

UNITED STATES OF AMERICA
 NUCLEAR REGULATORY COMMISSION

In the Matter of)	Docket No. 50-263
NORTHERN STATES POWER COMPANY)	
(Monticello Nuclear Generating)	
Plant))	

EXEMPTION

I.

The Northern States Power Company (NSP/licensee) is the holder of Facility Operating License No. DPR-22 (the license) which authorizes operation of the Monticello Nuclear Generating Plant, located in Wright County, Minnesota, at steady state reactor core power levels not in excess of 1670 megawatts thermal. The license provides, among other things, that it is subject to all rules, regulations and Orders of the Commission now or hereafter in effect.

II.

On July 11, 1983, the Commission published a revised Section 10 CFR 50.54 regarding shift staffing requirements for nuclear power plants. The revised Section 50.54 became effective on January 1, 1984. In accordance with Section 50.54(m)(3) of the Commission's regulations, the NRC staff, by letter dated December 30, 1983, approved for the Monticello plant the extension of the effective date of the rule from January 1, 1984 to February 1, 1984 when the plant began an extended outage.

Section 50.54(m)(2)(iii) of the revised rule requires that:

"When a nuclear power unit is in an operational mode other than cold shutdown or refueling, as defined by the unit's technical specifications, each licensee shall have a person holding a senior operator license for the nuclear power unit in the control room at all times."

In a letter dated September 29, 1983, and supplemented by letter dated March 23, 1984, Northern States Power Company described its plans for modifying the shift supervisor's office at the Monticello plant, and requested that the office be considered as part of the control room for the purpose of meeting the requirements of the new shift staffing rule. The proposed modifications to the office are to be accomplished during the present extended outage. We are treating this matter as an exemption request from the licensee.

III.

The shift supervisor's office is located immediately adjacent to the control room, but outside the previously defined control room boundary. Access to the control room from the supervisor's office is through a security door equipped with a card reader lock. A key to the door is immediately available to the shift supervisor in the event of failure of the card reader. As part of the proposed modification, the licensee plans to install card reader locks on the other doors to the shift supervisor's office such that access to the office can be controlled.

An intercom system exists between the main control room and the shift supervisor's office and there are normal telephone communications between the two areas. In addition, the licensee plans to provide the following in the shift supervisor's office to enhance the information available in that area:

- a. A computer alarm cathode ray tube (CRT) which displays numerous plant alarm conditions.
- b. A computer parameter display CRT which normally displays such items as power level, reactor pressure and generator output.
- c. A camera in the main control room connected to a CRT in the shift supervisor's office, which displays a panoramic view of the main control panels.
- d. Recorders for reactor pressure, reactor water level, reactor power, and drywell pressure.
- e. An annunciator panel to specifically annunciate reactor level (outside normal limits), reactor pressure (outside normal limits), reactor scram, and drywell pressure (outside normal limits).
- f. A common annunciator to annunciate all front panel alarms.

We have evaluated the modifications described by the licensee and we agree that, with these modifications, the shift supervisor's office is adequate to satisfy the underlying purpose of the rule. We do, however, require that the key to the security door between the shift supervisor's office and the control room be kept immediately available in the office in the event of failure of the card reader.

We had some concern regarding the licensee's intended use of the Senior Reactor Operator (SRO) in the control room. The intent of the rule is that, while the SRO may move about the control room area, most of his time should be spent in that portion of the control room where there is direct and prompt access to information on current plant conditions and where the operator at the controls can be supervised. It can be inferred from the licensee's September 29, 1983 letter that the SRO would be spending most of his time in the shift supervisor's office rather than in the control room. This would be contrary to the intent of the rule and, hence, unacceptable. We also had questions regarding the circumstances - under which the SRO assigned to the control room area would move to the control panel and whether the shift supervisor's office is located within the controlled ventilation boundary. We discussed these matters with representatives of the licensee and, on March 23, 1984, the licensee submitted a letter containing additional information related to this request.

The March 23, 1984 letter stated that the shift supervisor's office is within that portion of the administration building that is served by the emergency filtration treatment system. Normal ventilation to this area is interrupted upon detection of high radiation levels or toxic gases at the ventilation intake and the area is pressurized by the emergency filtration trains to prevent infiltration of radioactive material.

The March 23, 1984 letter also pointed out that annunciation of the front panel alarms will provide early warning of impending problems to the

shift supervisor's office. Upon receipt of an alarm, the shift supervisor will have sufficient CRT and recorded displays to assess whether or not his presence is required in the control room. In addition, he will respond to the control room if requested by the control room operator and he will proceed immediately to the control room upon receipt of any of the following:

- a. reactor level (outside normal limits)
- b. reactor pressure (outside normal limits)
- c. reactor scram
- d. drywell pressure (outside normal limits)

The March 23, 1984 letter committed that an SRO will be present in the control room or in the shift supervisor's office at all times during plant operation. Further, an SRO will actually be in the control room more than 50% of the time. Thus, the SRO will be spending most of his time in the control room where there is direct and prompt access to information on current plant conditions and where he can supervise the operator at the controls.

We have evaluated the information furnished by the licensee and we conclude that, subject to the condition that the key to the security door between the shift supervisor's office and the control room be kept immediately available in the office, and further subject to the satisfactory installation of the instrumentation and other equipment noted in this evaluation, the planned modifications to the shift supervisor's office and the plans for control of SRO in the control room are sufficient to meet the intent of the rule. They are, therefore, acceptable.

We require, however, that the licensee's administrative procedures include requirements that:

- ° The SRO spend at least some minimum time each hour in the control panel area so as to maintain a continuing awareness of plant status.
- ° The SRO must be present in the control panel area during initial startup and approach to power, recovery from an unplanned or unscheduled shutdown, or significant reduction in power, and immediately following notification of an unplanned plant transient.
- ° The SRO must be present in the control panel area at all times - during a declared plant emergency.

We do, however, want to better understand how this arrangement will work in practice. We, therefore, require that the licensee submit a report at the end of one year of operation (following restart from the refueling outage) which provides an evaluation of operations using the shift supervisor's office as a part of the control room. The report should include data on such matters as:

- ° The approximate response time of the SRO from the office to the panel area.
- ° The number of times SRO assistance in the panel area was requested by a control operator.
- ° The number of times the SRO proceeded to the panel area on his own initiative in response to alarms received in the shift supervisor's office.

- ° For each plant emergency or significant off-normal event, describe the location in the plant and the ongoing activities of both the Shift Supervisor and the other senior reactor operator at the onset of the emergency or off-normal event, and the immediate response actions of each.
- ° The percentage of time actually spent in the panel area by an SRO.
- ° Such other matters as the licensee deems relevant and of interest.

IV.

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, and hereby granted the following exemptions with respect to the requirements of Section 50.54 of 10 CFR Part 50:

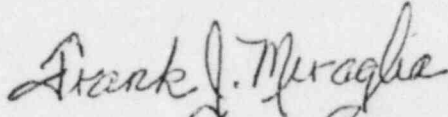
The shift supervisor's office shall be considered to be part of the control room at the Monticello Nuclear Generating Plant for purposes of meeting the requirements of 10 CFR Section 50.54(m)(2)(iii).

Provided the following conditions are met:

1. The key to the security door between the shift supervisor's office and the control room must be immediately available in the shift supervisor's office, and
2. The licensee must submit a report to the NRC one year after resuming operation from the present outage providing information described in Section III of this report.

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of the exemption will have no significant impact on the environment (49 FR 45085).

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "Frank J. Miraglia".

Frank J. Miraglia, Acting Director
Division of Licensing
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this 14th day of November, 1984.