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

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 58
License No. DPR-63

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The applications for amendment by Niagara Mohawk Power Corporation (the licensee) dated March 22, 1978, and supplemented and clarified by letters dated April 20 and October 26, 1983, and September 26, 1983 comply 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:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 58, 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

Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 18, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 58

FACILITY OPERATING LICENSE NO. DPR-63

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Revise the Appendix A Technical Specifications by removing and inserting the following pages:

Existing Page	Revised Page
77	77
78	78
79	79
-	79a
80	80
-	80a
81	81
-	81a
-	82
-	82a
-	82b
275f	257f

The revised areas are indicated by marginal lines.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
3.2.2 MINIMUM REACTOR VESSEL TEMPERATURE FOR PRESSURIZATION	4.2.2 MINIMUM REACTOR VESSEL TEMPERATURE FOR PRESSURIZATION
Applicability:	Applicability:
Applies to the minimum vessel temperature required for vessel pressurization.	Applies to the required vessel temperature for pressurization.
Objective:	Objective:
To assure that no substantial pressure is imposed on the reactor vessel unless its temperature is considerably above its Nil Ductility Transition Temperature (NDTT).	To assure that the vessel is not subjected to any substantial pressure unless its temperature is greater than its NDTT.
Specification:	Specification:
a. During reactor vessel heat-up and cooldown when the reactor is not critical the reactor vessel temperature and pressure shall satisfy the requirements of Figure 3.2.2.a.	a. Reactor vessel temperature and pressure shall be monitored and controlled to assure that the pressure and temperature limits are met.
b. During reactor vessel heat-up and cooldown when the reactor is critical the reactor vessel temperature and pressure shall satisfy the requirements of Figure 3.2.2.b, except when performing low power physics testing with the vessel head removed at power levels not to exceed 5 mw(t).	b. Vessel material surveillance samples located within the core region to permit periodic monitoring of exposure and material properties shall be inspected on the following schedule: First capsule - one fourth service life Second capsule - three fourth service life Third capsule - standby In the event the surveillance specimens at one quarter of the vessels service life indicate a shift of reference temperature greater than predicted the schedule shall be revised as follows: Second capsule - one half service life Third capsule - standby

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
c. During hydrostatic testing the reactor vessel temperature and pressure shall satisfy the requirements of Figure 3.2.2.c if the core is not critical and Figure 3.2.2.d if the core is critical.	
d. The reactor vessel head bolting studs shall not be under tension unless the temperature of the vessel head flange and the head are are equal to or greater than 100F.	

