

UNITED STATES NUCLEAR REGULATORY COMMISSIONNIAGARA MOHAWK POWER CORPORATIONDOCKET NO. 50-220

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-63, issued to Niagara Mohawk Power Corporation (the licensee), for operation of the Nine Mile Point Nuclear Station, Unit 1 (NMP1) located in the town of Scriba, Oswego County, New York.

The proposed amendment would change Technical Specifications (TSs) 3/4.6.2, "Protective Instrumentation," to reflect modifications to the initiation instrumentation for the Control Room Air Treatment System. Specifically, TS Tables 3.6.2I and 4.6.2I, "Control Room Air Treatment System Initiation," would be changed to delete the high radiation signal and substitute the following initiating signals from the Reactor Protection System: (1) low-low reactor water level in the reactor vessel, (2) high steam flow in the main steam line, (3) high temperature in the main steam line tunnel, and (4) high pressure in the reactor drywell. TS Table 3.6.2I would specify setpoints for each of these four initiating parameters ([greater than or equal to] 5 inches-indicator scale, [less than or equal to] 105 psid, [less than or equal to] 200 degrees F, and [less than or equal to] 3.5 psig, respectively). TS Table 3.6.2I would indicate for each of the four parameters that the minimum number of tripped or operable trip systems and the minimum number of operable instrument channels per operable trip system are two, and that the four parameters are required to be operable when the reactor mode switch is in the "startup" or "run" positions (but

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not if in the "shutdown" or "refuel" positions), except that the high drywell pressure signal may be bypassed when necessary for containment inerting. For three of the parameters (low-low reactor water level, high steam flow in the main steam line, and high drywell pressure), TS Table 4.6.2I would require daily sensor checks, quarterly instrument channel tests, and quarterly instrument channel calibrations (except that only the trip circuit need be calibrated and tested at these quarterly frequencies; the primary sensor would be calibrated and tested each operating cycle). For the parameter high temperature in the main steam line tunnel, TS Table 4.6.2I would require an instrument channel test and an instrument channel calibration each operating cycle, not to exceed 24 months. Associated TS "Bases for 3.4.5 and 4.4.5 Control Room Air Treatment System" would also be changed to update the system descriptions consistent with these proposed changes to the automatic initiation circuitry, and to reflect the system's manual start capability. These changes to the TS Bases would include deletion of the statements that (1) the Control Room Air Treatment System is designed "to automatically start upon a receipt of a high radiation signal from one of the two radiation monitors located on the ventilation intake" and that (2) "...air intake radiation monitors will be calibrated and functionally tested each operating cycle, not to exceed 24 months, to verify system performance."

During a system design review, the licensee determined that (1) contrary to a commitment in letters to the NRC dated January 31 and March 19, 1984, the NMP1 Control Room Air Treatment System would not automatically initiate during an MSLB [main steam line break] or an LOCA [loss-of-coolant accident], and (2) initiation of the NMP1 Control Room Air Treatment System at the current radiation monitor setpoint of [less than or equal to] 1000 CPM, as required by TS Table 3.6.2I, is not sufficient for compliance with GDC 19 limits for radiological protection of the control room operators. Consequently, on April 21, 1998, the licensee declared the Control Room Air Treatment System inoperable and notified the NRC that a 7 day limiting condition for operation had been entered as specified by TS 3.4.5. On April 27, 1998, the



licensee informed the NRC Project Manager that resolution of the inoperability condition would involve modifications more extensive than mere setpoint adjustments, that these modifications should not be implemented while NMP1 is operating, and that the licensee was considering filing an application for an emergency license amendment to allow the modifications to be implemented and the plant restarted after a 7-day outage. NMP1 was shut down on April 28, 1998, in accordance with TS 3.4.5. On May 2, 1998, the licensee filed an application requesting that the NRC amend the NMP1 license by May 8, 1998, on an Emergency basis because "resumption of operation cannot occur until NRC approval of the proposed change." However, on May 11, 1998, the licensee informed the NRC that as a result of the finding by a team of licensee engineers who reviewed the control room ventilation systems, modifications to the NMP1 Control Room Air Treatment System would not be completed and NMP1 determined ready for restart for 2 weeks. Accordingly, the NRC finds that exigent circumstances exist in that the full 30 days normally provided for public comment with respect to the proposed action is not available before NMP1 will be ready to resume power operation.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

