



UNITED STATES
NUCLEAR REGULATORY COMMISSION
 WASHINGTON, D.C. 20555-0001

May 8, 1997

Mr. E. Thomas Boulette, Ph.D.
 Senior Vice President - Nuclear
 Boston Edison Company
 Pilgrim Nuclear Power Station
 RFD #1 Rocky Hill Road
 Plymouth, MA 02360

SUBJECT: REQUEST TO CREDIT CONTAINMENT OVERPRESSURE TO SATISFY NET POSITIVE SUCTION HEAD (NPSH) REQUIREMENTS, AND SUBSEQUENT DEFERRAL OF REVIEW REQUEST BASED ON 10 CFR 50.59 EVALUATION - PILGRIM NUCLEAR POWER STATION (TAC NO. M97789)

Dear Mr. Boulette:

By submittals dated January 20 and January 30, 1997, the Boston Edison Company (BECO/the licensee) submitted an amendment request for the Pilgrim Nuclear Power Station (PNPS). The licensee requested to update the Updated Final Safety Analysis Report (UFSAR) to credit containment overpressure to satisfy Emergency Core Cooling System (ECCS) pump NPSH requirements, and also requested approval of revised containment pressure and suppression pool temperature analyses for an increased ultimate heat sink temperature of 75 °F, versus the current 65 °F. The NRC staff had determined that the licensee's need for containment overpressure constituted an Unreviewed Safety Question (USQ) and approval of the amendment request was needed to support plant startup.

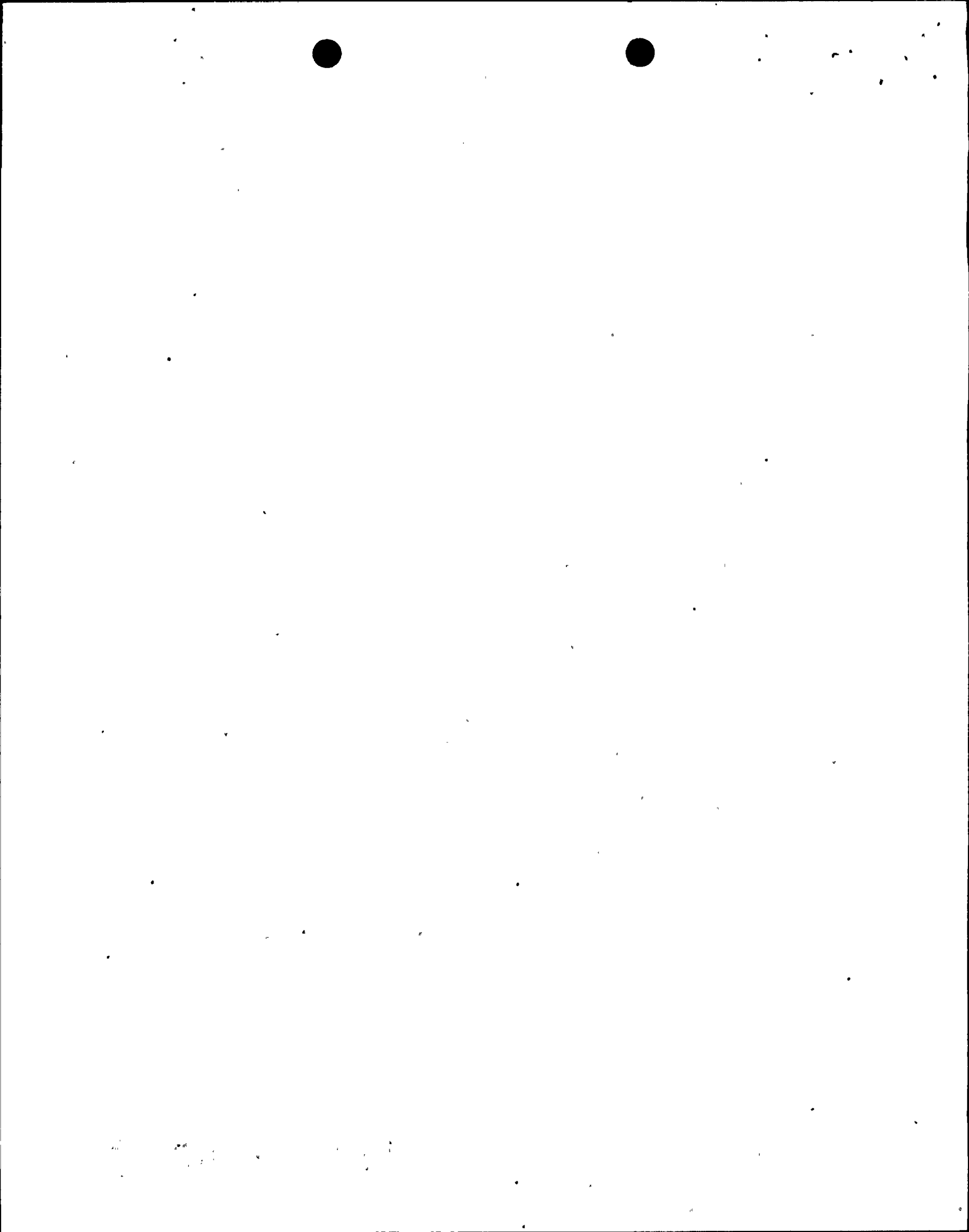
The licensee subsequently determined that because of the reduced head losses associated with new ECCS suction strainers installed during the refueling outage 11, credit for containment overpressure, assuming a 65 °F ultimate heat sink temperature, is no longer necessary to satisfy low-pressure coolant injection and core spray pump NPSH requirements. By letter dated April 11, 1997, the licensee submitted a 10 CFR 50.59 safety evaluation supporting this conclusion and committed to enter a "loss of containment cooling" limiting condition for operation when the ultimate heat sink temperature exceeds 65 °F. We find the licensee's conclusion that adequate NPSH will exist without credit for overpressure, as determined in the 10 CFR 50.59 evaluation, to be consistent with the plant's licensing basis. Because overpressure is no longer necessary to satisfy NPSH requirements, there is no longer a USQ involving the use of containment overpressure. / / 0
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However, while the amendment for credit for overpressure is not necessary with lower strainer head losses and a 65 °F ultimate heat sink temperature, it is anticipated that the amendment will be needed by the summer as the service water temperature typically will exceed 65 °F during this time. The licensee had performed the containment design basis accident loss-of-coolant accident analysis and NPSH analysis with the assumption of a 75 °F ultimate heat sink

