



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

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

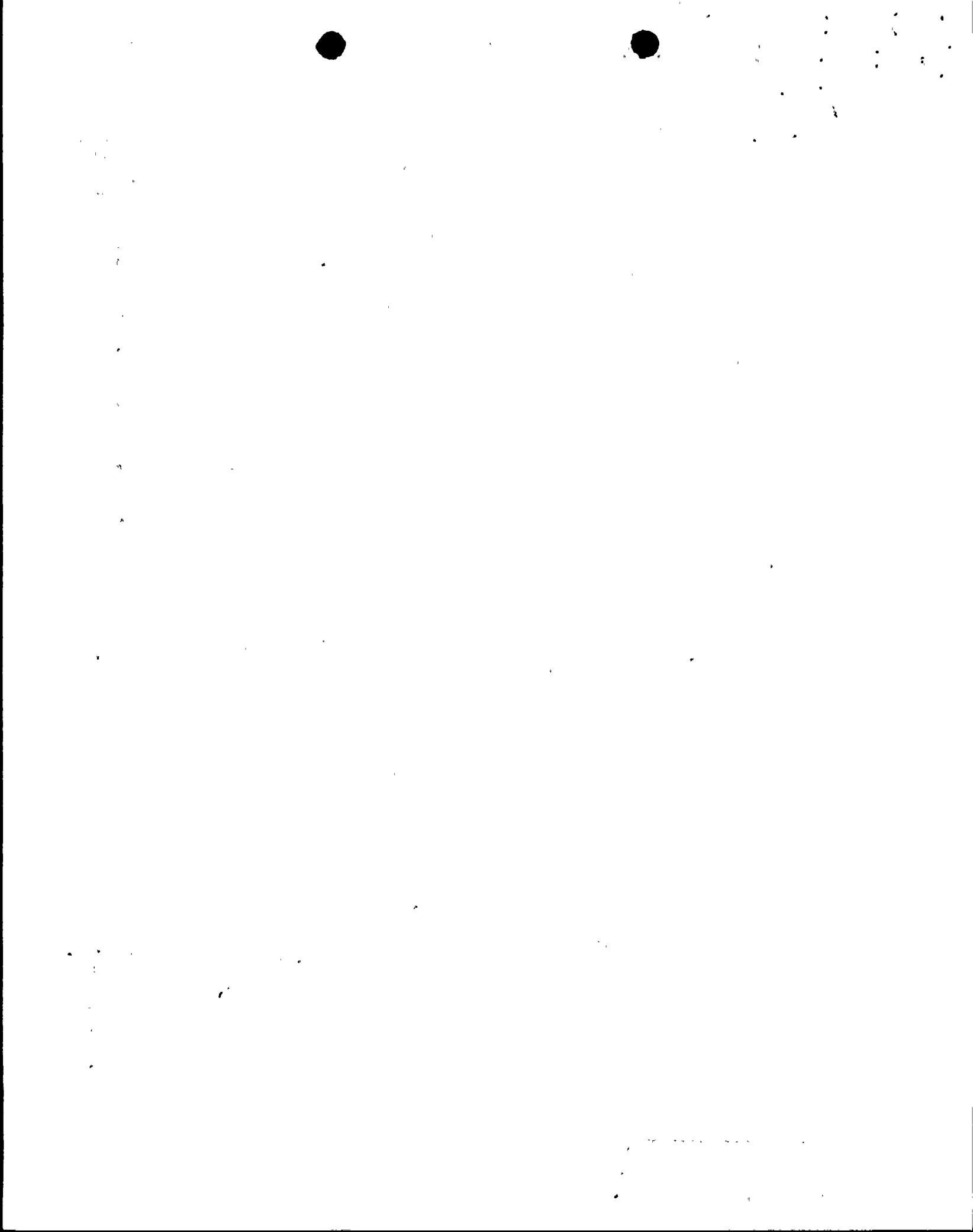
NINE MILE POINT NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 95
License No. DPR-63

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Niagara Mohawk Power Corporation of New York, Inc. (the licensee) dated July 8, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-63 is hereby amended to read as follows:

8803210460 880315
PDR ADOCK 05000220
P PDR



(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 95, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

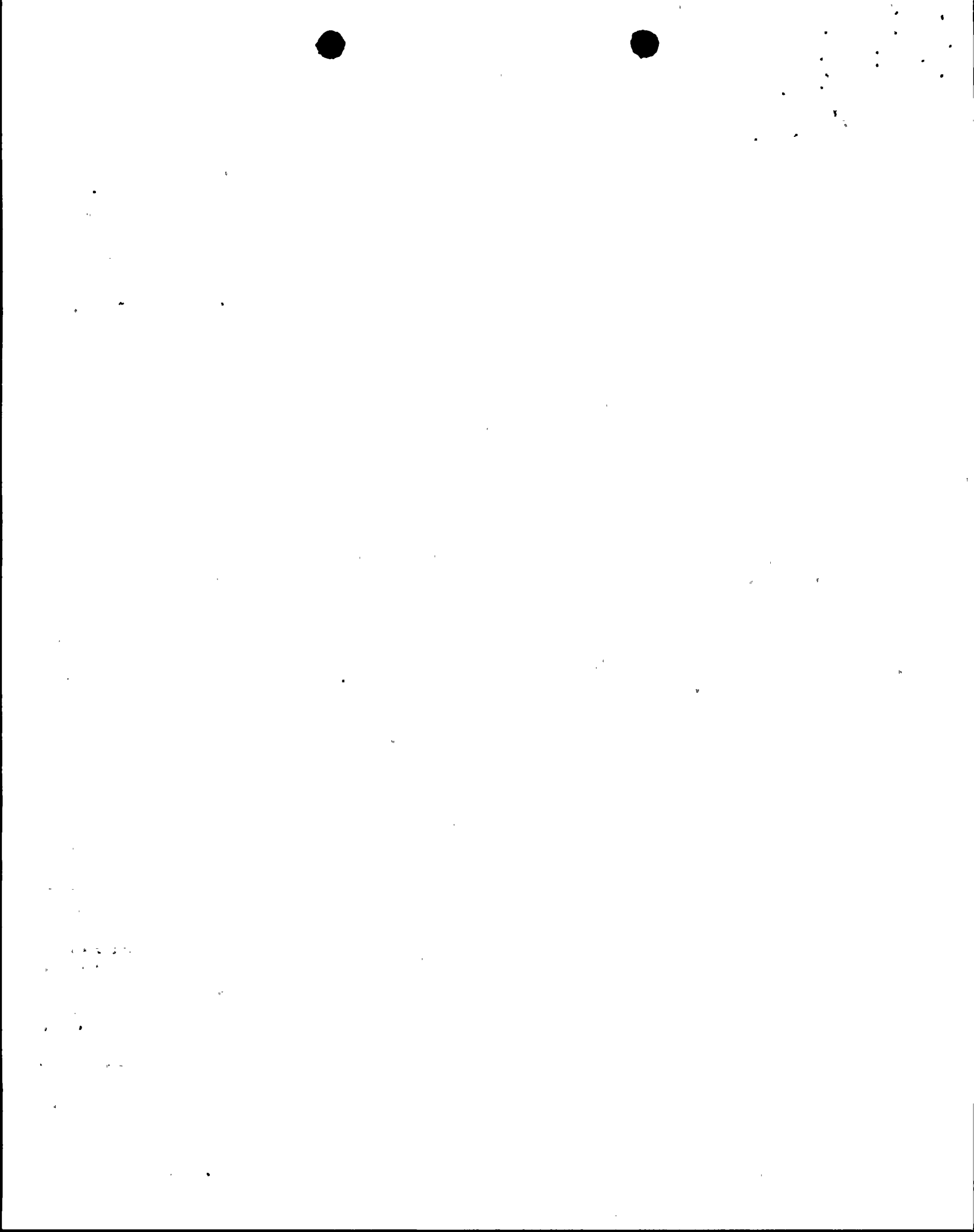
· FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Capra