Pursuant to 10 CFR 50.91(a)(6) for amendments to be granted under exigent circumstances, the NRC staff must determine that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by



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10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The operation of Nine Mile Point Unit 1, in accordance with the proposed amendment, will not involve a significant increase in the probability or consequences of an accident previously evaluated.

...The proposed modification and associated TS changes involve a system that is intended to detect the symptoms of certain events or accidents and initiate mitigative actions (i.e., the Control Room Air Treatment System). Accordingly, the proposed changes do not affect the probability of any accident initiators previously evaluated. Therefore, the proposed changes will not result in a significant increase in the probability of any accidents previously evaluated.

Currently, TS Table 3.6.2i, "Control Room Air Treatment System Initiation," specifies a setpoint of " ≤ 1000 CPM" for Parameter (1), "High Radiation Ventilation Intake." This requires the continuous radiation monitors located in the outside air intake duct of the Control Room Ventilation System to initiate the Control Room Air Treatment System at a detector count rate of "[less than or equal to] 1000 CPM." The setpoint was established to comply with the radiation dose limits specified in 10 CFR 50, Appendix A, General Design Criterion (GDC) 19 and NUREG-0800, "Standard Review Plan [SRP]," Section 6.4 for control room habitability during an accident, including a Loss of Coolant Accident (LOCA). In the event of an accident, timely initiation and proper operation of the Control Room Air Treatment System minimizes the amount of airborne radioactivity entering the control room. However, based on the results of a current study, initiation of the Control Room Air Treatment System at this setpoint does not provide assurance that personnel occupying the control room under the most limiting Main Steam Line Break (MSLB) accident assumptions would not receive radiation exposures in excess of the GDC 19 and SRP 6.4 limits. It was further determined that, contrary to a 1984 commitment, the Control Room Air Treatment System would not automatically initiate during a LOCA.

To correct this condition, a modification is proposed that will automatically initiate the Control Room Air Treatment System on either a MSLB or LOCA signal. Spare contacts from the RPS logic circuits will be used to provide the initiation signals. Specifically, MSLB automatic initiation of the system will be on main steam line high flow or main steam line tunnel high temperature, and LOCA automatic initiation of the system will be on high drywell pressure or low-low reactor vessel water level. Implementation of this modification will provide automatic initiation of the Control Room Air Treatment System at the onset of both a MSLB and a LOCA, as previously committed.

The MSLB accident has been evaluated for full power operating conditions where radioactive gases released from the turbine building could be drawn into the Control Room Ventilation System and accumulate in the control room. Engineering calculations show that the Control Room Air Treatment System would maintain the



dose to the control room operators below the GDC 19 and SRP 6.4 limits during these releases, and the addition of an anticipatory automatic initiation on a MSLB signal (main steam line high flow or main steam line tunnel high temperature) provides assurance that the consequences of the MSLB accident are bounded by the analysis.