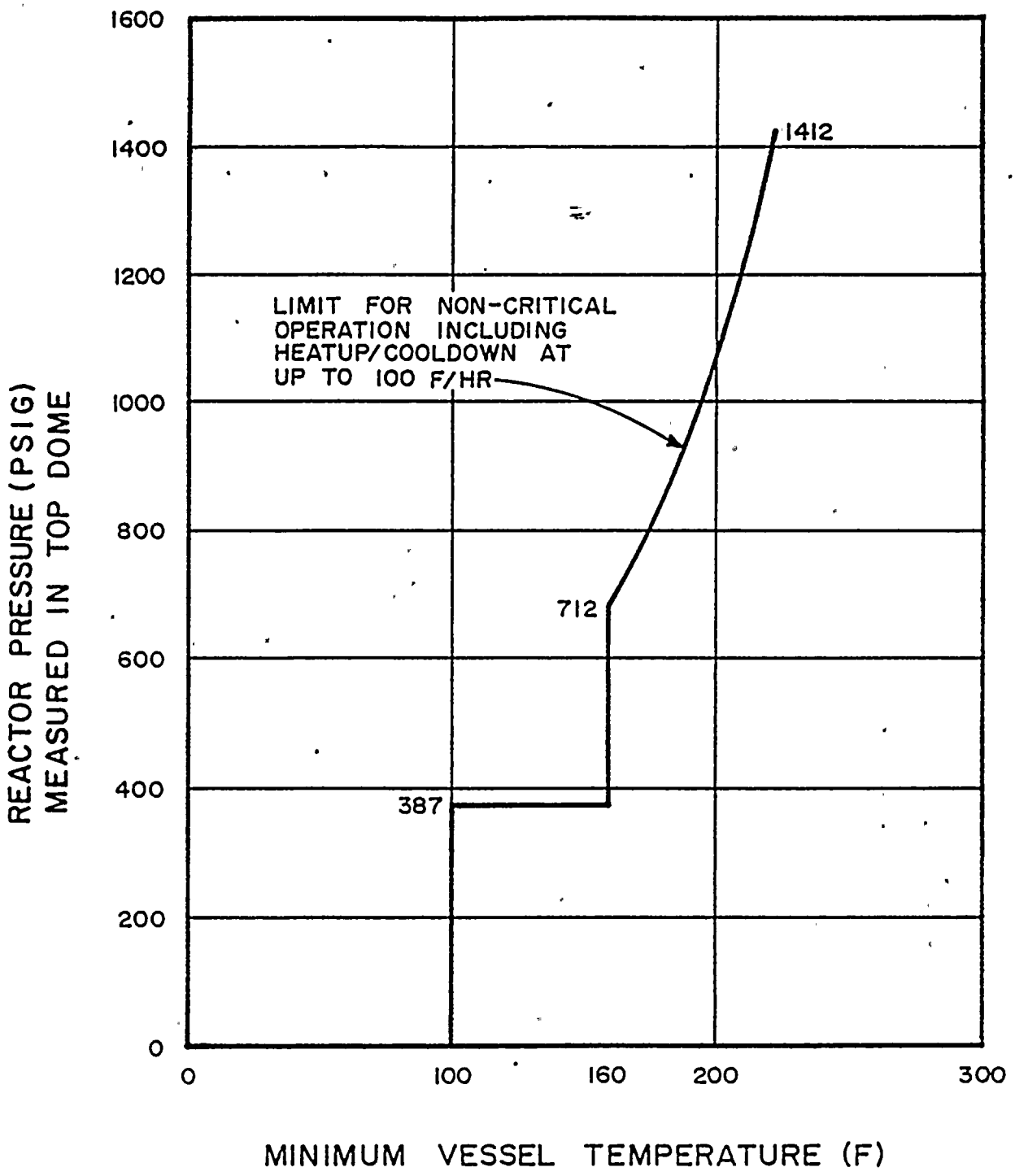

FIGURE 3.2.2.a

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

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

PRESSURE (psig)	TEMPERATURE (F)
387	100
387	100-160
712	160
762	166
812	172
862	177
912	182
962	187
1012	192
1062	196
1112	199
1162	203
1212	207
1312	213
1412	219