Robert A. Capra, Director
Project Directorate I-1
Division of Reactor Projects, I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 15, 1988



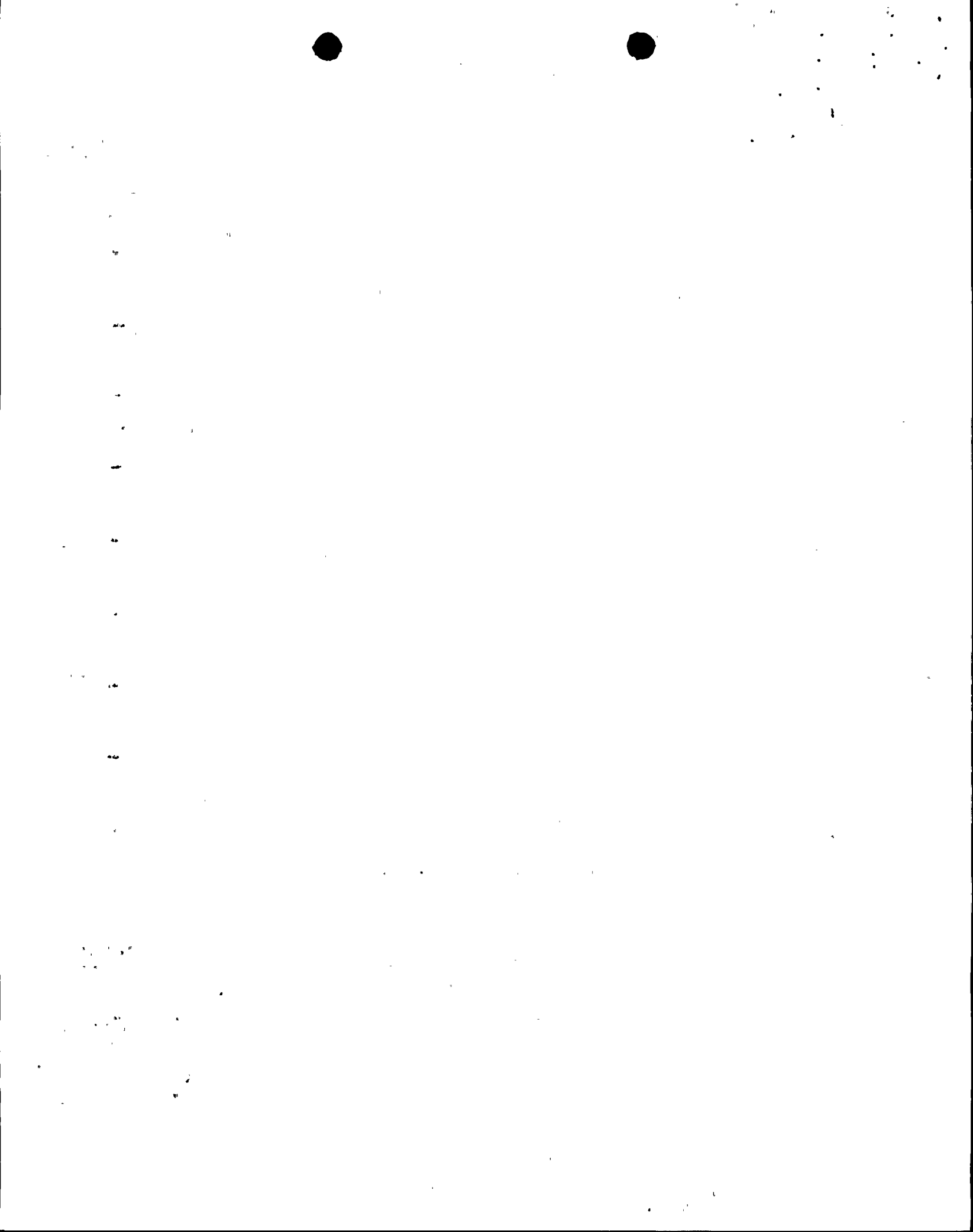
ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 95 TO FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

Revise Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
79	79
79a	79a
80	80
80a	80a
81	81
81a	81a
82	82