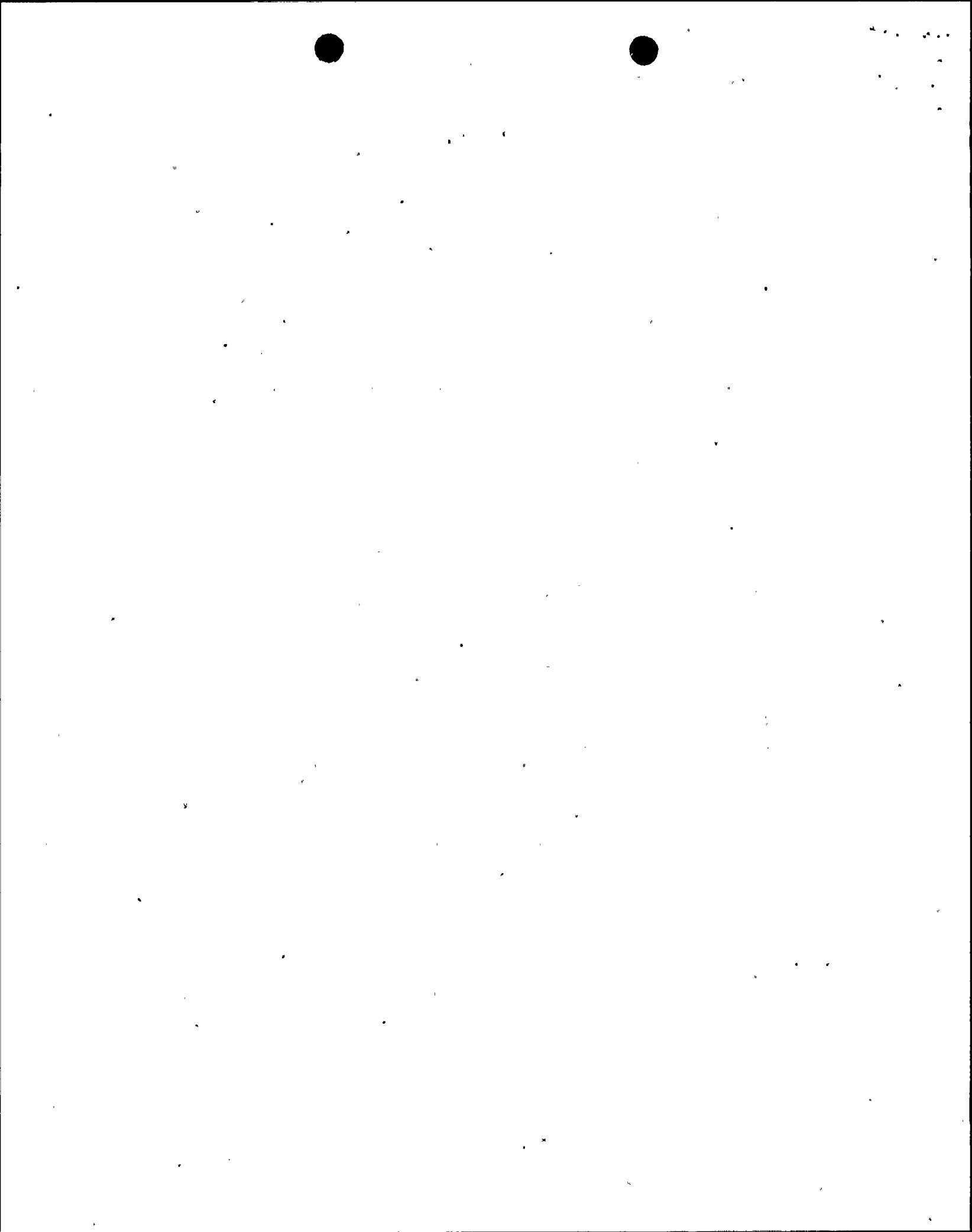
The LOCA analysis assumes that radioactive gases are released from the elevated stack and are then drawn back down into the Control Room Ventilation System intake duct. Analysis shows that for the bounding condition, the accumulated dose in the control room for a minimum of 30 days would not be detected by the Control Room Air Treatment System radiation monitors, even at a significantly reduced setpoint. Consequently, the radiation monitors cannot be relied upon to initiate the Control Room Air Treatment System in the event of a LOCA. As a result, an anticipatory automatic initiation of the Control Room Air Treatment System on a LOCA signal (high drywell pressure or low-low reactor vessel water level) is proposed to be added to provide assurance that personnel occupying the control room under the most limiting LOCA assumptions will not receive radiation exposures in excess of the GDC 19 and SRP 6.4 limits.