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 TEN EFFECTIVE FULL POWER YEARS OF CORE OPERATION

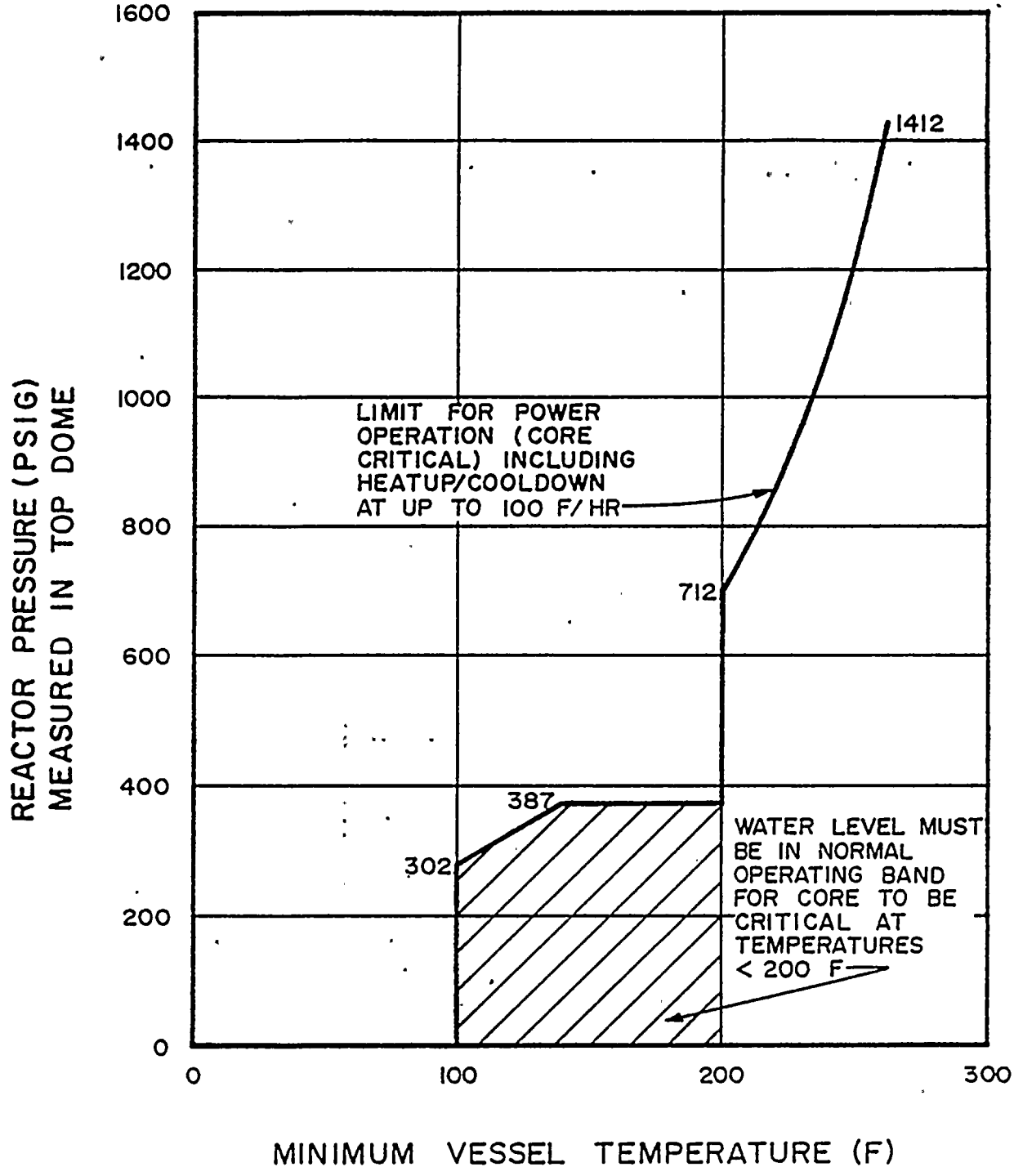

FIGURE 3.2.2.b

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

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

PRESSURE (psig)	TEMPERATURE (F)
302	100
312	106
362	127
387	136
387	137-200
712	200
762	206
812	212
862	217
912	222
962	227
1012	232
1062	236
1112	239
1162	243
1212	247
1312	253
1412	259