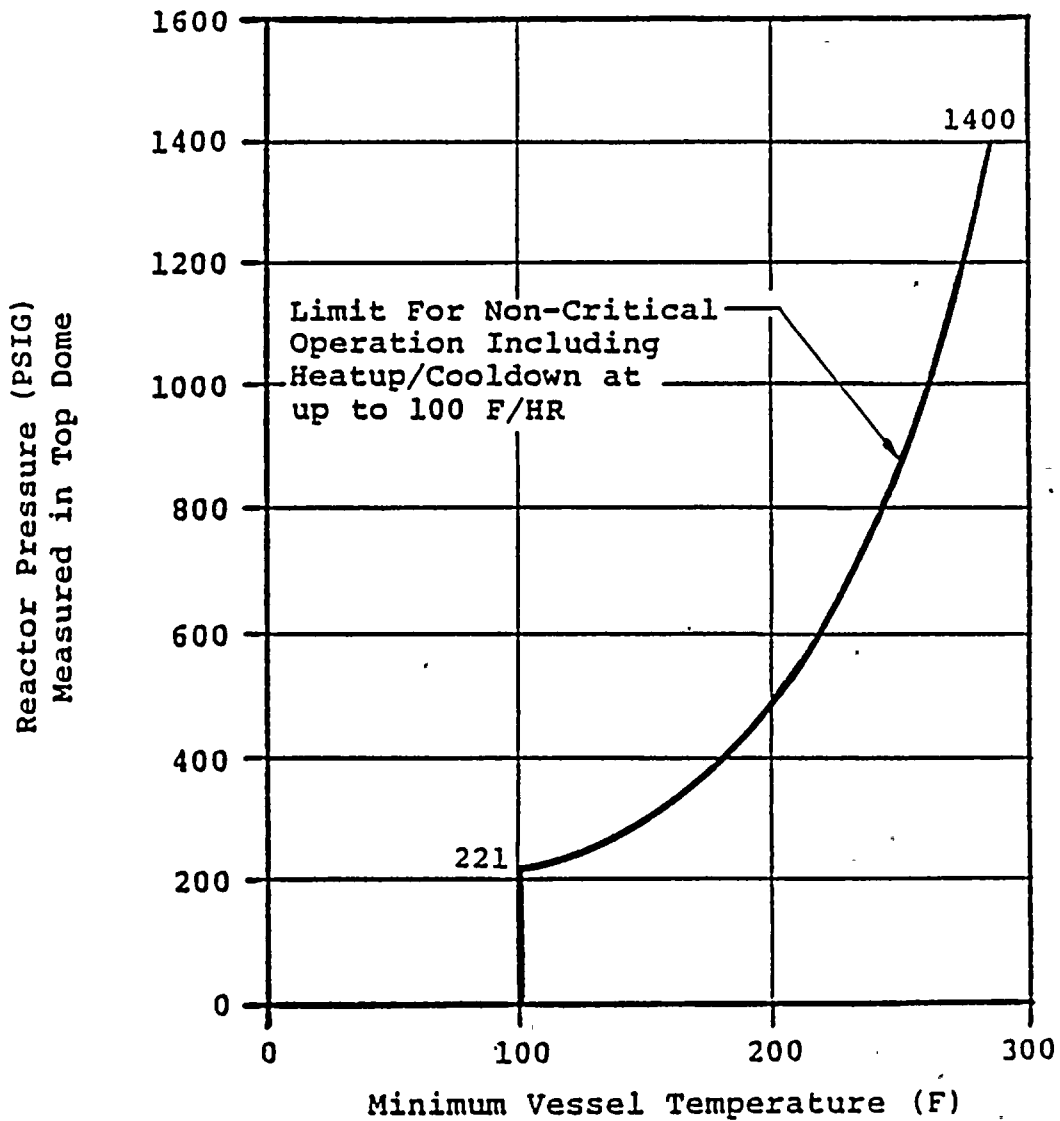
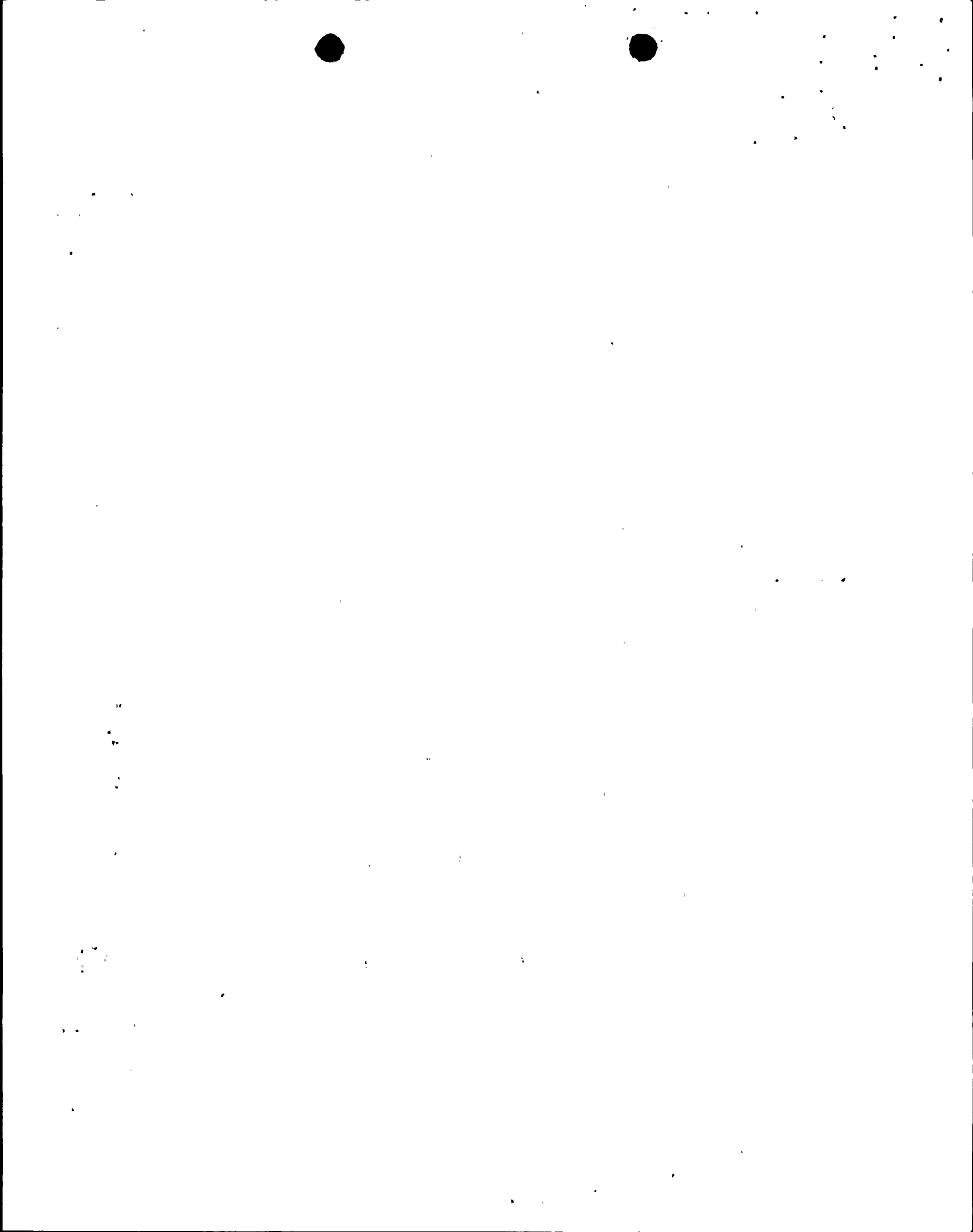