NMPC has also proposed to delete the requirement to have the Control Room Air Treatment System automatically initiate on a high radiation signal when the reactor mode switch is in the "Refuel" position. This change is acceptable based on 1) neither a LOCA or MSLB is assumed to occur in refuel; 2) for accidents assumed to occur during refueling (fuel handling accident), GDC 19 and SRP 6.4 limits are met without the Control Room Air Treatment System; and 3) the Control Room Air Treatment System can be manually initiated.

In summary, the proposed changes for the Control Room Air Treatment System initiation channels will assure that the NMP1 control room operators will not receive radiation exposures in excess of the limits delineated in GDC 19 and SRP 6.4. Accordingly, the operators will be able to respond to and mitigate the consequences of anticipated accident scenarios. Therefore, the proposed changes will not involve a significant increase in the consequences of an accident previously evaluated.

2. The operation of Nine Mile Point Unit 1, in accordance with the proposed amendment, will not create the possibility of a new or different kind of accident from any accident previously evaluated.

...The proposed changes do not introduce any new accident initiators and do not involve any alterations to plant configurations which could initiate a new or different kind of accident. The actuation circuit of the Control Room Air Treatment System actuation logic does not control or interface with any primary reactor processes. Addition of the MSLB logic and the LOCA logic will ensure that the Control Room Air Treatment System initiates such that habitability of the control room is not compromised. No new failure modes to existing systems or equipment important to safety are created by this change. Post-installation testing will confirm that the new logic will have no effect on other safety-related circuits and TS required surveillance



testing will routinely confirm operability of the Control Room Air Treatment System. Therefore, the changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The operation of Nine Mile Point Unit 1, in accordance with the proposed amendment, will not involve a significant reduction in a margin of safety.

The proposed changes to Sections 3.6.2 and 4.6.2 incorporate modifications to the initiation instrumentation for the Control Room Air Treatment System.... As a result of these changes, the requirement to have the Control Room Air Treatment System automatically initiate on a high radiation signal when the reactor mode switch is in the "Refuel" position has been deleted....

The addition of the trip circuit logic from the MSLB accident as well as from the LOCA circuits assures that the control room operator will not be exposed to radiation limits in excess of GDC 19 or SRP 6.4 limits. Additionally, the initiation signal will be automatic at the onset of both accidents, which improves the response time of the Control Room Air Treatment System to the MSLB accident and the LOCA. NMPC has proposed to delete the requirement to have the Control Room Air Treatment System automatically initiate on a high radiation signal when the reactor mode switch is in the "Refuel" position. This change is acceptable based on 1) neither a LOCA nor MSLB is assumed to occur in refuel; 2) for accidents assumed to occur during refueling (fuel handling accident) GDC 19 and SRP 6.4 limits are met without the Control Room Air Treatment System; and 3) the Control Room Air Treatment System can be manually initiated.

In summary, the proposed changes will assure that the Control Room dose established in GDC 19 and SRP 6.4 will not be exceeded. Therefore, the proposed activity does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 14 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 14-day notice period. However, should circumstances change during the notice period, such that failure