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E. Thomas Boulette

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temperature and the ANS 5.1 Decay Heat curve. The staff has informed BECo that a 2-sigma adder needs to be included to the ANS standard curve to provide a 95 percent confidence for that curve. The licensee has stated that this reanalysis will be submitted shortly.

In a separate action, the NRC deferred resolution of Pilgrim's final response to Bulletin 96-03, "Potential Plugging of Emergency Core Cooling Suction Strainers By Debris in Boiling Water Reactors," until no later than the end of 1998. This deferral is documented in a letter dated March 11, 1997.

Based on the NRC staff's review of the April 11, 1997, letter the staff has concluded that the need for containment overpressure is not a restart issue for PNPS. If you have any questions in this matter, please contact Mr. Alan Wang at (301) 415-1445.

Sincerely,



Patrick D. Milano, Acting Director
Project Directorate I-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-220

cc: See next page



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(Original Signed By)

Patrick D. Milano, Acting Director
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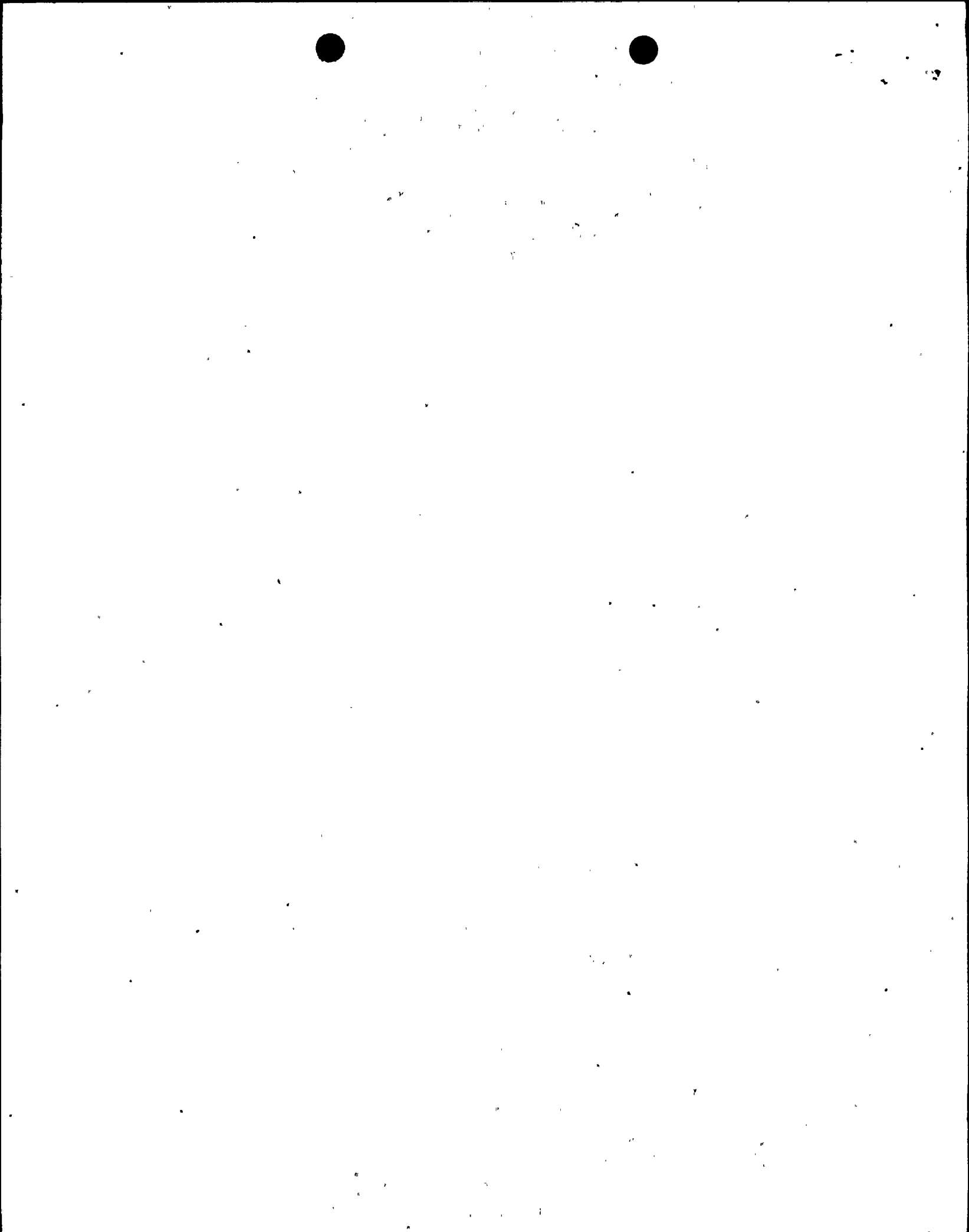
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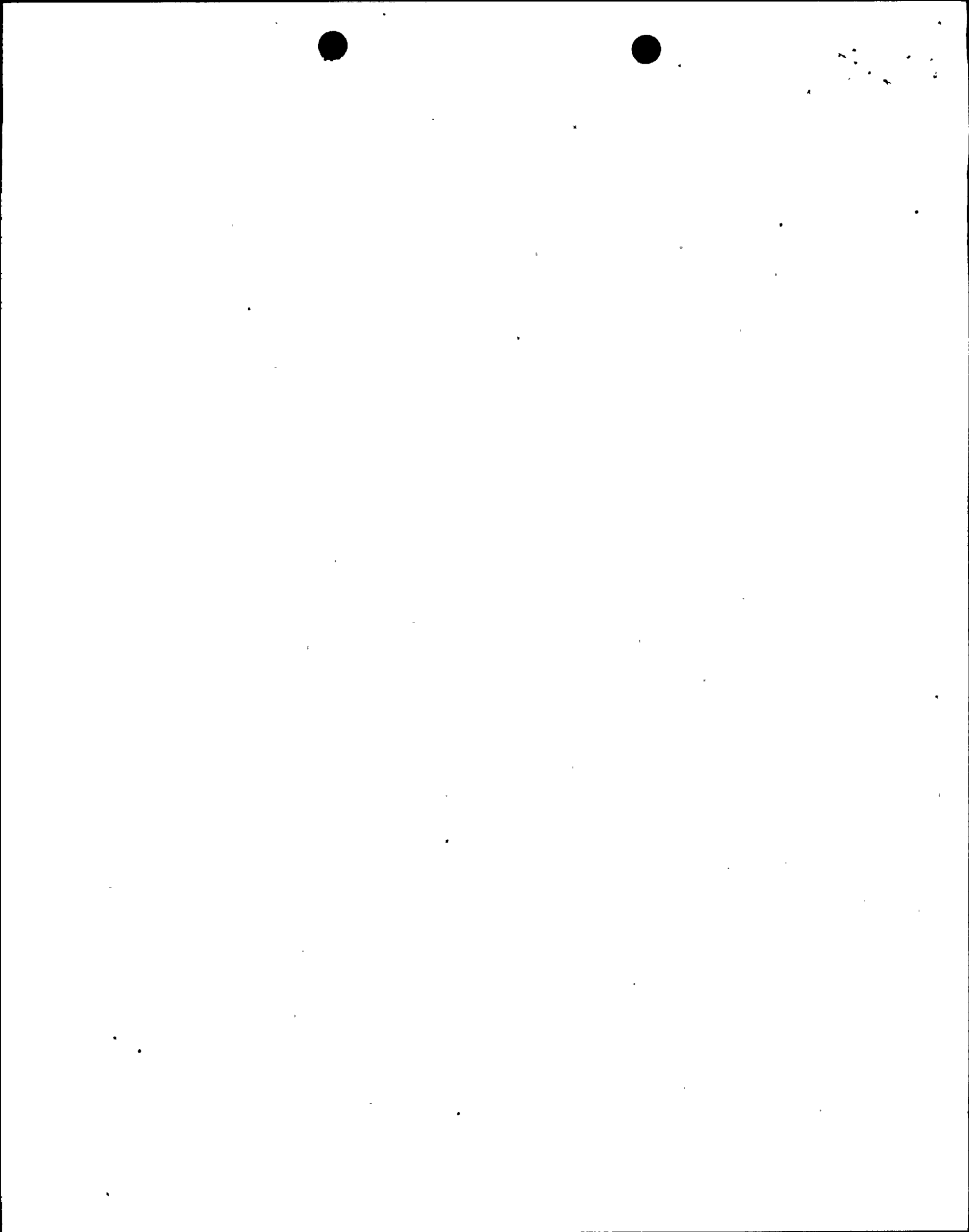
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