FIGURE 3.2.2.a

MINIMUM TEMPERATURE FOR PRESSURIZATION DURING
 HEATUP OR COOLDOWN (REACTOR NOT CRITICAL)
 (HEATING OR COOLING RATE ≤ 100 F/HR) FOR UP TO
 THIRTEEN EFFECTIVE FULL POWER YEARS OF CORE OPERATION

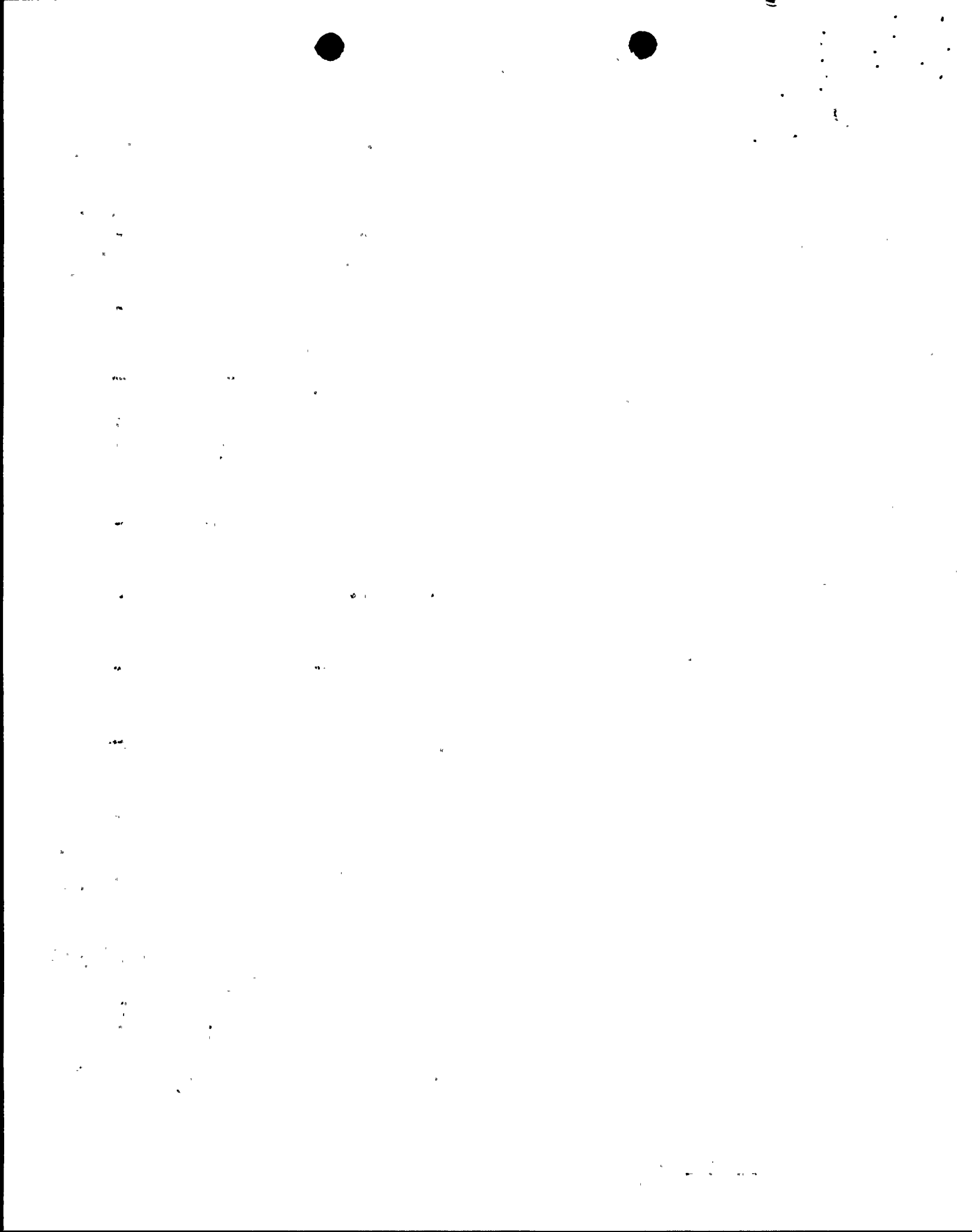


LIMIT FOR NON-CRITICAL OPERATION
INCLUDING HEAT-UP/COOLDOWN AT
UP TO 100F/HR

<u>PRESSURE (psig)</u>	<u>TEMPERATURE (F)</u>
221	100
300	148
350	167
400	182
450	194
500	204
550	213
600	221
650	228
700	235
750	241
800	247
850	252
900	256
950	261
1000	265
1050	269
1100	272
1150	276
1200	279
1300	285
1400	291

TABLE 3.2.2.a

MINIMUM TEMPERATURE FOR PRESSURIZATION DURING
HEAT-UP OR COOLDOWN (REACTOR NOT CRITICAL)
(HEATING OR COOLING RATE 100F/HR)
FOR UP TO THIRTEEN EFFECTIVE FULL
POWER YEARS OF CORE OPERATION