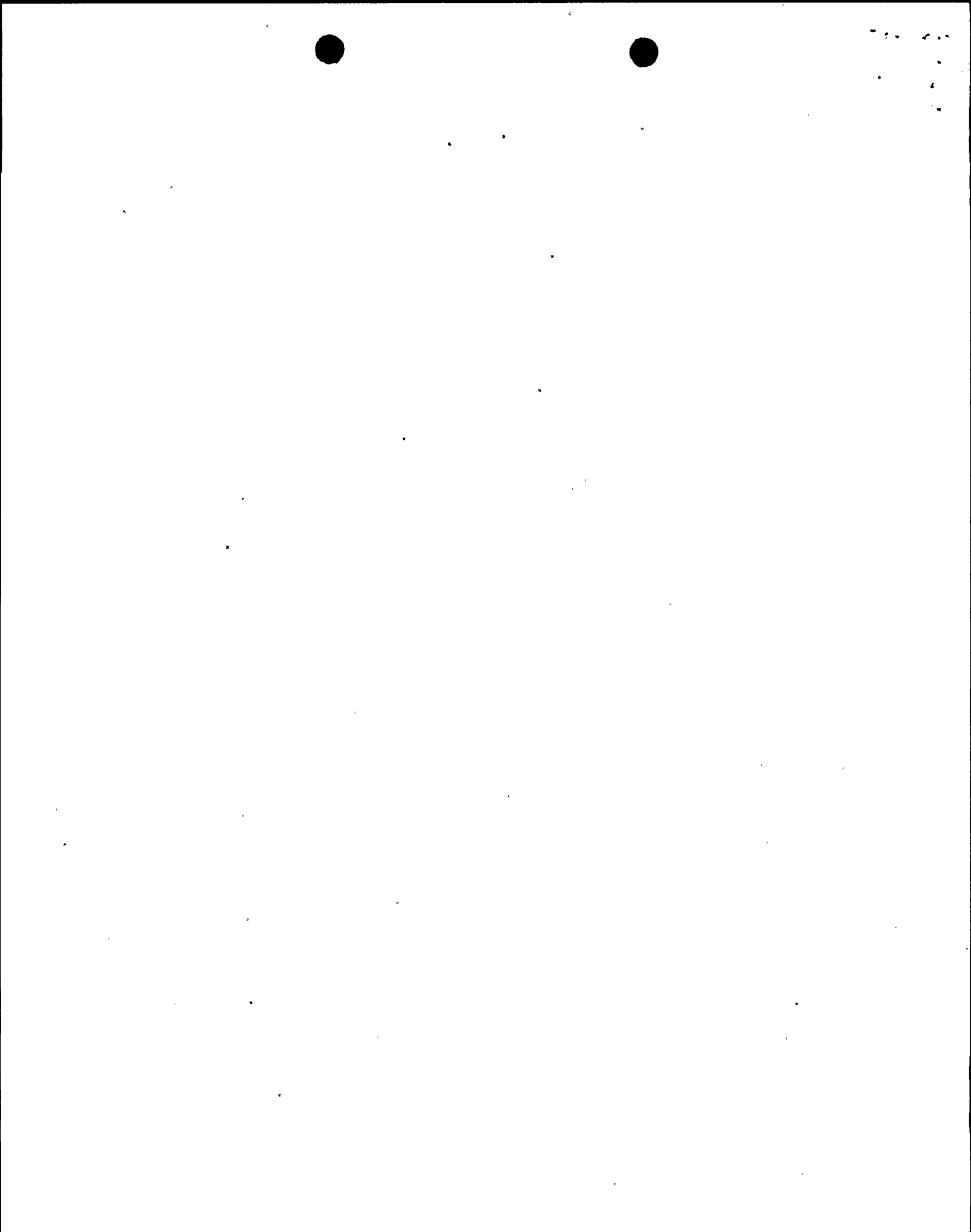


to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 14-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By June 17, 1998 the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Reference and Documents Department, Penfield Library, State University of New York, Oswego, New York 13126. If a request for a hearing or petition for leave



to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and



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on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

