would require waiting for the development of their daughter products and therefore a hold-up of two weeks would be necessary. It has been estimated that if literal compliance with the PCA permit is required, approximately 200,000 gallons of additional tankage might be necessary.

The evidence will indicate that each of these additional systems would create its own potential hazards. For example, the modified off-gas system would result in greater quantities of solid wastes to be disposed of. In addition, it might be questioned whether installation of charcoal filtration would be safe without simultaneous installation of a recombiner, condenser, dehumidifier and heater because of the ignition possibilities. It might also be questioned whether the additional exposure of plant personnel resulting from chemical analysis of the liquid and stack effluent would be justified in light of the knowledge to be derived from sampling and testing. The additional tankage and storage of liquid wastes in itself might be considered to create potential for accident not justified by the knowledge gained by attempting to detect isotopes at the low concentrations set forth in the permit. Thus, it appears that the AEC might object to the installation of

the additional facilities required by the State permit. If that potential exists, it would seem that such potential ought to be brought to the Court's attention, for this would unquestionably support the legal argument that a single agency ought to balance the risks of the suggested devices against the benefits to be obtained from them.

Other benefit-risk calculations of a technical (not political) nature made necessary by the State permit are as follows.

Paragraph 2(c) of the Special Conditions Relating to Radioactive Wastes requires routine ion exchange treatment of low purity wastes. It is our understanding that an attempt to demineralize low purity wastes would rather quickly foul the resins and would greatly increase the amount of solid waste to be handled in the plant and disposed of off-site with a concurrent (in some degree) increase in the risks associated therewith.

Paragraph 2(d) seems to suggest that the PCA will attempt to regulate the methods of inspection of fuel elements for tramp uranium and seems to suggest that on-site inspection and decontamination might be required. A question arises as to whether such inspection and decontamination is feasible and whether it would raise risks to the persons performing that function. Again, it would seem that the benefits from such inspection would have to be balanced against the risks thereof. In addition, a question arises as to whether this would be permitted by the AEC.

Paragraph 2(e) suggests that the PCA might require the identification and replacement of leaky fuel rods between normal fuel replacements. A question perhaps arises as to whether the AEC would consider it desirable to shut down the plant and hunt for leakers between normal refueling. Some

of the considerations that might indicate the undesirability of this practice are:

- (1) The increase in the number of thermal cycles to which the plant and equipment would be subjected;
- (2) The increase in the amount of liquid waste to be processed;
- (3) The hazards involved in the "sipping" process necessary to locate leakers;
- (4) The possibility that the detection procedures themselves could create leakers; and
- (5) The greater exposure to plant personnel because of the increase in the number of times it is necessary to open the reactor.

Several questions arise with respect to the foregoing permit requirements which we would like to explore with the AEC. These questions include: (1) could any of the additional facilities mentioned be added to the plant without AEC approval, in light of 10 C.F.R. §50.55(n); (2) what procedures would be necessary to obtain AEC approval (assuming approval would be forthcoming); (3) how much delay would result in the issuance of an operating permit, assuming that the mentioned changes in the plant were proposed by the operator; (4) are any of the added waste treatment or testing procedures in conflict with the F.S.A.R. now being studied by the Commission, within the meaning of 20 C.F.R. §50.59; (5) are any of the risks postulated because of the additional facilities, or the additional inspection, decontamination, or treatment suggested by paragraphs 2(c), 2(d), or 2(e) significant enough

so that there is uncertainty whether the AEC would approve these state imposed procedures; (6) is there a prospective witness on the AEC or on its staff, who has an opinion whether the risks of the various added facilities and procedures are justified by the advantages to be gained from these additions; (7) would any of the mentioned changes in design or operating procedures conflict with any of the usual requirements of the AEC?

Another area of possible conflict arises because of paragraph 13. This paragraph incorporates by reference pages 90-97 of the Tsivoglou report dated January 31, 1968. This report says, among other things:

"Hence, in the unlikely event of such an accident, primary responsibility for all aspects of control and protection of the public health should rest with the Minnesota State Board of Health. . . ."

"The MSBH should also have authority to direct the control and containment activities of NSP plant personnel to whatever extent the MSBH deems necessary."

We believe we should explore with the AEC the question whether its usual procedures permit a state board of health to control the activities of the operator in the event of an emergency when the particular state involved has not entered into a section 274 agreement with the Commission.

Another area for possible testimony from the AEC arises because of the Supreme Court's repeated reference to the "pervasiveness" of the federal regulatory scheme as a factor bearing upon the question of pre-emption. Often this pervasiveness (or lack thereof) is found by the Court merely from an examination of the applicable statute and regulations. At times, it appears that there has been testimony in the district court with reference to the scope of the agency's functions. The regulations contained

in 10 C.F.R. are unusually difficult for lawyers and judges to comprehend. And the licensing regulations contained in 20 C.F.R., part 50, do not really demonstrate the amount of detailed information apparently required of power plant operators who apply for construction permits and operating licenses. Therefore; it might be helpful to offer testimony concerning the extent to which the design, construction and operation of a nuclear power plant is regulated by the Commission. It would also help, in explaining the effect of section 274 of the act, to have a witness explain the areas of regulation which are properly covered by agreements with states for the regulation of persons who deal with "byproduct material, source material, or special nuclear material in quantities not sufficient to form a critical mass".

These are the major points which suggest themselves as topics for discussion with AEC personnel. Perhaps you will have additional suggestions and perhaps the AEC will have others. We would, of course, welcome all suggestions for ensuring a successful outcome of the litigation.

E.J.S.  
11/17/69

*Letter Howard to [unclear] 11-24-69*