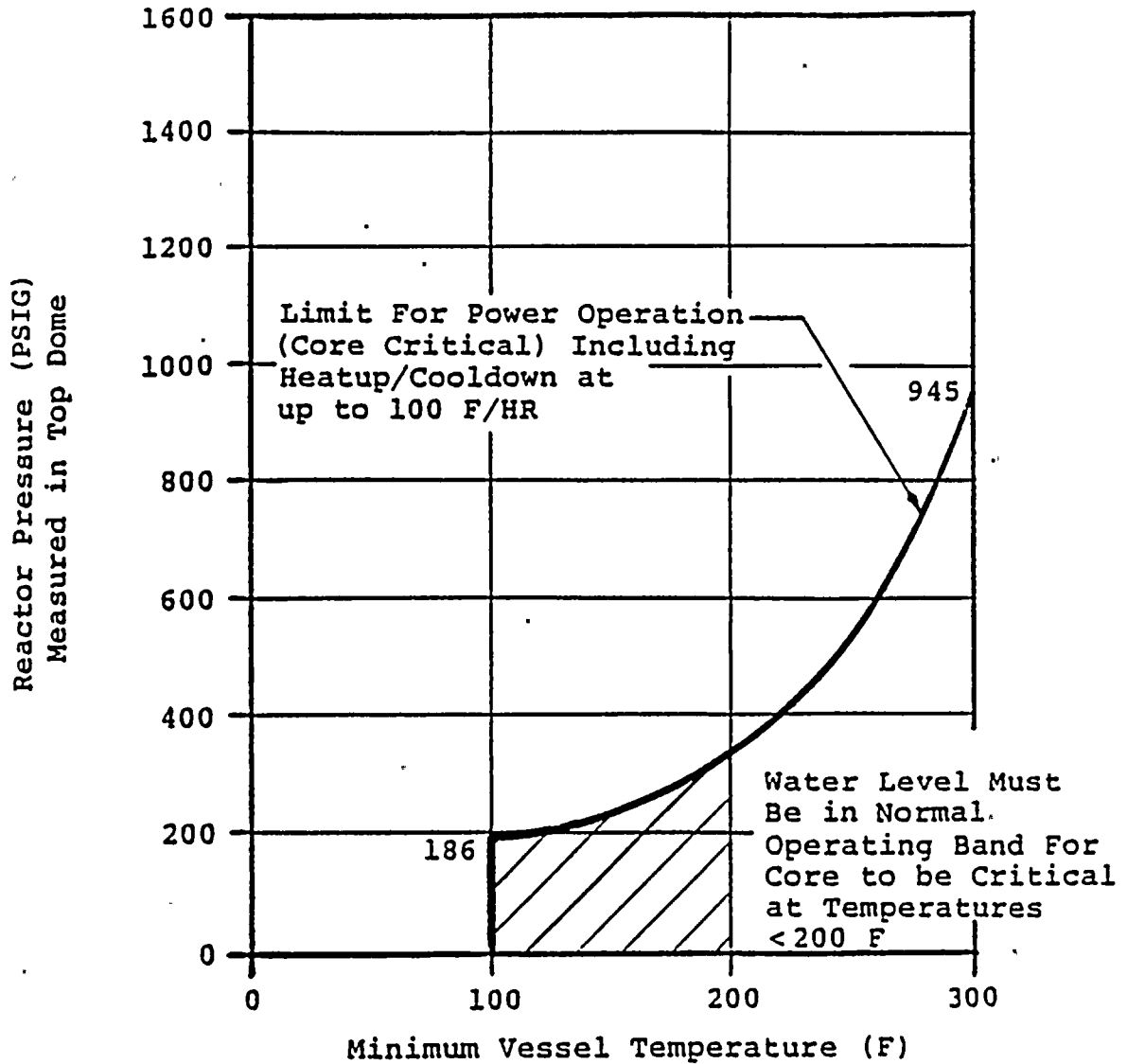
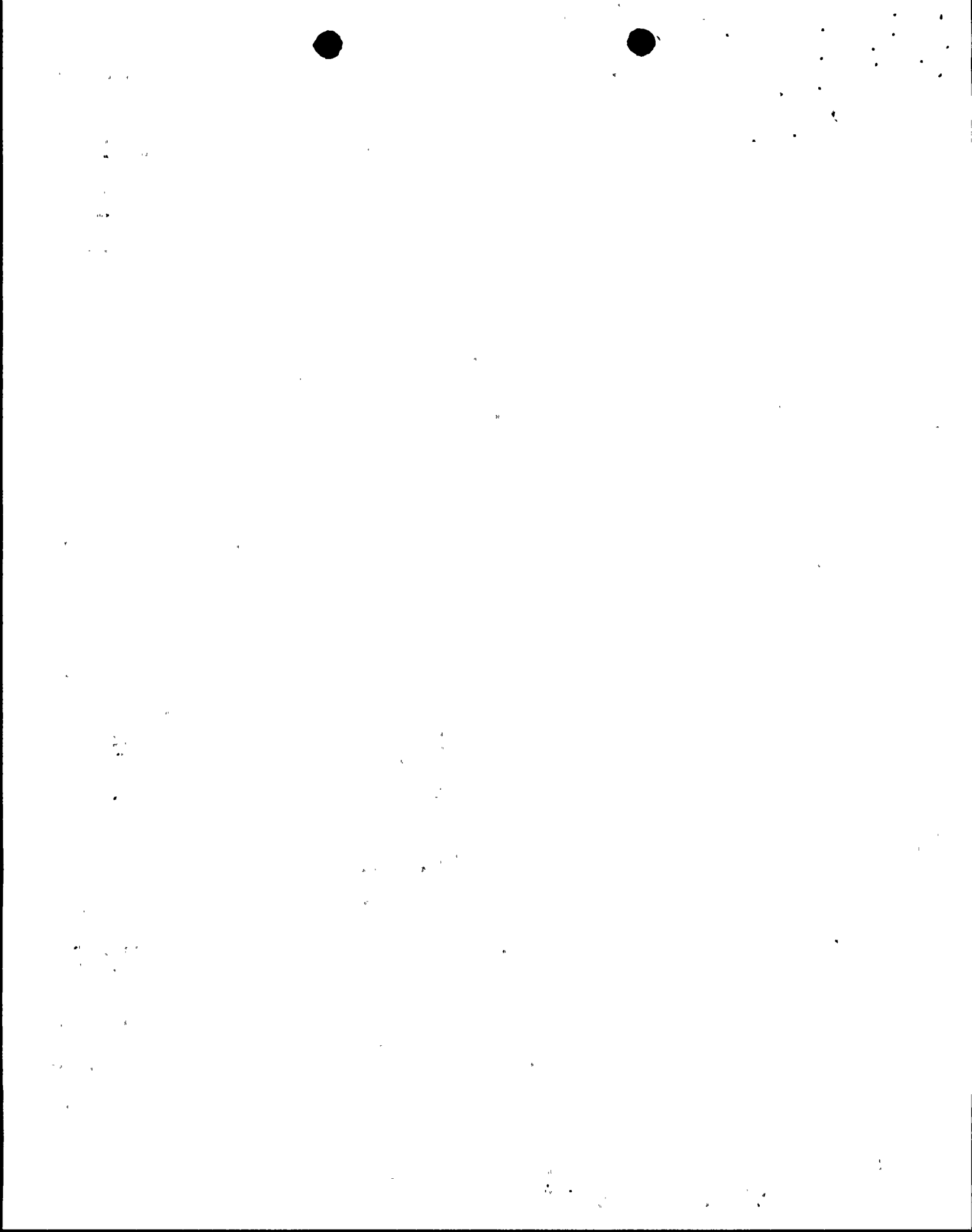