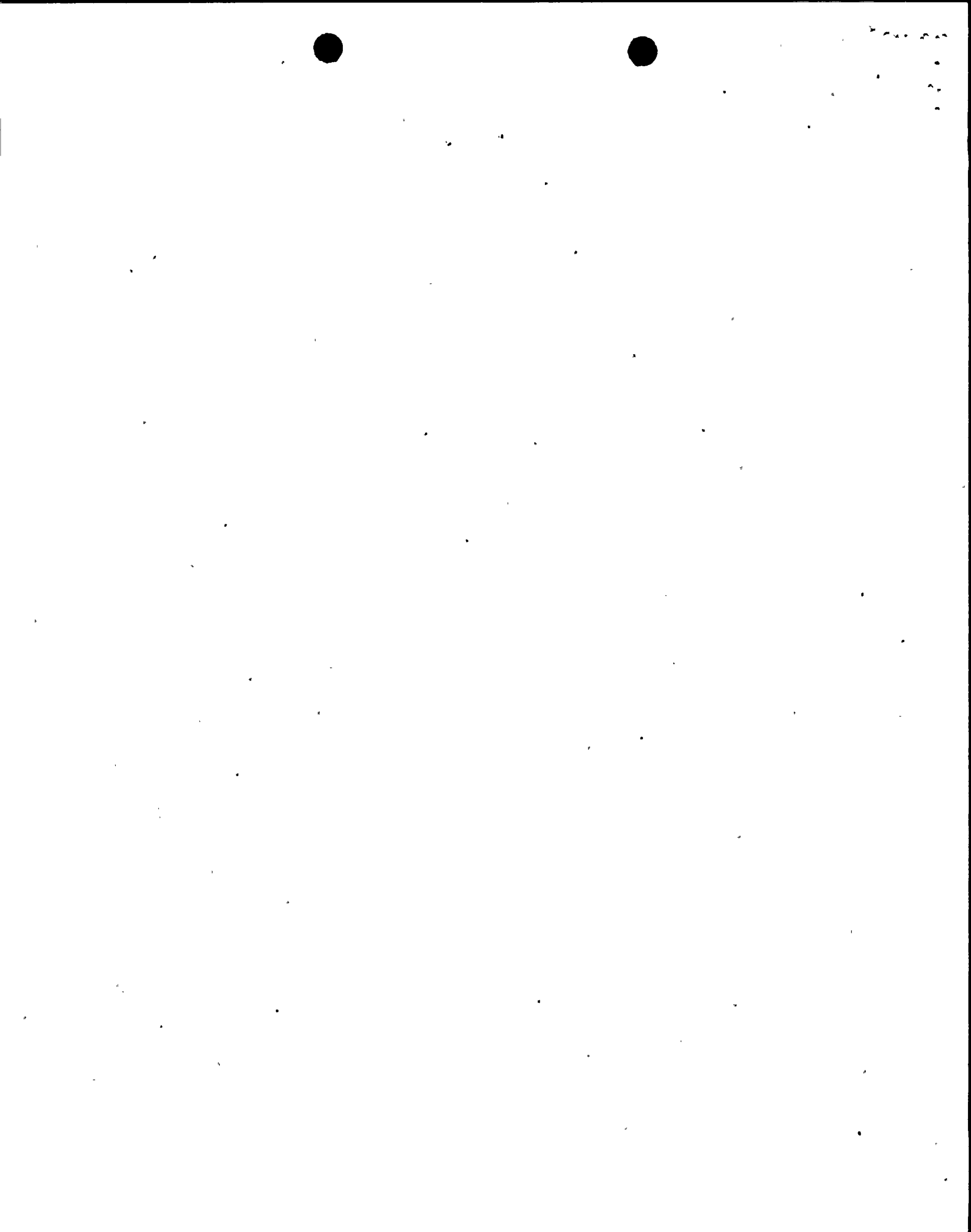
Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If the amendment is issued before the expiration of the 30-day hearing period, the Commission will make a final determination on the issue of no significant hazards consideration. If a hearing is requested, the final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date.



A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to Mark J. Wetterhahn, Esquire, Winston & Strawn, 1400 L Street, NW, Washington, DC 20005-3502, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated May 2, 1998, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room, located at the Reference and Documents Department, Penfield Library, State University of New York, Oswego, New York 13126.

Dated at Rockville, Maryland, this 12 day of May, 1998

FOR THE NUCLEAR REGULATORY COMMISSION



Darl S. Hood, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