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 TEN EFFECTIVE FULL POWER YEARS OF CORE OPERATION

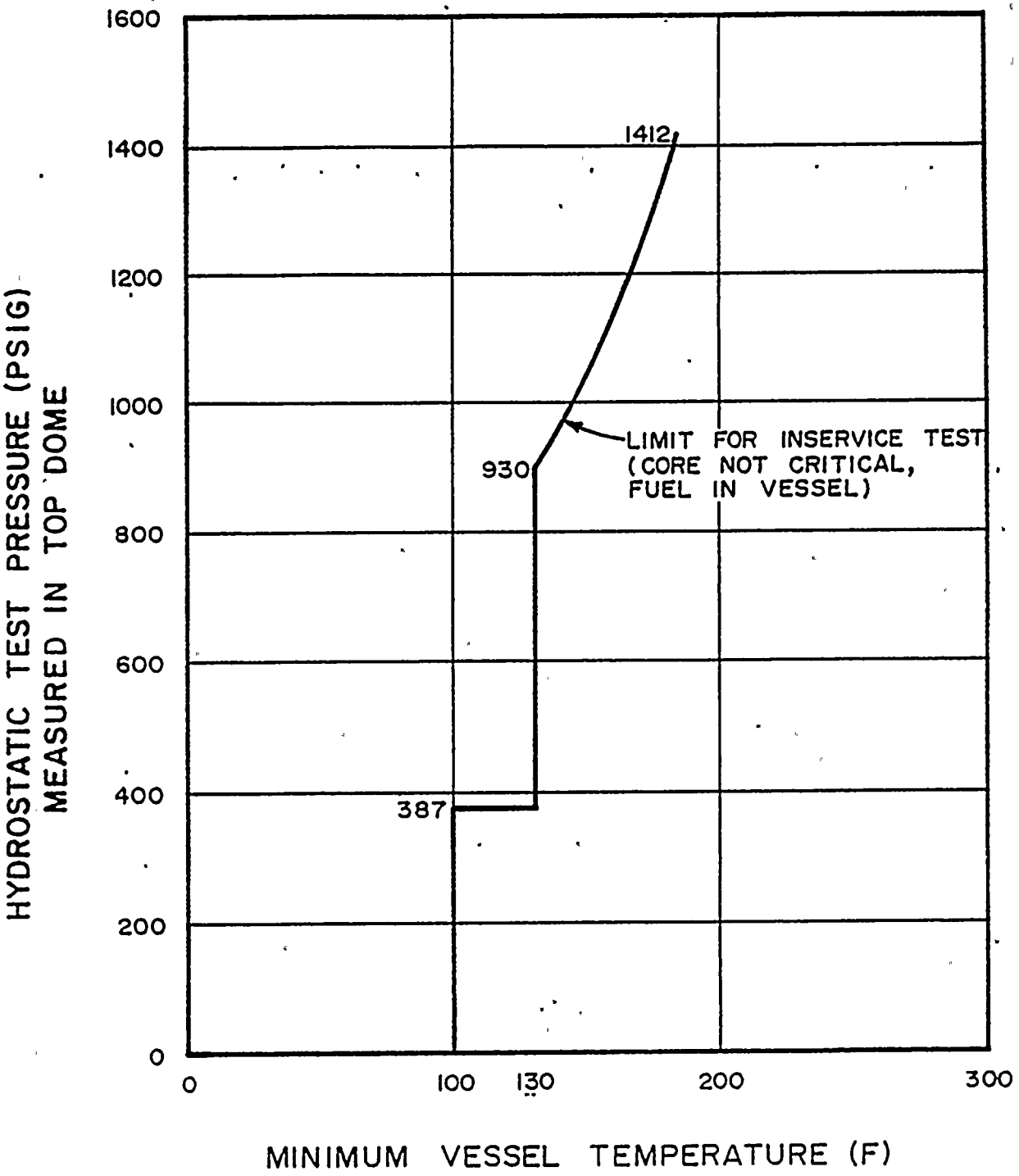

FIGURE 3.2.2.c

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

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

PRESSURE (psig)	TEMPERATURE (F)
387	100-130
930	130
962	135
1012	142
1062	148
1112	153
1212	164
1312	173
1412	181

TABLE 3.2.2.c

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

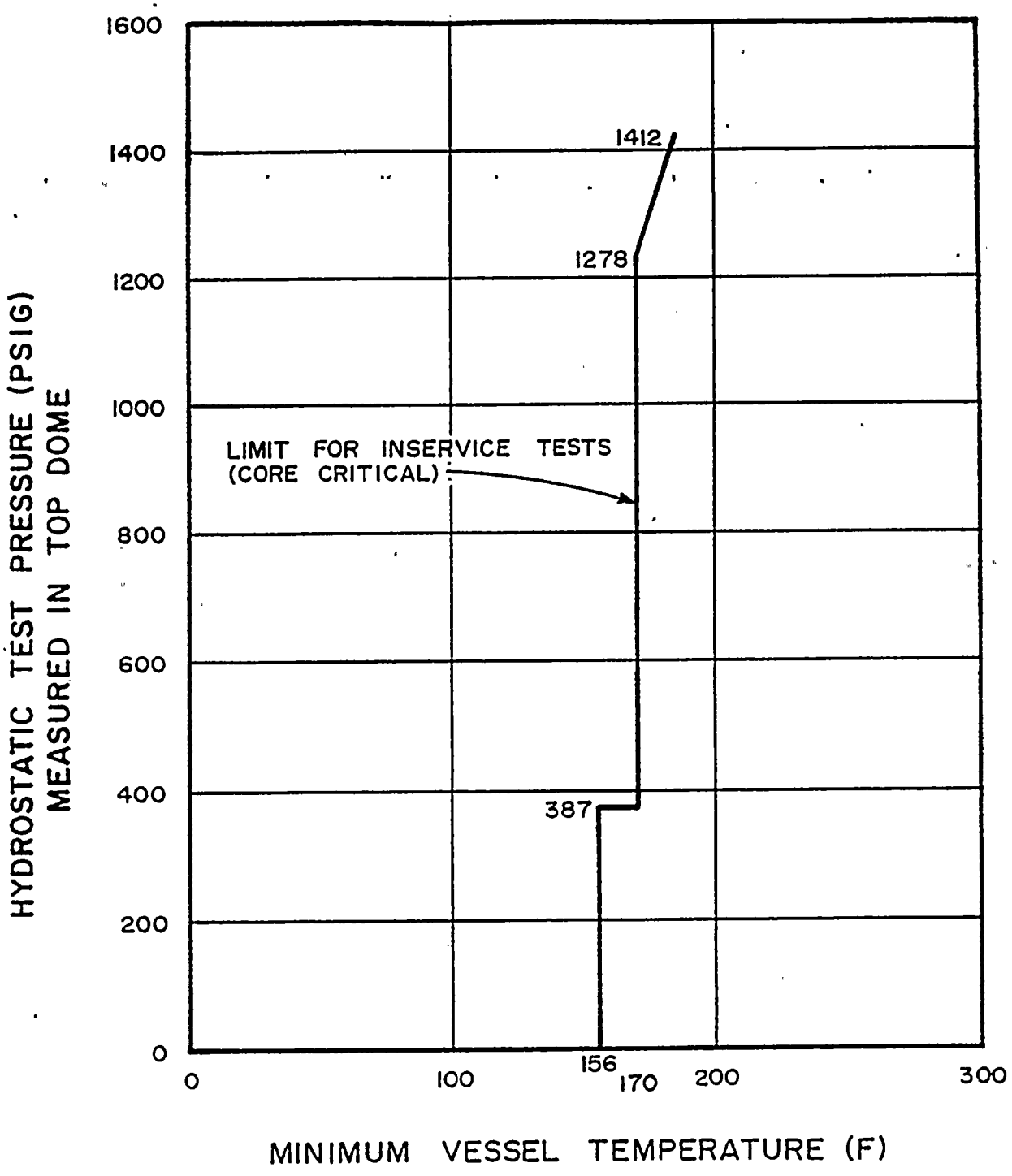

FIGURE 3.2.2.d

MINIMUM TEMPERATURE FOR PRESSURIZATION DURING HYDROSTATIC TESTING (REACTOR CRITICAL) FOR UP TO TEN EFFECTIVE FULL POWER YEARS OF CORE OPERATION

LIMIT FOR IN-SERVICE TESTS
(CORE CRITICAL)

PRESSURE (psig)	TEMPERATURE (F)
387	156
1278	170
1312	173
1412	181

TABLE 3.2.2.d

MINIMUM TEMPERATURE FOR PRESSURIZATION DURING
HYDROSTATIC TESTING (REACTOR CRITICAL)
FOR UP TO TEN EFFECTIVE FULL POWER YEARS OF CORE OPERATION

BASES FOR 3.2.2 AND 4.2.2 MINIMUM REACTOR VESSEL TEMPERATURE FOR PRESSURIZATION

Amendment No. 58

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). Figures 3.2.2.c and 3.2.2.d are plots 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 ten effective full power years of operation were incorporated into the figures. These shifts were calculated from the formula presented in Regulatory Guide 1.99, Revision 1 and the copper/phosphorus content of the reactor vessel. 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 vessel 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 vessel 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 vessel head is flexed slightly to bring together the entire contact surfaces adjacent to the "O" rings of the head and vessel flange. Both the head and vessel and flange have a NDT temperature of 40F and they are not subject to any appreciable neutron radiation exposure. Therefore, the minimum vessel head and head flange temperature for bolting the head flange and vessel flange is established as 40 + 60F or 100F.

Figures 3.2.2.a, 3.2.2.b, 3.2.2.c and 3.2.2.d 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 ten 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 E 185-66 except for the material withdrawal scheduled which is specified in Specification 4.2.2.b.

(1) Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the technical specifications but which do not prevent the fulfillment of the functional requirements of affected systems.

(2) Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.

Note: Routine surveillance testing, instrument calibration, or preventative maintenance which require system configurations as described in items 2.b(1) and 2.b(2) need not be reported except where test results themselves reveal a degraded mode as described above.

(3) Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems.

(4) Abnormal degradation of systems other than those specified in item 2.a(3) above designed to contain radioactive material resulting from the fission process.

Note: Sealed sources or calibration sources are not included under this item. Leakage of valve packing or gaskets within the limits for identified leakage set forth in technical specifications need not be reported under this item.

6.9.3 Unique Reporting Requirements

Special reports shall be submitted to the Director of Regulatory Operations Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

a. Reactor Vessel Material Surveillance Specimen Examination, Specification 4.2.2(c) (12 months)