FIGURE 3.2.2.b
 MINIMUM TEMPERATURE FOR PRESSURIZATION DURING
 HEATUP OR COOLDOWN (REACTOR CRITICAL)
 (HEATING OR COOLING RATE \leq 100 F/HR) FOR UP TO
 THIRTEEN EFFECTIVE FULL POWER YEARS OF CORE OPERATION |

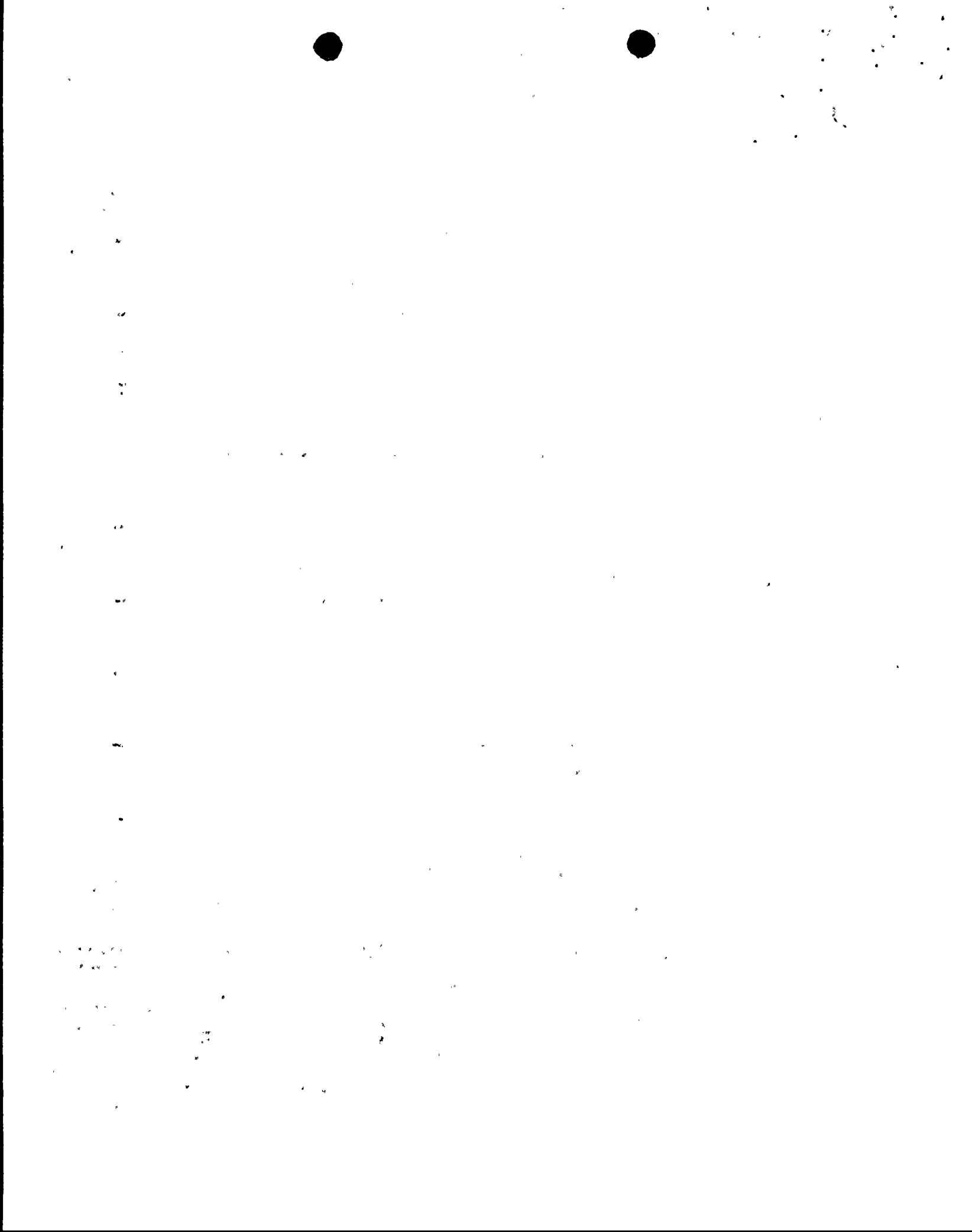


LIMIT FOR POWER OPERATION
(CORE CRITICAL) INCLUDING HEAT-UP/
COOLDOWN AT UP TO 100F/HR

<u>PRESSURE (psig)</u>	<u>TEMPERATURE (F)</u>
186	100
250	162
300	188
350	207
400	222
450	234
500	244
550	253
600	261
650	269
700	275
750	281
800	287
850	292
900	296
950	301
1000	305
1050	308
1100	312
1150	316
1200	319
1300	325
1400	331

TABLE 3.2.2.b.

MINIMUM TEMPERATURE FOR PRESSURIZATION DURING
HEAT-UP OR COOLDOWN (REACTOR CRITICAL)
(HEATING OR COOLING RATE 100F/HR)
FOR UP TO THIRTEEN EFFECTIVE FULL
POWER YEARS OF CORE OPERATION



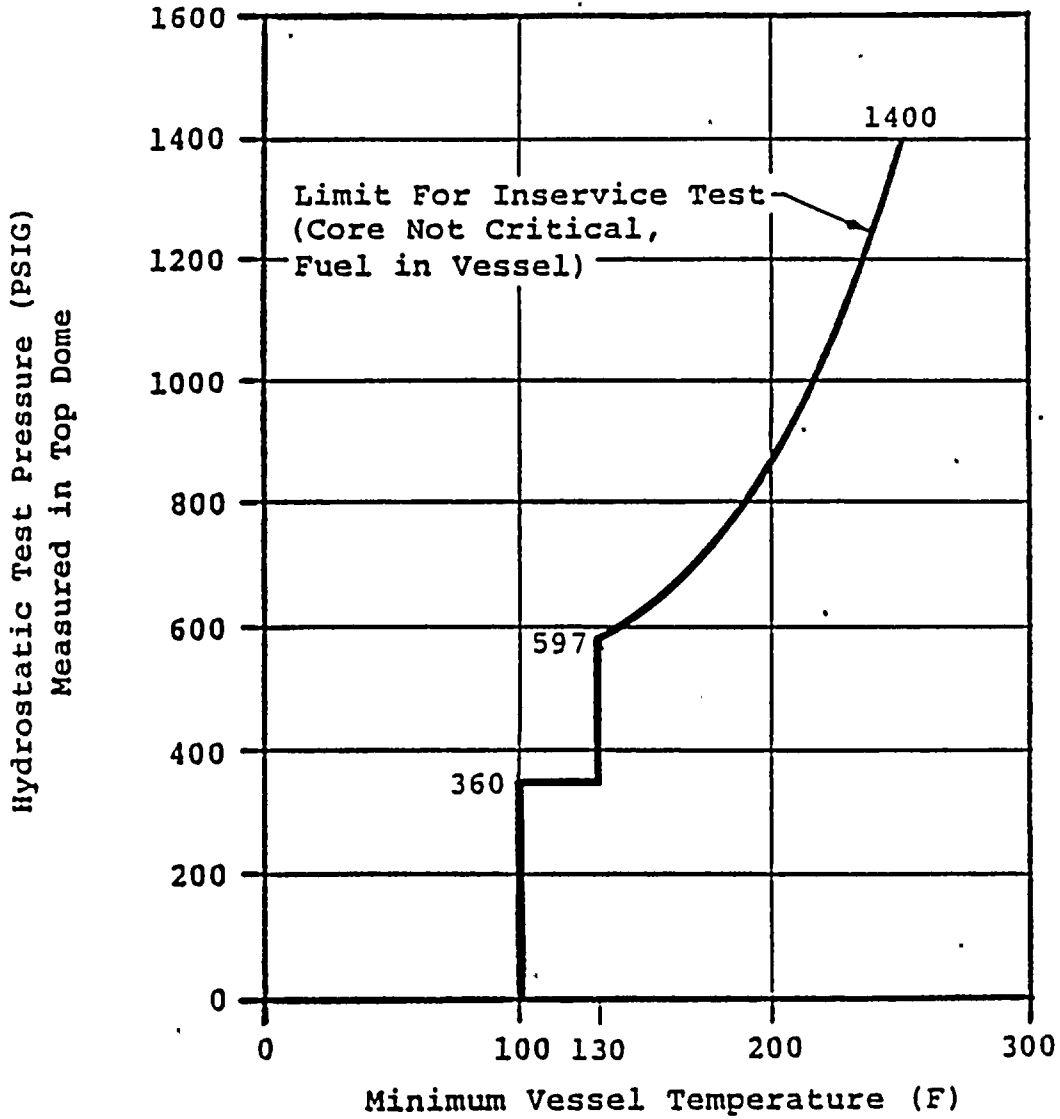
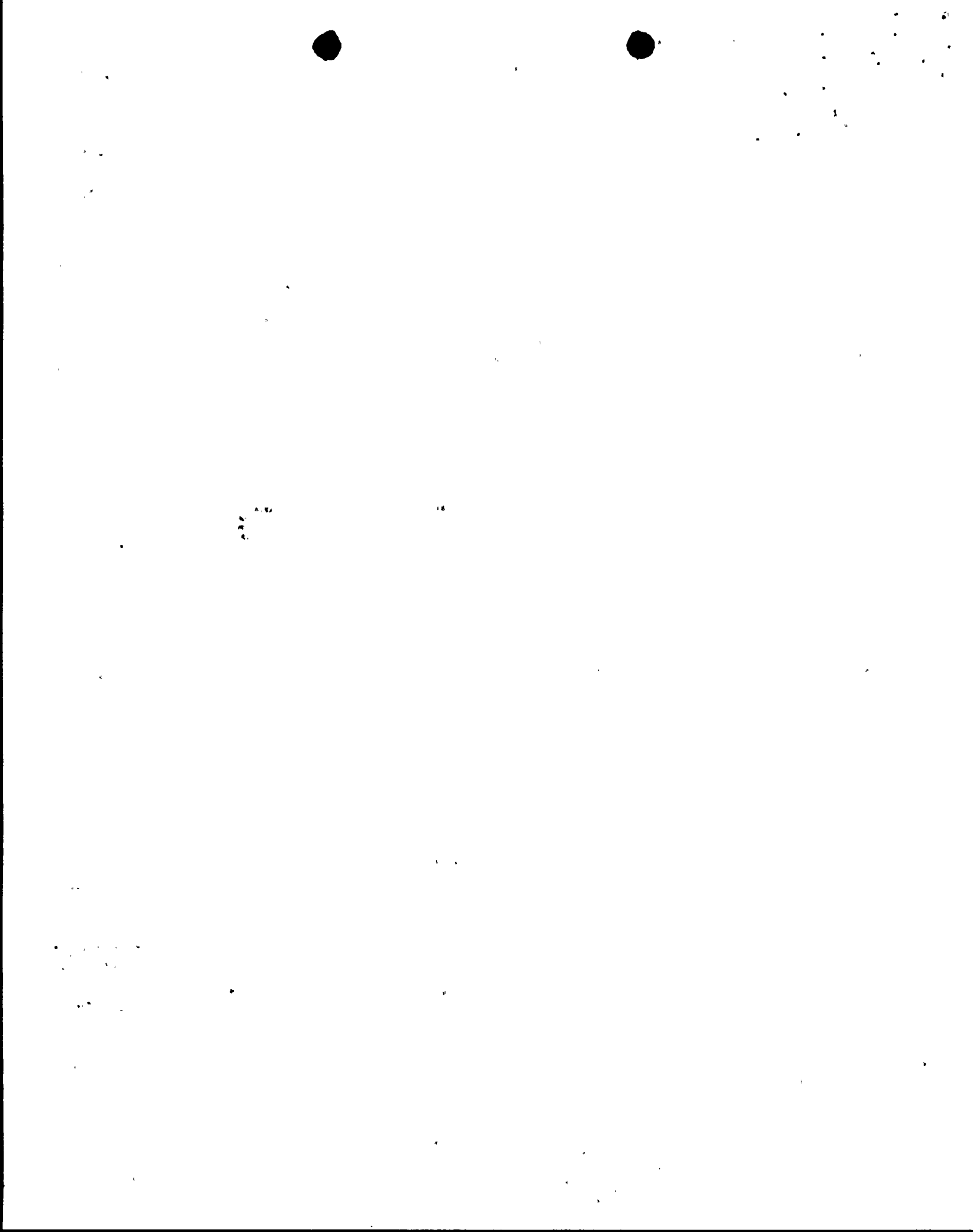


FIGURE 3.2.2.c

MINIMUM TEMPERATURE FOR PRESSURIZATION DURING
 HYDROSTATIC TESTING (REACTOR NOT CRITICAL) FOR UP TO
 THIRTEEN EFFECTIVE FULL POWER YEARS OF CORE OPERATION

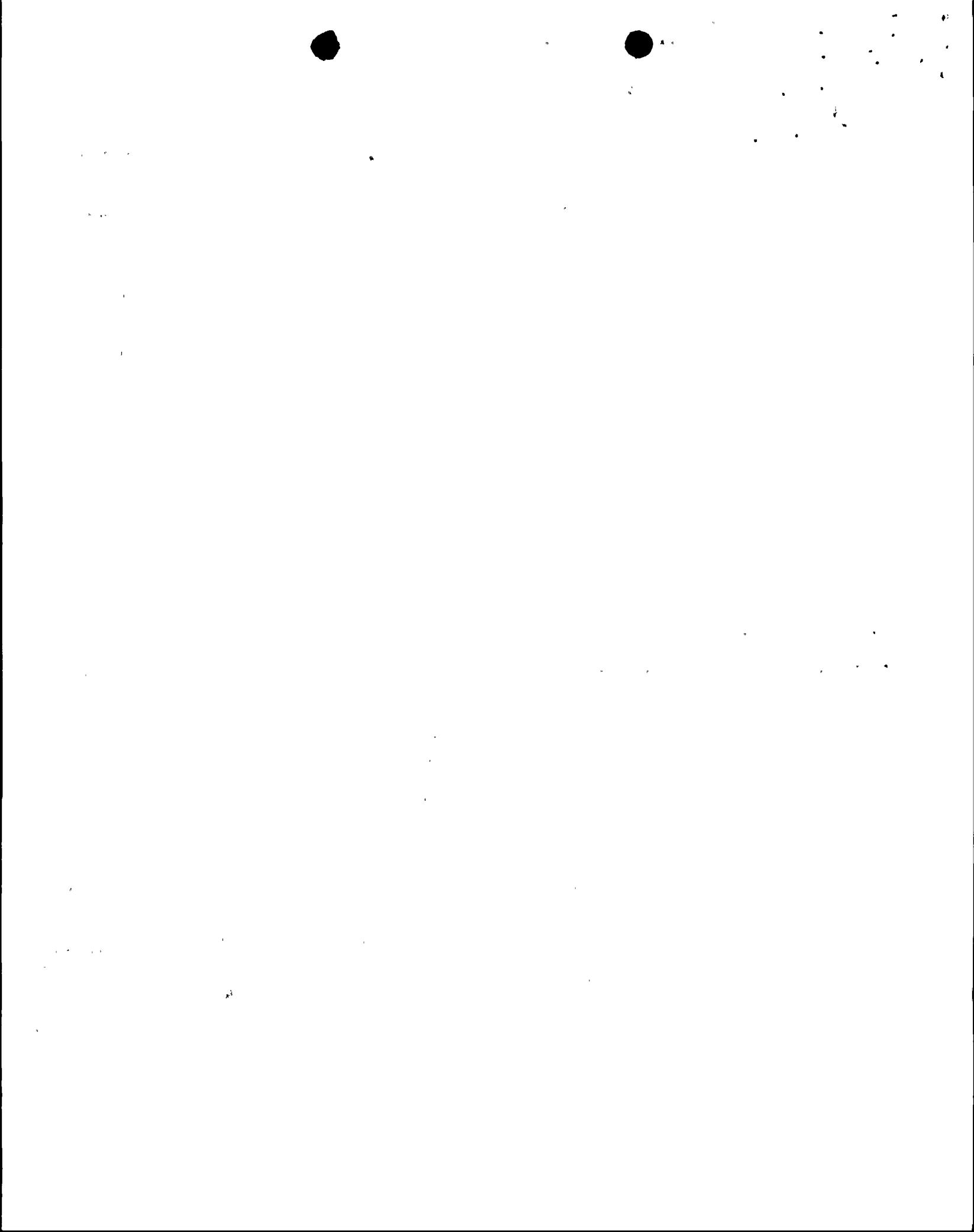


LIMIT FOR IN-SERVICE TEST
(CORE NOT CRITICAL, FUEL IN VESSEL)

<u>PRESSURE (psig)</u>	<u>TEMPERATURE (F)</u>
360	100-130
597	130
700	164.
800	186
900	203
1000	216
1050	222
1100	228
1150	233
1200	237
1300	245
1400	253

TABLE 3.2.2.c

MINIMUM TEMPERATURE FOR PRESSURIZATION DURING
HYDROSTATIC TESTING (REACTOR NOT CRITICAL)
FOR UP TO THIRTEEN EFFECTIVE FULL
POWER YEARS OF CORE OPERATION



BASES FOR 3.2.2 AND 4.2.2 MINIMUM REACTOR VESSEL TEMPERATURE FOR PRESSURIZATION

Figures 3.2.2.a and 3.2.2.b are plots of pressure versus temperature for a heat-up and cool down rate of 100F/hr. maximum. (Specification 3.2.1). Figure 3.2.2.c is a plot of pressure versus temperature for hydrostatic testing. These curves are based on calculations of stress intensity factors according to Appendix G of Section III of the ASME Boiler and Pressure Vessel Code 1980 Edition with Winter 1982 Addenda. In addition, temperature shifts due to integrated neutron flux at thirteen effective full power years of operation were incorporated into the figures. These shifts were calculated from the formula presented in Regulatory Guide 1.99, proposed Revision 2. These curves are applicable to the beltline region at low and elevated temperatures and the vessel flange at intermediate temperatures. Reactor vessel flange/reactor head flange boltup is governed by other criteria as stated in Specification 3.2.2.d. The pressure readings on the figures have been adjusted to reflect the calculated elevation head difference between the pressure sensing instrument locations and the pressure sensitive area of the core beltline region.

The reactor head flange and vessel flange in combination with the double "O" ring type seal are designed to provide a leak-tight seal when bolted together. When the head is placed on the reactor vessel, only that portion of the head flange near the inside of the vessel rests on the vessel flange. As the head bolts are replaced and tensioned, the head is flexed slightly to bring together the entire contact surfaces adjacent to the "O" rings of the head and vessel flanges. Both the head and vessel flanges have a NDT temperature of 40F and they are not subject to any appreciable neutron radiation exposure. Therefore, the minimum vessel flange and head flange temperature for bolting is established as 40 + 60F or 100F.

Figures 3.2.2.a., 3.2.2.b. and 3.2.2.c. have incorporated a temperature shift due to the calculated integrated neutron flux. The integrated neutron flux at the vessel wall is calculated from core physics data and has been measured using flux monitors installed inside the vessel. The curves are applicable for up to thirteen effective full power years of operation.

Vessel material surveillance samples are located within the core region to permit periodic monitoring of exposure and material properties relative to control samples. The material sample program conforms with ASTM E185-66 except for the material withdrawal schedule which is specified in Specification 4.2.2.b.

